Assessing Value for Money and PPP for Infrastructure Development

A Case Study of Indonesia and
Lesson Learned from United Kingdom and Australia

THESIS

A thesis submitted in partial fulfillment of the requirements for
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ABSTRACT

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Public private partnership (PPP) is a well known method as collaboration between public sector and private sector in providing infrastructure. Nowadays, due to limited budget, central government of Indonesia starts to wide open the opportunity to local government to develop their region through infrastructure development using PPP scheme. Theoretically, under PPP, through closer collaboration with the private sector, public services are supposed to add value in terms of Value for Money (VfM) and innovation by which delivered in effectively and efficiently by making optimal use of the public and private sectors' expertise, resources and innovation to meet public needs (Spiering and Dewulf, 2006)*.United Kingdom (UK) and Australia are amongst the countries in the world which have a well-established PPP/PFI practice with its value for money test based on PPP-PSC (Public Sector Comparator) comparison. Hence, this research analyzes those two countries experiences in applying Value for Money assessment in PPP procurement. From analysis, it can be said that there is a possibility that framework used under UK VfM assessment would appropriate with Indonesia circumstances. However, in order to ensure that the method is applicable enough to Indonesia' culture then the method call for an appropriate adjustment regarding policy and regulation and increasing government staff capacity as the one who will do the assessment process.*

***Keywords**: public private partnership, private finance initiative, value for money, and public sector comparator*

GUIDELINE FOR USING THESIS

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Agustina
Groningen, end of August 2011

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
CBA	Cost Benefit Analysis
CME	Coordinating Minister of Economy\
DTF	Department of Treasury and Finance of Victoria
FS	Feasibility Study
HM	Her Majesty
IMF	International Monetary Fund
OBC	Outline Business Case
OECD	Organization for Economic Co-operation Development
PFI	Private Finance Initiative
PPP	Public Private Partnership
PSC	Public Sector Comparator
UK	United Kingdom
VfM	Value for Money

CHAPTER 1
INTRODUCTION

1.1. Background

Public private partnership (PPP) is a well known method as collaboration between public sector and private sector in providing infrastructure. Commonly, government in most countries is responsible in providing a broad and various range of infrastructure and its services, until comes a new idea to share the responsibility to private which every country will have a different reason for holding that opinion. In Europe, public private partnership are became system chosen which covers many types of agreements between public and private sector in order to deliver public services such as infrastructures (Renda and Schrefler, 2006). It also happens to the country in Asia, that public private partnership become progressively popular among public sector such as in Hong Kong, (Cheung, 2009).

Theoretically, under PPP, through closer collaboration with the private sector, public services can be delivered effectively and efficiently by making optimal use of the public and private sectors' expertise, resources and innovation to meet public needs. The co-operation leads to results that could not be achieved by the parties acting alone which appears in four forms: "in content; in process; financial; external added value" (Spiering and Dewulf, 2006). PPP is supposed to add value in terms of Value for Money (VfM) and innovation. Although in most countries these two aspects are the main motives for starting PPP, actual enhancement of VfM and innovation through PPP is not always provable. Specifically, the contribution of PPP design and planning innovation is questionable (Spiering and Dewulf, 2006). "Despite the focus on VfM and innovation, especially in concession PPPs, 'low costs' are still used as selection criterion; this eliminates the possibility of making selections based on 'best value' where performance and cost are balanced" (Gansles, 2003: Dewulf et al, 2004).

A debate about the nature and method of Value for Money achievement, in order to measure the private' proposal, is still occurs. The reason that might exist is some obstacles such a difficulty to determine project outcomes due to project complexities (Broadbent et al., 2003; Heald, 2003; Shoul, 2005 and Khadaroo, 2007 in Ismail; Takim; Nawawi; and Jaapar, 2006). Studies result shows that there are difficulties emerge regard on how to measure the VfM. The main test of VfM for PPP' project is about determining benefits, risks and costs through both quantitative and qualitative analysis (Grimsey & Lewis, 2005). Further in

Grimsey and Lewis discuss that in a broader idea of VfM aspects in procurement that need to be considering, as also knowing whether PPP is more valuable than traditional procurement, are “construction risk, long-term contracts, competition, performance measurement, and private management skills; not to mention that risk can be different among projects”.

“The United Kingdom undoubtedly can be depicted as a pioneer country in the adoption of PPP”; therefore, United Kingdom is clustered as ‘advanced PPP adopters’ amongst countries in Europe (Renda and Schrefler, 2006). It has a meaning that United Kingdom is a country with advance experiences PPP in many sectors; range from economic infrastructure such as roads and railways to the one where not only needed innovation but also challenging like healthcare, school and prison. This country has a well-established PPP/PFI practice with its value for money test based on PPP-PSC (Public Sector Comparator) comparison (Grimsey and Lewis, 2005). IMF (2006) also clarified that United Kingdom is a country who has a meaningful lesson about partnership between public and private from their experiences along with their comprehensive assessment of PFI under HM Treasury. Further evidence is from UK’ HM Treasury which mentioned that from 61 projects that procured under PFI, 89 percent from it were successfully delivered on time and within budget (Grimsey and Lewis, 2005). That means almost all projects that runs under PFI achieve value for money in its construction.

Australia also develop PPP since 1980s which is now applied for delivering infrastructure from roads, rail, airports to schools, hospitals and prison (Jetro, 2010). In its practice, Australia have adopted method used as in PFI which launched by UK[1]. In accordance with that, Australia is also successfully in applying UK style of public sector comparator. PPP model which is applied in mostly Australian jurisdiction are coming from Victorian model. “Victoria has made significant improvement on the British model, at least in principle” (DTF Victoria, 2001b in Quiggin, 2004). And by 2005, the federal and all state governments in Australia approved to make uniform the approach used for PPP development (English, 2006). Therefore, Victorian approach can be considered as representative of general approach of Australia state governments.

Indonesia depends a lot on infrastructure development which plays a key role to boost up its economic. In additional, also can be said that this country is not completely new to the PPP idea. The idea of using PPP as a method in providing infrastructure is getting stronger since economic crisis in 1997 when government started difficulties to provide an adequate infrastructure due to

[1] Wikipedia accessible http://en.wikipedia.org/wiki/Public%E2%80%93private_partnership on 24 August, 2011

limited budget. So far, it seems that the implementation of PPP method in Indonesia is not running smoothly. Lack of experience from local practitioner on how to implement PPP procurement especially in measuring private' VfM proposal seems part of the constraint. Further, the constraint looks like caused by among other unclear investment regulation and the fact that land is owned by people and they offer for high cost substitution for the land which can not be afford for privates. Further, despite PPP has been implemented successfully in toll road project, the process of valuing private' proposal is not really trying to achieve value for money, only for a low cost; while achieving value for money as mentions before can be in form of construction risk, long-term contracts, competition, performance measurement, and private management skills.

Nowadays, due to limited budget, central government of Indonesia starts to open the opportunity to local government to develop their region through infrastructure development using PPP scheme. In circumstances where the project needed to be funded by the private sectors, they will likely doing it over a longer contract period (usually between 15 to 30 years) in providing a wider range of services. This is of course will take public sector full attention to be aware of the process in obtaining public private partnership, since the public sector will pay the private in term of revenues over 15 to 30 periods of year. A further study of VfM needs to be done for implementing in Indonesia in order to improve local practitioners skill on how to measure private's proposal. Being conscious on that matter, this research will try to find possibility framework as an assessment technique, that needed for implementing public private in order to be fitting with the local culture and practice, which will did by learning from international experiences that is from United Kingdom and Australia with rationales for choosing them are as mentioned above.

1.2. Research Objectives

Even though PPP has been applied in many countries in the world in order to provide an adequate infrastructure to meet social needs, there are still occur scepticism that PPP can delivered much better in term of time, money and technique compare to traditional procurement. Somehow, there are also varieties of reason for governments to adopt PPP but with accordance of the application of VfM to delivered improved services for the same total of budget spent. But, also comes up hint that VfM will applied differently from project to project and from time to time.

Regard to that matter mentioned above and the need for understand on how to apply VfM in a procurement process of PPP with also awareness that local practitioners in Indonesia has limited experience in public private

partnership and VfM; we apparently need to look deeper on how to value a project' proposal in term of Value for Money of public private partnership. One particular way is by learning from international experiences; and hopefully we can enhance our capability in understanding of enabling and implementing the framework of public private partnership. This research will try to explore and identify a possibility framework for assessment Value of Money in public private partnership by comparing and analysis the international experience that is from United Kingdom and Australia particularly Victoria.

1.3. Research Questions

This research is about to answer upon questions of:

- What are theories that drive VfM?
- Lesson learned from United Kingdom and Australia on :
  - What is VfM understood in both countries?
  - What are main characteristics in implementing VfM in both countries?
  - What and how the assessment technique of VfM applied in both countries is?
- What is the appropriate framework on how to assess VfM in measuring private' proposal for Indonesia circumstances?

1.4. Research Methodology

This research will purely base on literature review. It reviews theoretically VFM assessment models applied in the UK and Australia. Based on the identification of the research objectives, then, data required for this research is any document regard to VfM framework. The possibility framework in valuing a private's proposal in form of Value for Money will be based on international experience. Hence, largely document needed or data sources relies on secondary data, for instance data obtained from relevant references which can be from books, journals, report, articles, regulations and the author professional experience, which will be collected from library; certain website regarding to public private partnership and VfM.

Data analysis will be done in step of selection of methods such as comparative analysis and content analysis. The aims, as stated previously, are to investigate the notion of VFM for public private partnership projects in UK and Australia; and, to discover whether PSC method is the most appropriate way to evaluate VfM. Main steps taken in processing this research are:

a. Gaining background knowledge on the topic

This phase is the initial step of the research by gathering basic knowledge about PPP and VfM through comprehensive literature review. This basic knowledge will perform a background for the research in form of short story of public private partnership and how it implements in the world, with more focus on VfM.

b. Data acquisition

Based on analysis on elements of basic knowledge, the data and information will be collected from a certain resources regarding VfM and its implementation in form of assessment technique chosen. The chosen country as explained in sub chapter 1.1 is UK and further will compare to Australia. Data and information will consist of theories driving VfM including its characteristic, framework or tool used: qualitative and/or quantitative, etc. As a comparison, data and information are also including from VfM assessment practice in Victoria-Austalia. Further, data and Information will also gathered from Indonesia, what has been done regarding PPP and VfM and what is needed to be improved. Data particularly will be collect from Ministry of National Planning Agency and local government in form of project report, regulation documents and policy documents. There is possibility that no significant data can gather about the development of PPP in Indonesia, since seems not many article and journal related to PPP from academic, nor PPP in practice. Therefore data and information will mostly gathered from P3CU[2] (public private partnership central unit) under National Planning Board of Indonesia.

c. Data interpretation and analysis

This phase starts to evaluate what has been achieved about data and information through comparative analysis and content analysis. It starts to synthesize the theoretical framework of how VfM assessment technique implement. The author will try to discover the gap of current VfM practice in those three countries UK, Australia and Indonesia.

d. Constructing result as recommendation and conclusion

From a thorough analysis to find the gap between two cases, the author will only propose a recommendation framework to Indonesia that might be suitable enough to be implemented in Indonesia.

[2] Accessible: http://pkps.bappenas.go.id/index.php/lembaga/struktur-organisasi

1.5. Report Outline

This research will be reported in form of structure of six chapters which describe as following:

Chapter 1. Introduction

This chapter introduces the research setting in form of background, research objectives, research questions which relate to the objectives; research methodology and finally the flow of the report will be drawn in form report outline.

Chapter 2. Literature Review

This chapter will discuss theoretical foundation of the research. Some theory and definition VfM regarding its characteristics, framework or tool used: qualitative and/or quantitative, etc.

Chapter 3. Value for Money and PPP Internationally

This chapter discusses about VfM but specifically in UK and Australia as a country chosen in finding the possibility framework to assess VFM to be implemented in Indonesia..

Chapter 4 Value for Money and PPP in Indonesia

This chapter will focus on Indonesia only with its current PPP development and VfM assessment. South Sumatera Province will also part of this chapter since the idea of this topic is inspired by the application of PPP in this region.

Chapter 5. Analysis

This chapter is assessing what has been found in previous chapter and analyze by comparing three countries in order to find an appropriate framework of VfM.

Chapter 6. Recommendation and Conclusion

This chapter will propose a recommendations regarding VfM framework as an assessment techniques. The framework will likely useful in valuing private' proposal in procurement process in Indonesia.

1.6. Research Framework

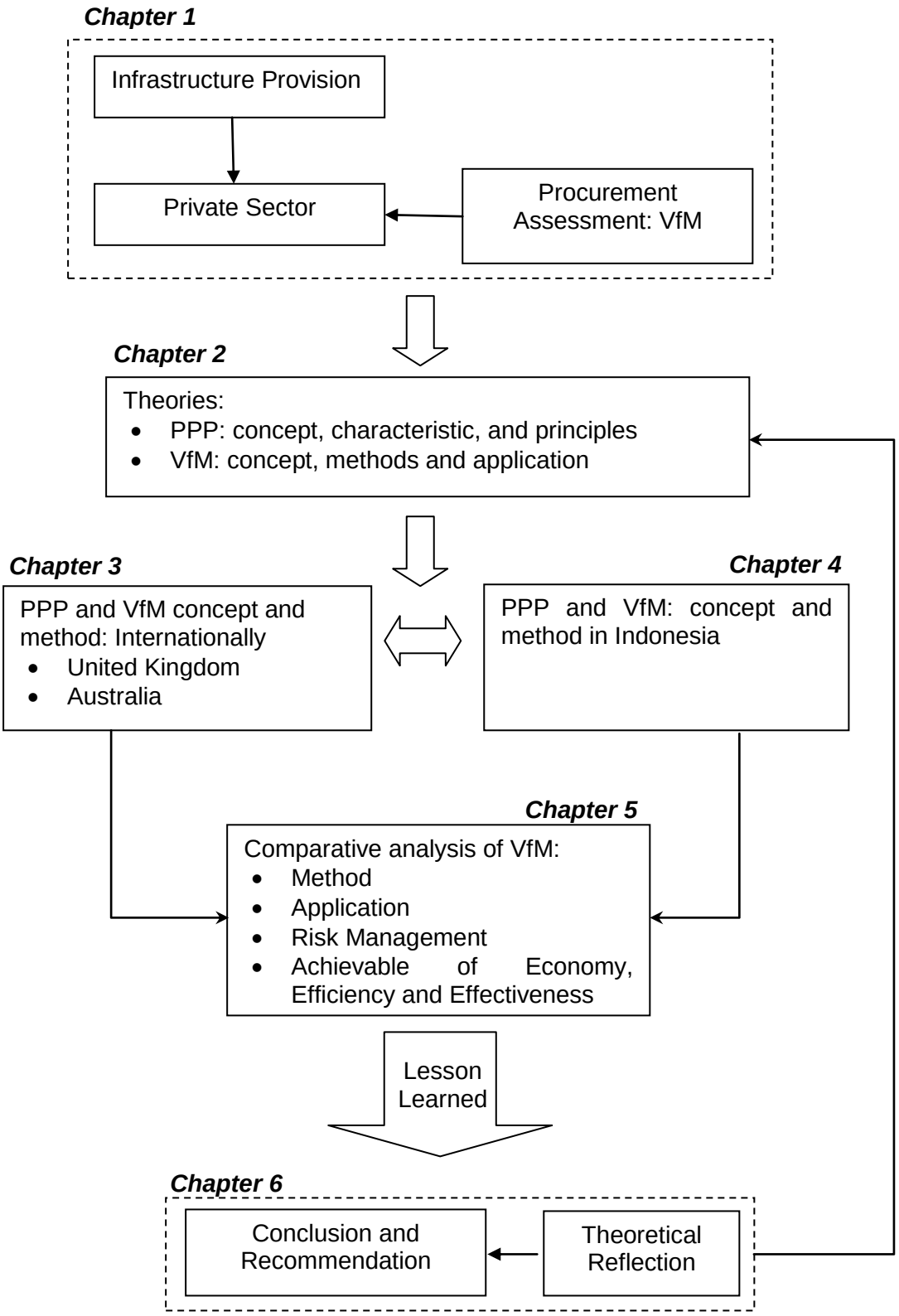


Figure 1.1 Research framework

CHAPTER 2
LITERATURE REVIEW

Infrastructure, something that is used to be as a public sector' responsibility to provide it; commonly it can be categorized into economic and social infrastructure. The categorization is mostly based on its function which is for economic infrastructure means infrastructure that supports economic activity and involving revenue in its use, among other are road, bridges, port, etc; while the later means infrastructure that deliver social services such as hospitals, schools, etc. But somehow, for some certain reasons, public sector starts to involve private sectors in providing infrastructure in form of partnership; and further this partnership called as Public Private Partnership (PPP). The reasons behind PPP development commonly is due to limited budget; but now, trend that comes up because of public sector needs private sector's expertise and technology, particularly management skill in providing infrastructure in effectively and efficiently. Those are added value which well-known as Value for Money (VfM) that presents when talking about creating partnership between public and private sector.

Therefore, this chapter will discuss about theory behind the development of PPP in order to gain a broad view of the reason of the development of PPP in the world. After that, the discussion will be narrowed down to a topic of VfM. Other than that, discussion will specify to PSC (Public Sector Comparator) as one of method in assessing VfM of infrastructure procurement.

2.1 Public Private Partnership

There are shift through out the world in government performance to a better management in providing public service. The shift is particularly in form of governance which indicates that focus on process instead of institution. This has become a new trend in twentieth century called new public management (NPM). The idea of NPM is to enhance government performance; particularly in management skill improvement. Public private partnership is considered as a stem of NPM (Yescombe, 2007); even though NPM is particularly encourage privatization which is fundamentally different to PPP. Along with market-based philosophies, NPM encourage public management in many countries and create further of partnership commonly to public and private partnership (Bult-Spiering & Dewulf, 2006).

What do we know about partnership between public and private sector? There are some common or can be said identical to what is called by

partnership. Some public sector would likely to use the same supplier every year, they use the same paper supplier from year to year; can we call that kind of partnership as one form of PPP? In Grimsey and Lewis (2004), that kind of partnership can not be defined as one form PPP. Partnership should show real continuity of behavior and relational, which means that the continuity has to be design in one long contract. There are also some similar definitions to clarify and understand more what is meant by PPP. As what defined by Grout (2005) that PPP is "long-term partnerships between the public and private sectors that usually involve the private sector undertaking investment projects that traditionally have been executed (or at least financed) and owned by the public sector". Other than that, Yescombe (2007) also clarify some important features of PPP such as: "a long term contract"; private deal with "design, construction, financing and operation"; "payment over the life of PPP contract to private party"; and, ownership is in public sector by the end of contract. In detail, Grimsey and Lewis (2004) point out the most important component to define that one partnership is "part of PPP family":

- "Participant". It takes two (or more) parties; no less than one of them is a public entity.
- "Relationship". Partnership is a kind of relation that needs to keep up in a long time. It explained by Grimsey and Lewis that a relation such as public sector and supplier can not be categorize as a partnership, even the relation has been going on from year to year.
- "Resourcing". Partnership means each party will give their best in form skills, knowledge, and resources in order to create more value to the partnership.
- "Sharing". Each party with their skills, knowledge, and resources share responsibility and risk to the one who can handle it best.
- "Continuity". To keep the continuity of partnership both parties have to be sets out the 'rules and game' in form of contract management, therefore it also can provide certainty.

Another key characteristic of PPP is also defined by ADB (2008), in form of "1) a contractual agreement defining the roles and responsibilities of the parties; 2) sensible risk-sharing among the public and the private sector partners; and 3) financial rewards to the private party commensurate with the achievement of pre-specified outputs".

The history of the development PPP is spread out in many countries in the world. Say that USA which has been accustomed enough with this method; or UK which known for its well-establish Private Finance Initiative as part of PPP scheme. Bult-Spiering and Dewulf (2006) explains that PPP in USA is been there since the distance past. It was put more as a method for motivate private

to invest in developing infrastructure and economic within the region around 1950s and 1960s. Therefore in 1980s, private involvement became increasing in many form of PPP and also has changed government' point of view of private' skill in presenting higher quality of goods and services at lower cost. In addition, Grimsey and Lewis (2004) even write out that partnership between public and private has been around in the eighteenth and nineteenth centuries; Britain and the United States have involved 2500 private companies to develop private turnpikes. Same thing also happen in France, PPP-type arrangements have been there in the seventeenth century. France, as Britain and USA used a concession model as a start to finance public infrastructure.

A common reason for using PPP is that point toward dissatisfaction with conventional procurement and construction methods, and the development of the project financing model. Asian Development Bank (ADB) (2008) defines what become common reasons of government motivation in applying PPP for infrastructure development are "1) attract private capital investment; 2) to increase efficiency and use available resources more effectively, and: 3) to reform sectors through a relocation of roles, incentives and accountability."

International Monetary Fund, IMF (2006) explains that among OECD (Organization for Economic Co-operation and Development) members, United Kingdom is known as the best developed in PPP scheme. Other significant countries are Australia and Ireland, while USA has well experience with leasing scheme. Further, it explains that part of western Europe which also develop their PPP projects are Finland, Germany, Greece, Italy, the Netherlands, Portugal and Spain; while in Central and Eastern Europe, the countries which have embarked on PPP are Croatia, the Czech Republic, Hungary and Poland. Though, those countries are mostly experience only with road projects. In Asia, also mentioned has initiate to develop PPP scheme even though in very limited progress, namely Japan, Korea, the Philippines, and Singapore; while countries like Thailand, India and Indonesia just arrived on showing strong interest in PPP scheme. Meanwhile, sectors that have been built using PPP scheme worldwide among other are (ADB, 2008) "power generation and distribution, water and sanitation, refuse disposal, pipelines, hospitals, school buildings and teaching facilities, stadiums, air traffic control, prisons, railways, roads, billing and other information technology systems, and housing".

PPP has dynamic process and on a certain circumstances; that is why the design and structure will likely apply number of different PPP approaches. Therefore, there is no best model of PPP structure (European Commission, 2003). In addition, European Commission explains that there has no standardized yet upon nomenclature for PPP. "There are several terms often used interchangeably – turnkey and build-operate- transfer (BOT), for example".

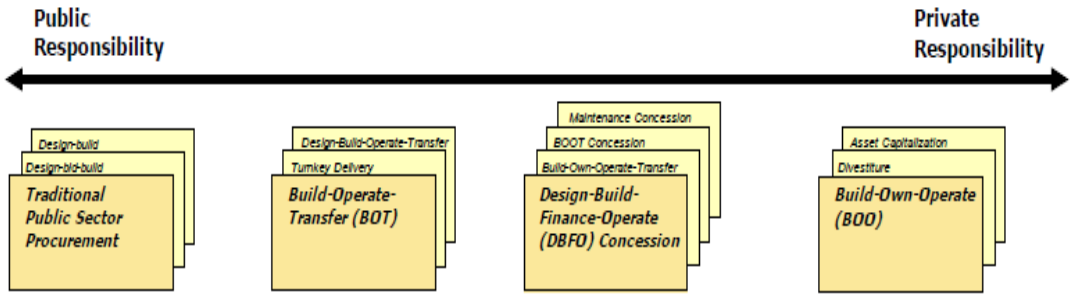


Figure 2.1. Project Procurement Options (European Commission, 2003)

PPP scheme can be classify into many different forms. Some are classify them into it contract types and the other based on the nature of service and risk transfer. From European Commission (2003) (figure 2.1), PPP approaches are diverse into a spectrum; classify from the public responsibility on one side and private sector responsibility on the other side. While in the middle is a place where most of PPP approaches have been applied; this is where public and private allocate risks and responsibilities best on side that can handle it better.

While ADB (2008), in their handbook, classify PPP types according to its contract types which the assessed is against the sector reform objectives that are:

- *Service contracts*, capital investment is coming from publics and they uses private's skill to do only some certain services such as billing or meter reading;
- *management contracts*, also capital investment from publics and private not only contract for doing one certain services but also some or all management i.e utility, port authority;
- *lease contract*, public's capital and private responsible for management, operation and certain renewals;
- *build–operate–transfer (BOT) and similar arrangements*; private not only responsible for all operation but also financing
- *concessions*, private responsible all capital investment and services delivery including operation, maintenance, collection, management, construction and rehabilitation of the system;
- *Joint ventures*, public and private joint ownership or could be establish new company.

Yescombe (2007), classify PPP into its nature of service and risk transfer that is specifying in the contract. Yescombe, divide PPP into two main categories: usage-based and availability-based. While, availability-based can be

categories into sub-categories: accommodation; equipment, system or network; and process plant. Further, what explains more by Yescombe is that Usage-based are facilities that typically user-paid tools or usage fees such as roads, bridges, tunnels, port, airport, trams or light rail network. On the other hand, what include in accommodation-based types are usually a social type infrastructure such as hospitals, schools, and prisons; for equipment, systems or network-based types are road project in form design-build-finance-operate scheme where the payment is dependent on the road being available not by on usage. Availability is measured by, for example "any traffic lanes are closed, or the speed at which traffic is able to move on the road, or the rate at which accidents or spillages are cleared from the road". Sub-category of process plant is type of involving measurable process such as privatization of power generation, water and waste water treatment plants.

There is another term that typically one of PPP scheme which is most applied in United Kingdom (UK), Private Finance initiative (PFI). "PFI is a type of 'public–private partnership' (PPP) where project financing rests mainly with the private sector" (Akintoye et.al, 2003). Similar definition also defined by HM-Treasury (2006) and Alshawi (2009) that PFI is one of PPP type in providing public service where responsibility transfer mechanism from public to the private sector will be done in certain period of time. Further, Akintoye discusses that PFI is first launched in UK in 1992; and 1994, it became an obligatory to all major infrastructure project to use private finance. Like other type of PPP, PFI has some key principles which are (Alshawi, 2009):

- "Purchase services not assets;
- Value for money to the public sector;
- Project risk management between public and private sectors;
- Utilizing and incorporating private sector know-how and expertise; and
- Incorporating whole life-cycle costing in infrastructure projects".

As we can see above that the principles mentioned by Alshawi are the key that make PFI has been chosen to replace the traditional method in delivering public services, in form of VfM; and that is not only occur in PFI as one type of PPP but also as a major point in delivering PPP scheme. As defined by European Commission (2003) that "PPP should only be adopted as procurement and implementation option if they are reasonably expected to deliver enhanced value for money over traditional methods"; as also mentioned by some scholars (i.e Bult-Spiering and Dewulf, 2006; Grimsey and Lewis, 2004; Ministry of Finance of Singapore, 2004; or Renda and Schrefler, 2006).

2.2 Value for Money

2.2.1 Concept

Nowadays, value for money (VfM) becomes one vital factor to be considered in choosing a private sector as a partner of public sector; particularly when it compare to traditional one. Once we start to have a discussion about value for money, there are two words that might need to understand before we have the whole meaning of the phrase. As clarified by Bult-Spiering and Dewulf (2006), value is depend on what is authority's motives and interests and that might alter from time to time influenced by political, economic and social development. Value which is defined by Business Dictionary[3] in economic term is "the worth of all the benefits and rights arising from ownership which has two types of economic value are (1) the utility of a good or service, and (2) power of a good or service to command other goods, services, or money, in voluntary exchange. Or, as defined by another dictionary[4] is "an amount, as of goods, services, or money, considered to be a fair and suitable equivalent for something else; a fair price or return". While money, in a very common understanding as also defined by free dictionary, has a meaning as an exchange for goods and services.

So, as a simple thought VfM might be explained as an amount of money that spent for a fair of return. Whose money? In a PPP scheme, money mostly borrowed by privates from bank loan, and they will pay back the loan from the money they earn in form of revenues from public. As we can see both side has their own motivation to a have a fair return; public want to have a good quality of output from the money they spent while private want a fair return in form fair payment for all their skill, expertise or technology that used. Both has their own value for the money spent and that would takes many years also specific to different context.

For the same phrase Butt and Palmer (1985) discuss that when we talk VfM then we talk about economy, efficiency and effectiveness, then when it attach to public sector, then it means to all institution involve, large and small. Butt and Palmer explain that economy is when we obtain resources in appropriate quality and quantity at the lowest cost; efficiency is when we can make a maximum useful output; and effectiveness is when the output achieves the desired results. What is discussed by Butt and Palmer is general demand of many services that provided by public sector. But, when it comes to a more specific situation such as PPP, VfM is not always the lowest price, it define as

[3] Business Dictionary, accessible: http://www.businessdictionary.com/definition/value.html?q=value, at 4 July 2011
[4] Free Dictionary, accessible: http://www.thefreedictionary.com/value, at 4 July 2011

"the effective use of public funds on a capital project, can come from the private sector innovation and skills in asset design, construction techniques and operational practices, and also from transferring key risks in design, construction delays, cost overruns and finance and insurance to private sector entities" (Grimsey and Lewis, 2002 in Darvish, 2006).

VfM is one reason why government would take PPP to deliver public services. VfM is also something that does not happen in traditional procurement. In traditional procurement, contractor are not motivated to assess whole life cost of service provided as it include in VfM concept (Bult-Spiering and Dewulf, 2006). VfM can be said as good combination between whole life cost and quality to deliver appropriate public services needed. Whole life cost is more likely a consideration of whole cost that attach to project which are not only cost of maintenance and operation of the project's life but also initial design, construction and renewal cost (Grimsey and Lewis, 2004); and it has to be in result that generate lower cost compare to traditional way.

2.2.2 Application

VfM is attach stronger to PPP scheme; and Grimsey and Lewis (2005) state that VfM concept has something to do with the long history of public project being rescheduled which give impact of over budget project. But then, when the appropriate time to accomplish the assessment is? Murray (2006) explains that ideally VfM is carrying out in the very beginning of the project thus would make a good possibility of open and transparent process so we can decide whether PPP is a better choice of delivering the project.

In UK particularly for PFI, there are six main factors that becomes consideration in VfM (Andersen, 2000 in Grimsey and Lewis, 2005) that is likely applied to most PPP scheme in many countries, which are: "risk transfer, the long-term nature of contracts (including whole-life cycle costing); the use of output specification; competition; performance measurement and incentives; private sector management skills". But, among those factors, competition and risk are consider being the most important.

From what National Audit Office (NAO, 2001) states in their report of Getting Value for Money from Procurement, the author also found and similar to what stated by Grimsey and Lewis that there are some major points that important to examine about kind of VfM that can be attained from procurement, in term of:

- Better quality of service for the same budget
- Limitation of the unimportant purchases

- Identification of the most important purchases in output so supplier able to give necessary advice of cost-effective and innovative approach to meet the purchases
- Certainty of what user inquire is possible but not necessarily exceeded
- Optimization of the cost needed in purchasing goods and services toward full life of the contract instead reducing initial costs
- Encourage promoting incentives to the contract in order to assure quality improvement in project' life.

2.2.3 Methods used

As already discuss before, VfM is about concept of economy, efficiency and effectiveness (Butt and Palmer, 1985) but unfortunately it is rarely made precise (Heald, 2002); or not all understand what a VfM assessment is (Grout 2005).

One of the few authors that discuss about the methods used in assessing VfM is among other Grimsey and Lewis (2005). In more precise, Grimsey and Lewis explain that there four possibility options in implementing approach to VfM concept from the most to the least complex, which are: "first, a full cost-benefit analysis of the most likely public and private sector alternatives; second, a PSC–PPP (Public Sector Comparator-Public Private Partnership) comparison before bids are invited; third, a UK-style PSC–PPP VFM test after bids; fourth, reliance on a competitive bidding process to determine VFM once PPP 'road-testing' has been established".

At the same kind, European Commission (2003) classifies what should be in the comparator to assess a VfM that is two aspects which consist of monetary and non-monetary comparison. Monetary comparison also known as financial comparator; while, non-monetary comparison contain of all item that has a value to public but can not be measured in monetary terms. In addition, to attain overall VfM, then it require a process of bidding that well-planned, managed, executed, and transparent. If these requirements can be followed then it might reduce transaction cost, increase bidder involvement, and create a competitive bidding (HM-Treasury, 2006).

Following are major information upon the four possibility methods as mentioned by Grimsey and Lewis (2005):

Cost-Benefit Analysis (CBA)

Due to its function, which is 'fruitfulness of its methodologies rather than mechanistic" (Zerbe Jr and Dively, 1994) and Gramlich (1990) would rather name it in their book as Benefit-Cost Analysis (BCA). The term BCA is more to

an art to them, an ethics and values to economic theory; while the term CBA is a term used by engineer to a technique in a more mechanistic fashion. But, for this part author will use CBA as it commonly used. As explained by Zerbe Jr and Dively, CBA is used as an aid to help the decision maker to decide but not the decision itself. So, CBA is a series of process of economic appraisal which comparing between benefits and costs, and the result is used by the user, usually public interests, to decide whether the activities or a project will be executed or not.

The concept above can be explained that upon one plan or project, there are choices between to implement the plant as **with** or not to implement the plant as **without**. Once the plan is implemented, public will get benefit from it; say for a Dam development, by using scarce resource such as labor, land and capital, public will get more electricity supply (cost X). But, if the Dam is not built, with those scarce resources, then there is an opportunity to develop more farm production to attain more food supply; this is called opportunity cost (cost Y). The plan/project will get recommend once it comes to a position of X > Y. The things that important to be considered when using a CBA is that we have to take into account as much as possible components that part of both benefits and costs. Those assessing of benefits and costs which is used to validate a project in term of Net Present Value, Benefit/Cost Ratio, and Internal Rate of Return. (Tanczos and Kong, 2001)

PSC–PPP comparison before bids are invited and *UK-style PSC–PPP VFM test after bids*

Public sector Comparator (PSC) is a benchmarking tool in assessing value for money used in UK. This benchmark is prepared by government in order to identify the cost needed if the project is procured using traditional procurement. These two methods: PSC-PPP before and after bids are the same. There are countries that use PSC only in the beginning of bid; but, in UK style, VfM is assessed at early stage before engagement with the market and also after the bid to make sure that VfM is not likely to erode.

Public Sector Comparator (PSC) is a tool by comparing bidder bids with benchmark that made by public sector or authority and this has been used in many countries in the world. PSC as an independent tool is illustrating all costs involve in order developing a project in a conventional technique; and it prepared by public sectors with their expertise team (Akintoye, 2010).

The key role of PSC can be describing as follows (World Bank Institute, 2009):

- "Ensure the procurement method gives the best value for money;
- Promote whole life costing early in the project's development;
- Assist in assessing the project's affordability;

- Provide a means for demonstrating VFM;
- Provide a consistent benchmarking and evaluation tool;
- Encourage bidding competition".

Since PSC is known for its well develops in UK, then further explanation about PSC will be presence in the next chapter attach to partnership in United Kingdom.

Reliance on a competitive bidding process

This method is used as in traditional procurement. A competitive bidding process is a process where all the bidders give their procurement proposal and it will judged only by looking at which candidate with a proposal that offering the lowest price for the same project.

2.3 Critiques

Since both countries applied PSC for the VfM assessment and seems mostly critiques by scholars is purposely for the method used not to the country who's applied the method, then the critiques will be discuss under one sub chapter. There are critiques upon the process taken of PSC because of its widely used, among other are from deputy controller and auditor general at the National Accounting Office in the UK which explains that PSC is a "pseudo-scientific mumbo-jumbo where the financial modeling takes over from thinking…it becomes so complicated that no one, not even experts, really understand what is going on" (Murray, 2006: p.28). Further, in Murray (p.19) also clarified that there are 3 major point that shows process under PPP is more expensive compare to traditional procurement which are "profit margins are required to attract the private sector partners; the cumbersome procurement process involved with larger PPP contracts is more expensive than direct government procurement would be; and the cost of capital (borrowing) is higher for the private sector". Same discussion also occurs in Bult-Spriering and Dewulf (2006: p.100). It says that the discussion on PSC should mostly falls on discussion of risks involved and benefit achieved. Perhaps, the PSC process in assessing VfM is taking high cost but what most important is the process taken will end up with result good quality of design and services of delivery (Bult and Spiering, 2006).

Moreover in Grimsey (2005), criticism upon PSC approach occurs from scholars about the validity of the VfM methodology or about VfM and its accountability issue. In general Grimsey cluster the critiques into VfM evaluation which covers of question whether value can be altered since it involves many assumption in the PSC process; or discount rate which covers the methodology used since even small changes can alter to the outcome and finally to VfM

assessment; and last is about risks which covers risks calculations problematical. All the critiques came from academic writers to show the gap between theory and practice and try to engage both side in order to improve the existence of VfM assessment which mostly applied in UK and Australia.

2.4 Analytical Framework

Public private partnership is considered as one solution for providing infrastructure projects, even though it is not a dominant method for the infrastructure provision (Grimsey and Lewis, 2005). Just like a plant, you need the right place and the right fertilizer to make it grow and even reveal the flower. PPP also, in its development needs certain circumstances to make it last and generate a result as people want it to be. The existence of PPP is getting widely utilize in the world, for providing both economic and social infrastructure; and it is not always a good story about its successful applied; there are some critiques associates with this scheme as discuss in previous sub chapter. Those critiques then discussed by scholars but not purposely to halt the existence of PPP in the world instead to improve the usage.

Regarding its practice in the world, there are some problem appointed by some scholars which is said by Bult-Spiering and Dewulf (2006) “threats’ as they called it. These threats are collected based on literature and empirical research. Bult-Spiering and Dewulf (2006) categorize the threats into:

1. “Product performance
    - Financial performance: cost efficiency, transaction, and risks
    - Content performance: value for money and innovation
2. Process performance.
    - Actor’s fit and willingness to co-operate
    - Public interest
    - Behavior”

Product performance is about issues consist of performance of financial and content performance. In brief, those issues are regarding method applied which is said that benchmark used to compare to private’ proposal is difficult related to minimum good quality data provides. It also about the process which is took a long time to do and costly. Other than that, value for money and innovation also under question that whether it is provable. Therefore, all those doubts will be used as criteria in comparing VfM assessment under two countries which is United Kingdom and Australia which can be explained as follows:

- From those two criteria, product performance and process performance, the analysis will be limited only discuss about criteria under product

performance since criteria under product performance seems appropriates enough with objective of this research instead product performance.

- To comply with the end product of this report, criteria chosen is based on that financial performance categorization but simplify into group that cover those criteria under financial performance which are 1) method; 2) application; 3) risk management; and 4) achievable of economy, efficiency and effectiveness.
- The explanation for grouping is:
  - criteria under **method** will cover: value for money process and innovation;
  - criteria under **application** will cover cost efficiency, transaction cost, and add up with human capacity (since the VfM assessment will be done by government staff then it is necessary to include this criteria for Indonesia situation);
  - criteria under **risk management** will cover risks; and
  - criteria under **achievable of economy, efficiency and effectiveness** will also cover value for money in result which consist of economy, efficiency and effectiveness (Butt and Palmer, 1985) as a final product of PSC process. In sum, the process of analysis can be seen in figure below (figure 2.2).

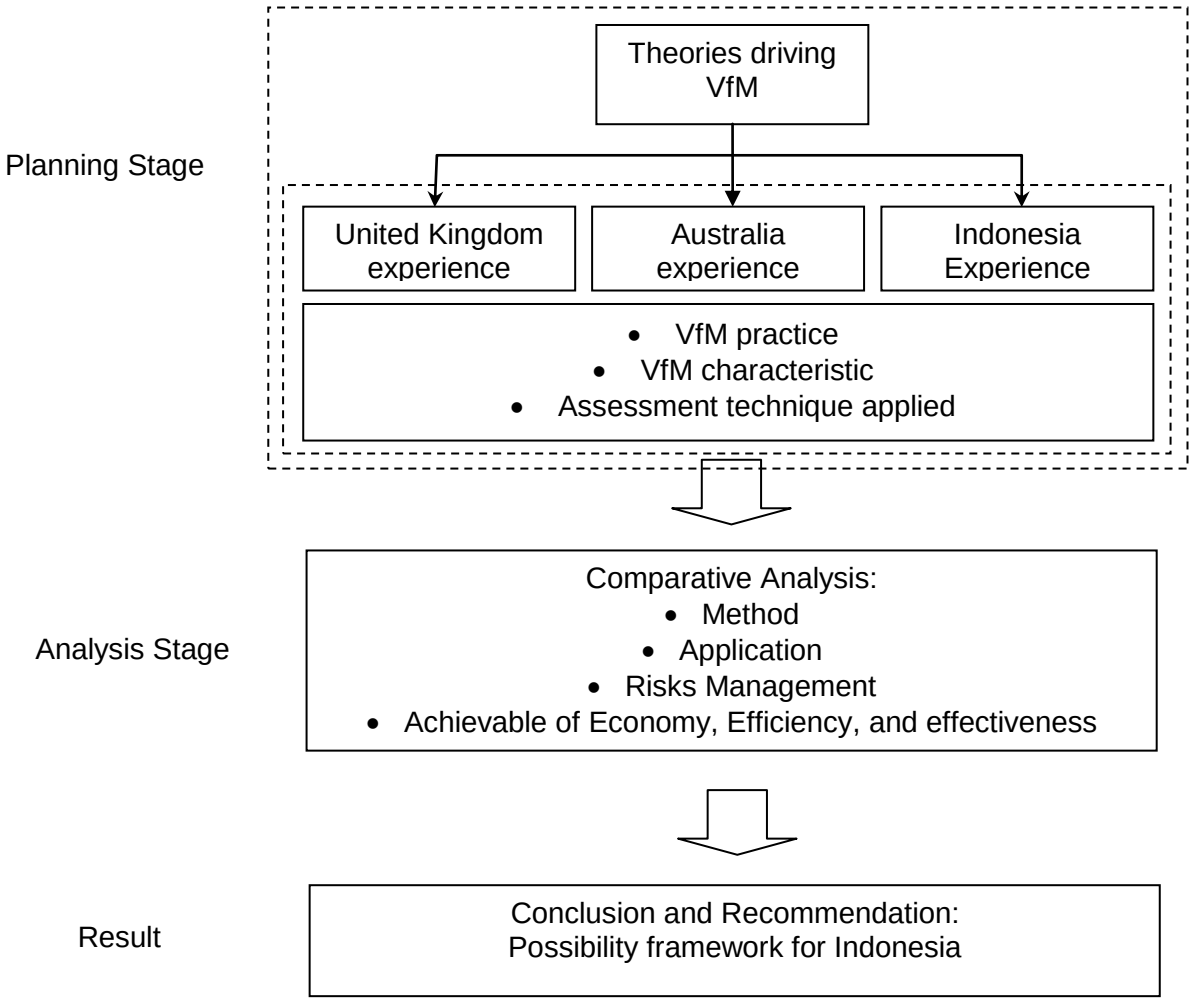


Figure 2.2 Analytical Framework

2.5 Remarks

This chapter ends with remarks that will be used as a basis for the next chapter. First of all, in finding a possibility VfM framework two countries are chosen, with rationale as mention in first chapter, which are UK and Australia. Further, under UK, PFI is a common term using instead PPP while Australia use PPP, hence for next chapter forward PPP and PFI could be interchangeable but basically it is the same in this report.

Next, since partnership is about value for money (VfM) in delivering public services, then we need to know the method needed in assessing VfM. Based on all the explanation about method used in assessing VfM then it can be concluded that PSC-PPP comparison is the chosen one. This is based on: other than PSC-PPP comparison those three of them, PSC–PPP comparison before bids; after bids; and competitive bidding process, are typically used in traditional

procurement. As clarified by Grimsey and Lewis (2005) that CBA is mostly used in traditional procurement. Further, it also argued by Grimsey and Lewis that PSC is “much simpler and easier to compile than any of the alternatives presented” (Grimsey and Lewis, 2005 in Sarmento, 2010). For that reasons, PSC is the one that will be examined by comparing this benchmark cost to the cost proposed by private under PPP scheme.

CHAPTER 3

PPP/PFI AND VALUE FOR MONEY INTERNATIONALLY

This chapter ahead will try to discover PFI as one type of PPP and how VfM assessment done internationally. For that reason, there are two countries picked in order to obtain a possibility framework of VfM assessment through comparative analysis. As explained in chapter before the countries chosen are The United Kingdom and Australia particularly Victoria.

United Kingdom is one of the chosen since it has a meaningful lesson about partnership between public and private from their experiences (IMF, 2006), along with their comprehensive assessment of PFI under HM Treasury. Therefore, most of the text in this chapter particularly about method in assessing VfM, will based on 'VfM Assessment Guide' published by HM-Treasury in November 2006. 'VfM assessment Guide' is replacing Treasury Taskforce 'Technical Note 5' about Public Sector Comparator (PSC) published in 1997. The discussion in this chapter will also include about on how UK' method in assessing VfM as one of benefit that public can get from partnering with private.

Similar discussion will also take place for Victoria, Australia. Australia picked for its successfully adopting PFI and PSC from UK; and Victoria has significant approach from British model that can be considered as representative of general approach of Australia state governments.

In sum, this chapter discusses about United Kingdom with its Private Finance Initiative and Value for Money; as also the same for Victoria Australia discussion. And the last subchapter discusses about achievable of economy, efficiency, and effectiveness as final result of VfM.

3.1 UNITED KINGDOM (UK)

3.1.1 Private Finance Initiative (PFI)

The origin of PFI can be found and discussed in many articles such as by Fewings (1999); Allen (2001) for House of Common Library; Heald (2003); Leach (2003); Pitt and Collins (2006; and many others. As told that PFI first time announced in UK is in 1992 and was introduced under conservative government; and its aim, as mentioned by Allen (2001), is "to achieve closer partnerships between the public and private sectors at both central government and local authority levels". But, before PFI is applied, there are other forms of partnership between public and private that exist since 1980 (Akintoye et al,

2003); these other forms is types of procuring such as outsourcing and privatization.

In UK, before government initiate to develop partnership between public and private, infrastructure asset is constructed using procurement as we also recognized as traditional way. Traditional public-sector model, as named by Grout (2005), is a process where government makes use of private sector companies to do the construction under a condition that the construction will be funded from government borrowing. Under this process, government purchases the capital asset and not services. On the other hand, using partnership government only purchases flow of services and it more likely to form such a leasing. This is what so far now called as PFI. In addition, Grout mentioned that the core of PFI projects is that it more aware to public services like health care and education.

PFI in its development history is replacing what was known as Ryrie Rules. Ryrie Rules was first announced in 1981 and has a function to "establish criteria under which private finance could be introduced into nationalized industries" (Allen, 2003 in Pitt and Collins, 2006). So, Ryrie Rules is more likely a guideline as an effort in decreasing public expenses by also introducing private finance like PFI does. The rule then is no longer in favor since 1989 and replaced by PFI; this has purpose to support the effort by removing such difficulties that might emerge as the privates intend to invest in infrastructure development; as also clarified by Allen (2001) that "the retirement was intended to further encourage the private sector to bring forward schemes for privately financed roads, which offer value for money for the user and the taxpayer".

Up to 2001, PFI area of work has involved almost 450 projects (Allen, 2001) which mostly in infrastructure projects (Table 3.1). The UK government also has published a comprehensive assessment of the PFI through its HM-Treasury which provide a series of technical note that can help public sector manager with practical information regarding PFI and its procurement. Following are PFI signed deals by department up to 2001:

Further in Leach (2001) mentioned that what becomes the benefit from applying PFI is that through PFI public sector has a possibility to transfer the risks to privates; and for that risks handling along with cost effective and good quality of services, privates will get incentives. This is the art of applying PFI that risks and reward, in term of incentives, are emerge on the same time which more likely not appears in traditional procurement.

Table 3.1. PFI signed deals by Departments

1	Transport, Local Government and the Regions	58
2	Health	105
3	Defence	37
4	Scotland	56
5	Home Office	39
6	Education and Skills	69
7	Work and Pensions	7
8	Inland Revenue	8
9	GCHQ	1
10	Wales	11
11	Environment, Food and Rural Affairs	8
12	Lord Chancellor's Departments	7
13	Trade and Industry	8
14	Northern Ireland	22
15	Treasury	1
16	Customs & Excise	1
17	Foreign and Commonwealth Office	4
18	Northern Ireland Court Service	2
19	Office of Government Commerce	1
20	Culture, Media and Sport	3
21	Public Record Office	1
	Total	449

Taken from Allen (2001)

What is the characteristic of PFI? What has been clarified by Leach is generally known as part of PFI' characteristic. Other scholars are also mentioned about PFI characteristic, among other from Kee and Forrer (2002) which describe that in PFI, privates joint together and structuring a consortium and together perform a design, build, finance and operate an infrastructure over a long term - carefully arrange and negotiate contract up to 30 years. While Grout (1997) justifies three criteria to cluster a scheme under PFI which are:

- *funding is to be predominantly (usually fully) from the private sector and the contractual structure relates to the consumption of services not the asset itself;*

  This has become general characteristic of PPP that privates with their consortium is the one who is going to find source of fund to finance the project and public sector commonly will pay in form of revenue to the consortium.
- *a 'substantial' amount of risk must be transferred into the private sector;*

  Risk, in a traditional form, is something that commonly become public sector' responsibility; whereas, in PFI risk is put on the side that best can handle it but commonly it sticks to privates side.
- *The project must be shown to offer value for money to the taxpayer.*

  This is other item of benefit than risk transfer that public sector can get by performing PFI as in other type of PPP; and value for money is not always about the cheapest price.

The last criteria above about value for money (VfM) is become Important consideration in delivering successful PFI project. According to Grout (1997) VfM in PFI is “an aggregation of issues such as quality, price, technical merit, aesthetics and functional characteristic, cost effectiveness, etc”. So, in order to achieve the VfM UK government has set a certain procedures to secure the permit will only be given to the project that would likely deliver VfM to public.

3.1.2 Method of Value for Money

Value for Money (VfM) as written by HM Treasury in its document Value for Money, Assessment Guide (2006) is “the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user’s requirement”; and PFI should not undertake unless it shows prove of VfM in procurement. While PFI in that document, as also explained in the beginning, is explained that **“**PFI is only one type of Public Private Partnership (PPP). There are many other types of PPP arrangement, typified by some form of joint working between the public and private sectors”. So, while others have applied other type of PPP, UK use only one type name of partnership between public and private under PPP scheme that is PFI. Further, the guidance itself, as also mentioned, is not intended for the purpose of assessing VfM for PFI projects but also can be applied by other type of PPP as long as it has characteristic of involving contract service for a long-term basis and funded by private finance. Nevertheless, it is not appropriate for “individually procured low capital value projects” since it will involve high cost of procurement. It also can not be applied to “rapid technological or other change which makes it difficult for both procuring authorities and bidders to predict with reasonable certainty the service delivery requirements and to include sufficient contractual flexibility at a reasonable price”.

VfM assessment is a guideline to authority, or particular department as a sponsor, in deciding whether the project is to be proper enough to undertake procurement under PFI and deliver VfM. Hence, there are three stages in the assessment that have to be through by the sponsoring department; and all those stages are said that include both qualitative and quantitative analysis (HM Treasury, 2006).

As mentioned before there are 3 stages in the assessment process that is:

- Stage 1 or known as Programme Level Assessment, a process to ensure that PFI is chosen since it fits enough to the programme and shows indication of VfM.

- Stage 2 or known as Project Level Assessment, a process of earlier procurement appraisal which used to be done by applying Public Sector Comparator (PSC) but recently replaced by using Outline Business Case (OBC).
- Stage 3 or known as Procurement Level Assessment, a process of assessment during the procurement to know whether the project will likely delivered in such a way like competitive interest and market capacity.

Both in stage 1 and stage 2, there will be an assessment for qualitative assessment; and in stage 2, the qualitative assessment will accompanied by quantitative assessment in form of Outline Business Case (OBC). In applying OBC, HM Treasury also publish what is called as 'spreadsheet' as a guidance on how to do the quantitative assessment. Stage 3 is a stage of identifying market problem such as is there a bidder who will be interested to the project; and, to ensure that after stage 1 and 2 assessment are done there will be no further change that will likely influence the VfM result.

The whole process of UK' VfM assessment is said as a complex process, thus the process would likely take a period of time and also costly (Grimsey and Lewis, 2005; Murray, 2006). In order to observe its complexity in, following are the scheme of the outline of VfM Assessment process which explained the flow of stages starts from stage 1 to the financial close of the process.

- Outline of Value for Money Assessment Process

This sub chapter forward will discuss about step by step of VfM process as written in the VfM Assessment Guidance (ahead, the VfM Assessment Guidance will be named only by 'the guidance'). The guidance is purposely to ensure that all projects being considered for PFI across Government are assessed against the same criteria. Before we take further of the discussion there are some important points that need to be design carefully in order to produce the right decision upon whether PFI is VfM, those points are:

- The procuring team should determine in the very beginning what is the key drivers of VfM in the procurement process in order to gain a well-managed procurement.
- Since procuring team should prepare benchmarking for procurement it is necessary to also carefully design and collect qualify historical information and data.
- To realize VfM, from the very beginning of the procurement process, it require for a well planned, managed, executed and transparent process thus it would likely make VfM driver works effectively and for overall VfM to be achieved. As a result, it will lessen cost of transaction and a competitive procurement.

There is rationale that would make VfM assessment considered to be complicated. It is likely that the achievement of VfM in the partnership is driven by factors which are including: the optimum allocation of risks; whole life cost; integrated planning and design of the facilities-related services outputs specification approach; transfer of risk; sufficient flexibility; incentives; the term of the contract; there are sufficient skills and expertise; and managing the scale and complexity.

Other than that, there are qualitative analysis is done under series of questions that need to be clarified to accompany qualitative analysis. The question of stages 1 and stages 2 is almost similar which will cover assessing factors capturing of viability, desirability and achievability (HM Treasury, 2006: p: 16). What are they covered? According to the guidance (HM Treasury, 2006:p.16) they are about:

"Viability": it is about efficiency and accountability or equity; and to ensure the service prerequisite is include in the contract.

"Desirability": assessing benefit like incentives and risks transfer and make sure that other benefit can be realised.

"Achievability": measure "market interest, the skills and capacity of the private sector, their appetite for risk, any lender constraints and whether the procuring authority has sufficient capability to manage the complex processes involved".

The whole process of the assessment as described in the guidance can be seen in figure 3.1 below:

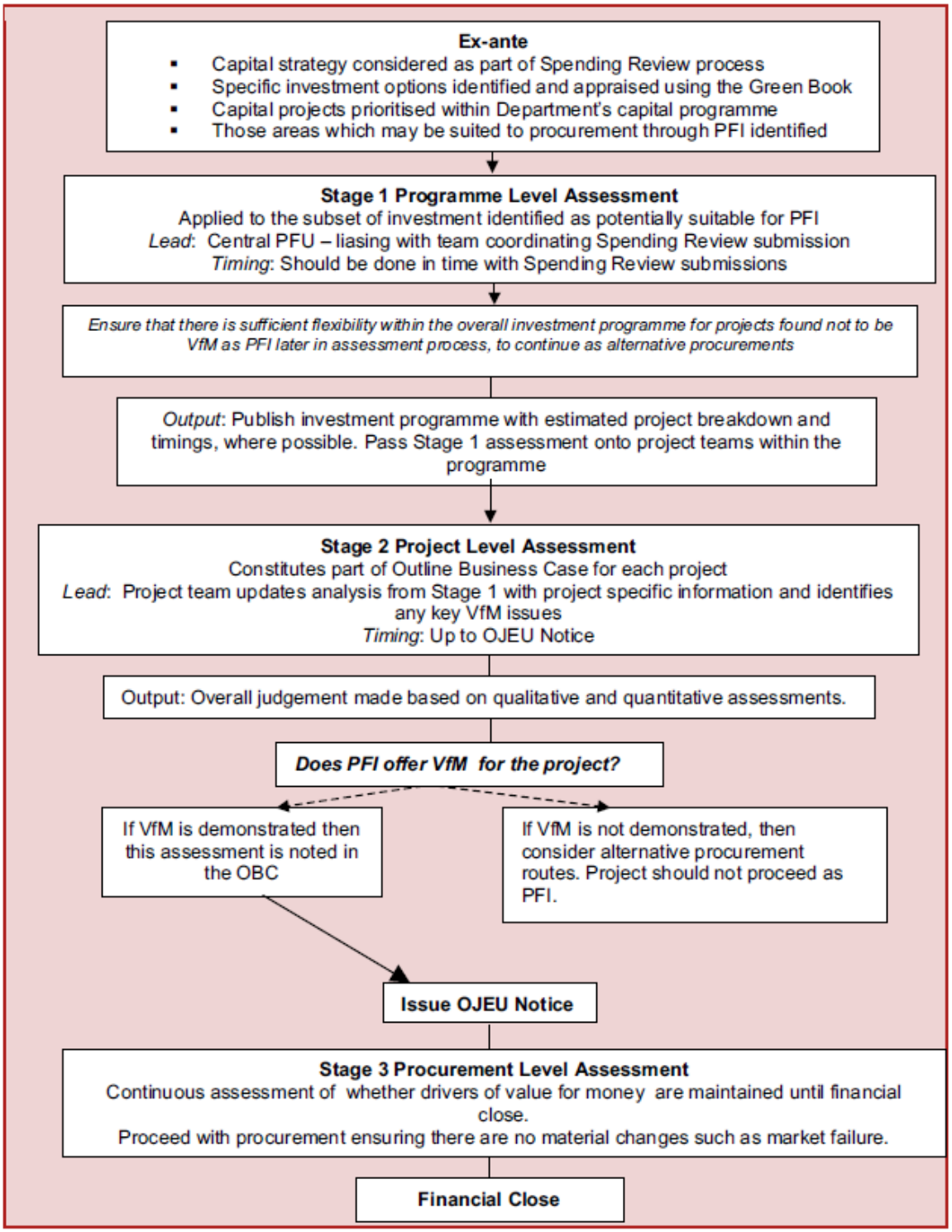


Figure 3.1. VfM Assessment Process (HM Treasury, 2006)

The aim of Stage 1, as explained in the guidance (HM treasury, 2006: p. 19), is "*to provide a clear strategic direction, whilst indicating where there may be a need, later in the process, for flexibility in the chosen procurement route for*

some projects". So, Stage 1 is stage that to ensure the procurement will deliver VfM and will take next stage into stage 2 and 3

The objectives of Stage 1 are to present early assessment in order to find out that the project under PFI is likely shows VfM and also as a process what is called spending review. Stage 1 also identifies risks that might exist throughout the project; and in fact risks occur whether procured traditionally or through PFI. Risks allocation defined in the guideline consist of design, financing, implementation, operation, usage, regulatory change, obsolescence of technology, service provider lock-in and residual value/disposal. Further explanation upon this matter can be found in the VfM guideline (HM Treasury, 2006: p. 20)

Stage 2 is taken after there is a conclusion reached in stage 1 that indicate best evidence of procurement route taken is PFI. The aim of stage 2 is "to *verify that the assumptions upon which the decision was taken to proceed with a PFI procurement route remain supportable in the light of prevailing market conditions"* (HM Treasury, 2006: p.27)

The major difference between both of stage 1 and 2 is that stage 2 clarifying of market sounding and Soft Facilities Management (SFM) or also known as soft services. Market sounding exercise is about determining the potential level of market interest and the current and future capacity by talking directly to potential players. While, Soft Services generally relates to day-to-day supporting services required in the operation of an asset. For example; catering, cleaning, security, and portering at a facility such as a hospital, school or office. For soft services, there will be it require a separate assessment as also include below.

The aim of stage 3 is "*to ensure that both procuring authorities and sponsoring departments are fully appraised of market conditions and can identify any market problems early on in the procurement process, in order to effectively evaluate whether there is any erosion of VfM"* (HM Treasury, 2006: p. 41). So, here in stage 3 there are steps needed which involve an ongoing 'checks' to ensure VfM under questions of market failure; efficient procurement process; and risk transfer.

In a simple thought of the process described above, once again the whole stages described in figure 3.1 can be simplified into a process as in figure 3.2 below; while the qualitative questions for each stage can be found in the Appendix 1.

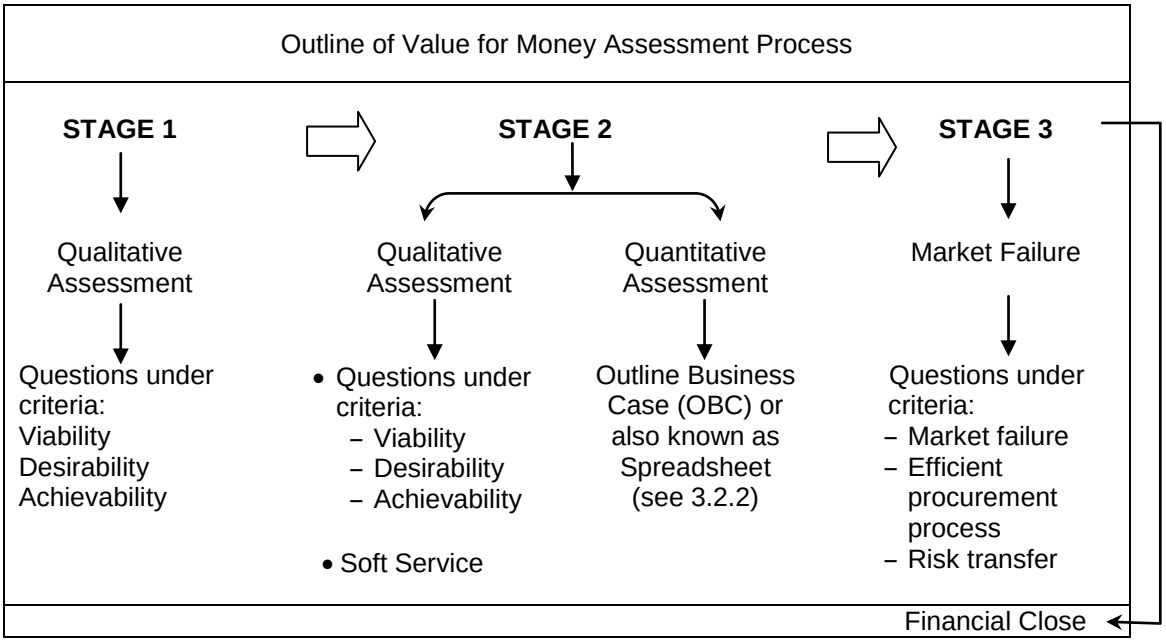


Figure 3.2 Summary of outline VfM Assessment Process

- **Outline Business Case (OBC)**

Outline Business Case (OBC) of PFI, also named as 'spreadsheet', is based on Quantitative Assessment User Guide composed by HM Treasury (2007) as a companion to qualitative assessment. It said that the spreadsheet is used as tool to assist Procuring Authorities in examining quantitative analysis to support the VfM decision as to whether to use PFI or conventional procurement. Spreadsheet has been revised in order to generate a simpler tool in assessing quantitative analysis. Therefore, the user of the spreadsheet would likely not find many aspects that were in a conventional public sector comparator (PSC).

In the guidance of the spreadsheet, it clarifies that quantitative analysis is "only one elements of the VfM assessment and should be used only in conjunction with the qualitative assessment which is completed parallel. Further, the guidance is not purposely for project or sector specific; it can be applied by many kind of project even though each project has its own characteristic.

From the guidance, flow of process quantitative analysis can be summarized as below (Figure 3.2); while full explanation upon the process of this analysis can be found in the Appendix 2.

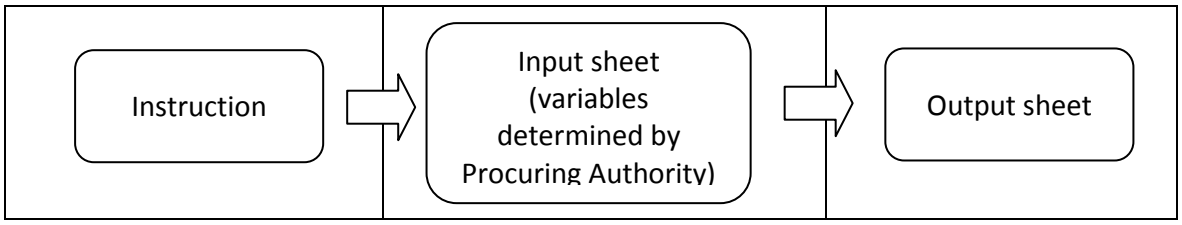


Figure 3.3. Diagram of quantitative assessment (spreadsheet) (HM Treasury, 2007)

3.1.3 Application

About the application here is to define whether the process taken in valuing private' proposal would taking a lot of money regarding its complex process. Moreover, from the application it can be considered that the process needs a high quality human resource, as stated in guideline. "The guidance emphasises that procuring authorities must ensure they have sufficient capable resources to apply to the procurement itself" (HM Treasury, 2006: p.3)

Privates are often criticised upon the high cost needed for organizing bids for PFI projects (Allen, 2001). It is said that private sector have to include costs of 'front-loaded' which higher than conventionally tendered contract, as can be seen in figure 3.4 below. From the figure, Allen (2001) defines that costs of tender is far greater than other type of procurement in average.

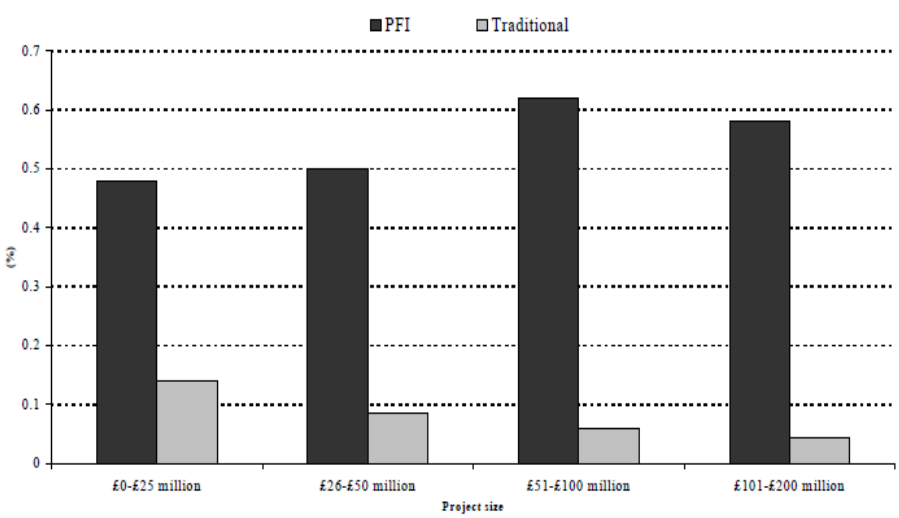


Figure 3.4 tender costs as a percentage of project cost (Allen, 2001)

Further in Allen, it also discusses that time needed from offering public services projects until final signing contract could be expanded, particularly for complicated and technical project.

Grout (2005) clarified that in the process of VfM is lying the process of PSC. And, the purpose of PSC itself is present a benchmark against private' proposal in order to give aid in decision about VfM of PFI bids. PSC is a

quantitative analysis which will be supported by qualitative analysis and also include risks of each procurement approach purposely to inform a wider VfM assessment (Grout, 1997). So, it can be said that the process of PSC alone is typically complex process. That comes up with a thought that VfM assessment is a complex process. According to Grimsey and Lewis (2005), the critique about PSC is different from country to country; “in particular procurement cost and delays caused by switching to a new procurement route could be reasonably included”. Therefore, added by Grimsey and Lewis that if the process by public sector is unaffordable in any way, then it is not necessary to implement the process. One of example which shows involving large transaction cost in its process is London underground project (Grout, 2005)

The cost needed to implement the whole process of VfM can caused the differential cost of procurement, thus in estimating of VfM which carried out before bids the difference is also included. In the guidance published by HM Treasury (2006) it is already warned that “In order for the VfM drivers to be effective and for overall VfM to be achieved, the procurement process needs to be well planned, managed, executed and transparent, whichever procurement route is taken. This will reduce transaction costs, increase bidder involvement and ensure a more competitive procurement. To do this procuring authorities need to ensure, from the very earliest stages, that they have, and are able to apply, sufficient and capable resources to the procurement process itself. If they are unable to do so then it is unlikely that they will be able to realise VfM”.

3.1.4 Risk Management

Risk management is defined as of the key in delivering VfM whereas its identification and management need a thorough process throughout the project. In the guideline, it is written list of risks which is mostly found based on past project that document well. Types of risks under the guideline are: design, financing, implementation, operation, usage, regulatory change, obsolescence, service provider lock-in and residual value/disposal.

In Allen (2001) defines that risks exist in different form depends on the project. Risks attach to type of project like for school would be different to transport project. The difference between conventional procurement and PFI project is that the risks associate with the project can be transferred to private sector. The importance of transferring the risks to private sector is part of a benefit which purposely to secure VfM.

Further in Allen (2001), within PFI risks can be categorized into two group which are general risks and specific risks. “General risks that are common all types of public/private service projects and PFI specific risks that are PFI public

services project specific". It also said that when the risks are finally defined then the next step is transferring it to whomever best able to manage it. Risks which still are attach to public sector, or called retained risks, are consist of:

- "The risk of a wrongly specified requirement". It is due to that risks might not be easily identified from the very beginning. Therefore, when risks come up during the implementation then the public sector would retains the risk in respect of the initial specification.
- "Risk of criticism". Criticism, entirely, should become a government or local authority responsible.

In sum, Allen (2001: p.29) describes that "the risks of a public services project should only be transferred to the private sector if, and to the extent that, the private sector is capable of managing such risk. In situations where the private sector is best judged able to deal with risk, such as construction risk, then the public sector should try and transfer this responsibility completely. Where the private sector is deemed less able to manage project risk, responsibility for these risks should remain within the public sector".

3.2 VICTORIA - AUSTRALIA

This sub chapter will discuss in brief about VfM assessment under PPP scheme in Victoria-Australia, as a comparison to VfM assessment in UK. The source for this sub chapter is mainly taken from Public Sector Comparator Technical Note and Supplementary Technical Note (further it only mentioned by 'the Note') produced by Department Treasury and Finance of Victoria in 2001. Further, the discussion under this sub chapter will also discuss items as discuss in previous sub chapter about UK which covers method, application and risks management.

3.2.1 Public Private Partnership

The Victorian government launched its policy for establishing public-private partnerships in form of *Partnerships Victoria* in June 2000. The policy is purposely to support partnership in delivering public infrastructure also other support services. For the partnership, government produces policies in form of detail guidance which can be assist departments and agencies under Victorian Government; one of it is Public Sector Comparator (PSC).

3.2.2 Method of Value for Money

The construction of PSC is a must for all partnership projects in Victoria and it purposely design to examine whether partnership offers VfM when compare to the most efficient form of traditional procurement. The PSC is suggested to be constructed and refined in early assessment and pre-market stage in order to obtain project brief.

As it discusses in the guidance that PSC in its performing has role as (DTF, 2001: p.4):

- *it promotes full cost pricing at an early stage in the procurement process;*
- *it acts as a key management tool during the procurement process, assists the procurement team and the Department of Treasury and Finance to manage the process by focusing attention on the output specification, and risk allocation and development of a comprehensive costing of the project;*
- *it provides a reliable means of demonstrating value for money;*
- *it provides a consistent benchmark and evaluation tool; and*
- *It encourages bidding competition by creating confidence in the financial rigour and probity of the evaluation process.*

Further, the use of PSC as a comparison to private' bids is only part of quantitative analysis; and to have a complete comparison not only quantitative analysis needed but also qualitative analysis. It is also necessary that qualitative analysis should be constructing in form of list at the very beginning of the project design in order to obtain costs that could not be significantly quantified in the PSC.

According to the guidance, qualitative analysis that needs to be well thought-out would likely as follows (p.66):

- *"material costs (including risk) that are not capable of being quantified for a project (either explicitly or as a contingency factor);*
- *The identity, credit standing and proven reputation of the bidder (including consortium parties and financiers). This will help ensure the ability of the bidder to deliver the proposed service at the specified bid price;*
- *any differences in the deliverable service which cannot be quantified and adjusted for;*
- *any wider net benefits or costs that a Partnerships Victoria approach may bring. For example, the social and wider benefits of earlier provision of key infrastructure services (e.g. a new hospital) under a partnership delivery method; and*
- *the accuracy and comprehensiveness of the information used and the assumptions made in the PSC".*

Other than those qualitative and quantitative analyses, there also might additional costs and risks that possibly not include in PSC or in bids, which are:

- Sponsor risk, which is an essential risk that falls on government as a result of contracting with a private party; and sometimes it is not priced in the PSC. Also, interface risks which is as a result of services are delivered by government from within privately built, operated, and serviced infrastructure and also are not priced into the PSC.
- any additional ongoing contract management costs once a contract is signed. These may in fact be lower than ongoing management costs to government associated with a traditional publicly procured project.

- **Outline of Public Sector Comparator**

In the Note , PSC is categorized into four elements, as shows in the picture below, that is:

- Transferable Risk;
- Competitive Neutrality;
- Raw PSC (base costing); and
- Retained Risk

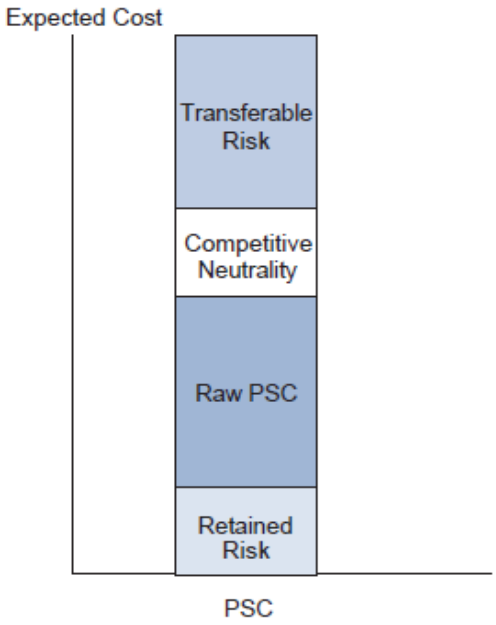


Figure 3.5 Component of PSC (Department Treasury and Finance of Victoria (DTF), 2001: p.6)

Following is the whole process of PSC and the element described above which explained that it is not a fixed format of PSC that must follow by procurement team or a department. Somehow, the following process is common enough and based on practical experience in Australia (Figure 3.6). From the

figure, it can be seen that the process, as in UK, would likely need some time to be finished. Further, from the figure, a process with bracket outside shows a sequence process for one process, such as for raw PSC and the other for transferrable risks.

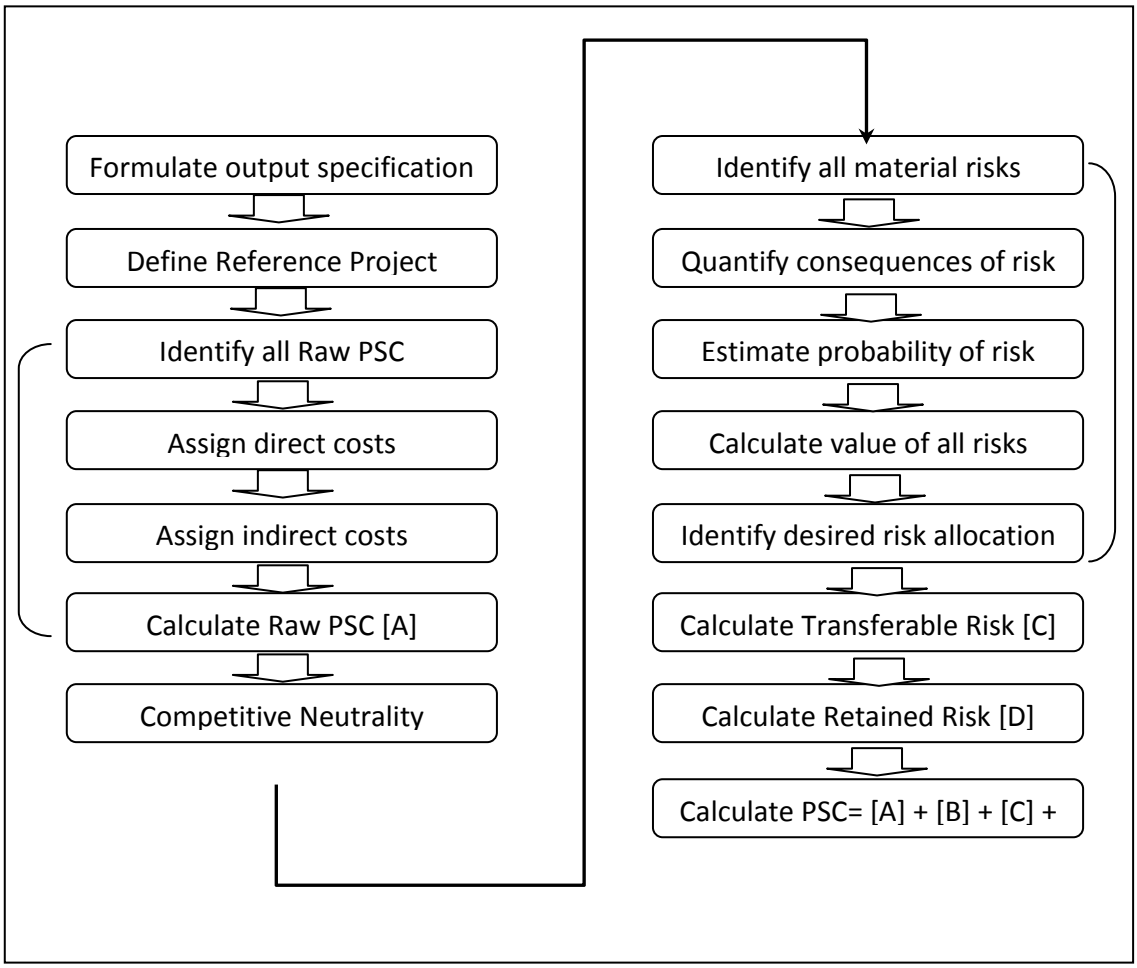


Figure 3.6 PSC Process (DTF, 2001: p.14)

Raw PSC

The Raw PSC is a method of calculating asset or service which is owned by public sector under public procurement method. Raw PSC is consists of all capital and operating costs, both direct and indirect, that correlate to building, owning, maintaining and delivering the service (or underlying asset). The raw PSC should not include any valuation of risks to which government remains exposed. In many cases, the public procurement method may involve an element of design and construct outsourcing or other forms of private contractor management. Below is a process of calculating PSC

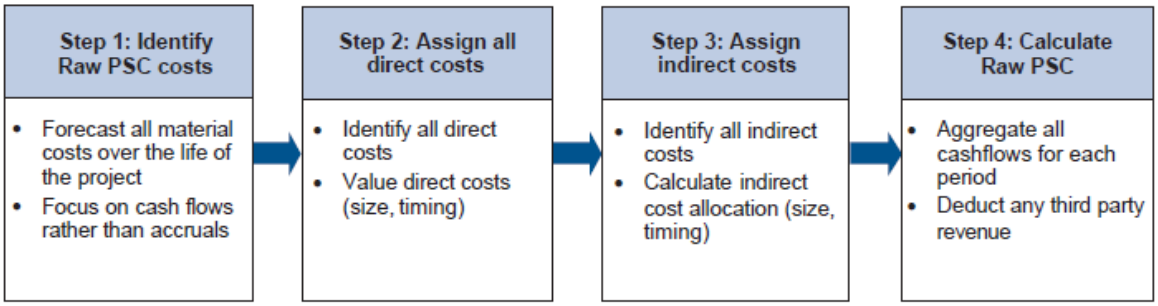


Figure 3.7. Steps in calculating PSC (DTF, 2001: p.18)

There are some components that include in the raw PSC, which are:

- direct costs: costs that can be traced or assigned to a particular service;
- Indirect costs: other costs incurred that are not directly related to the production of the services. These are costs that contribute to the production of a service, but are not incurred exclusively for that one service;
- Less any identifiable third-party revenue.

Competitive Neutrality

This is where procurement team reviews over projects and market for potential bidders in order to identify any material advantages or disadvantages peculiar to government under a public sector delivery method. Competitive advantages from public sector ownership typically include taxes, such as land tax, that are only levied on private enterprises. Following are steps in calculating competitive neutrality.

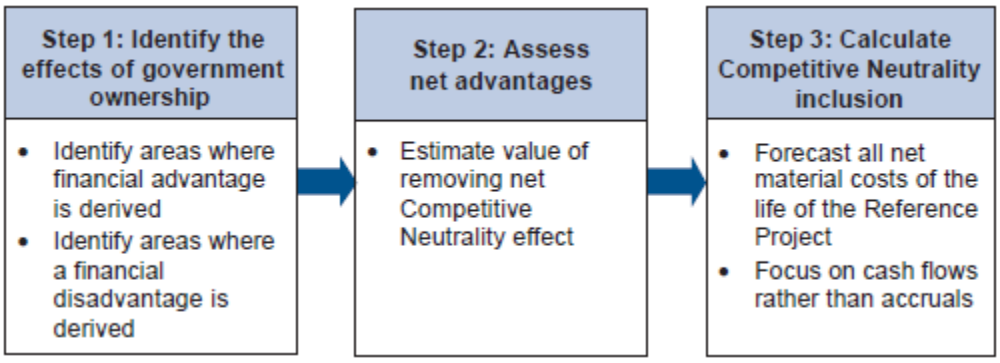


Figure 3. 8. Steps in calculating Competitive Neutrality (DTF, 2001: p. 27)

Transferable Risk

Risk Allocation is the most important thing in partnership including partnership Victoria. There are two kinds of risk which is transferable risk and retained risk.

Transferable risk implies that the risks is initially attach to government, but in partnership it can be transfer to the private; whereas retained risk will be discuss below.

Before risk is analyzed, procuring authority must able to identify and valuing risks, which steps of it can be described as follows:

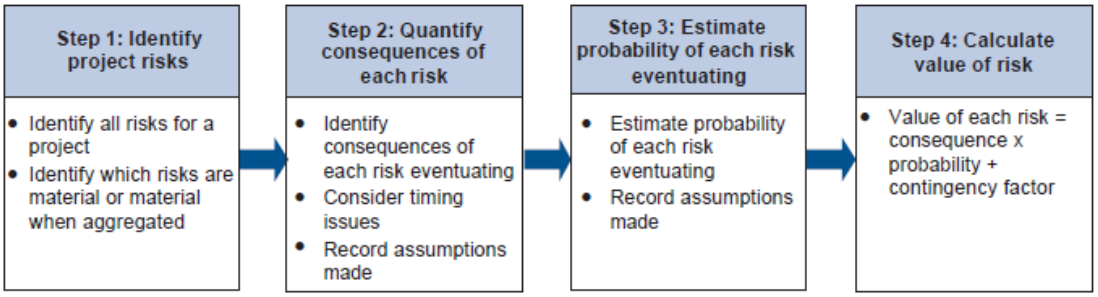


Figure 3.9 Steps in valuing risks (DTF, 2001: p.32)

The allocation of risks to the bidder is as what also clarified for many other type PPP scheme that is transfers to the side, private or public which can handle it best. This is also mentioned in the guidance as follows: “The decision to allocate a risk to the bidder depends on whether the bidder is best able to manage the risk at least cost. The type and number of risks which are classified as Transferable Risks needs to be assessed on a project by project basis and over time as parties develop more effective risk management and mitigation skills”.

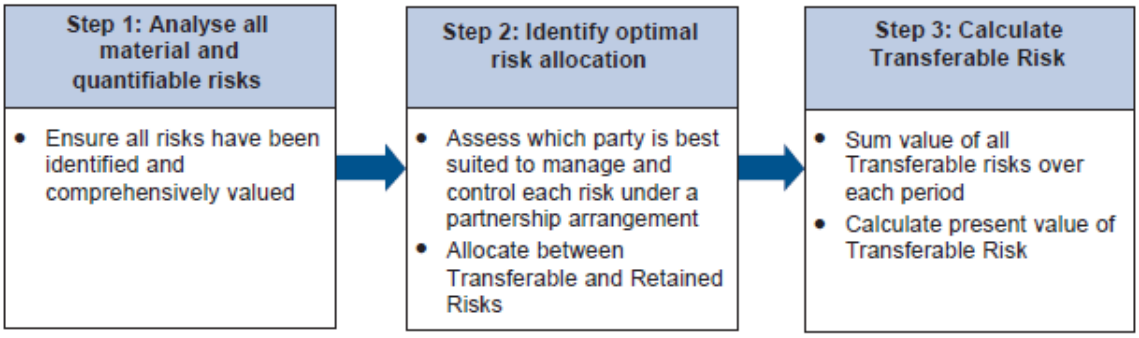


Figure 3.10 Steps in valuing transferable risk (DTF, 2001: p.51)

Retained Risk

Retained risk means all risk that retained by government since it might not possible to be handled by private. It explains that “the cost of Retained Risk should be included to provide a comprehensive measure of the full cost to government in a PSC. For projects where Retained Risk is included in the PSC, its value will need to be added to each of the private bids to allow a meaningful comparison”. Steps needed in valuing retained risk can be seen below:

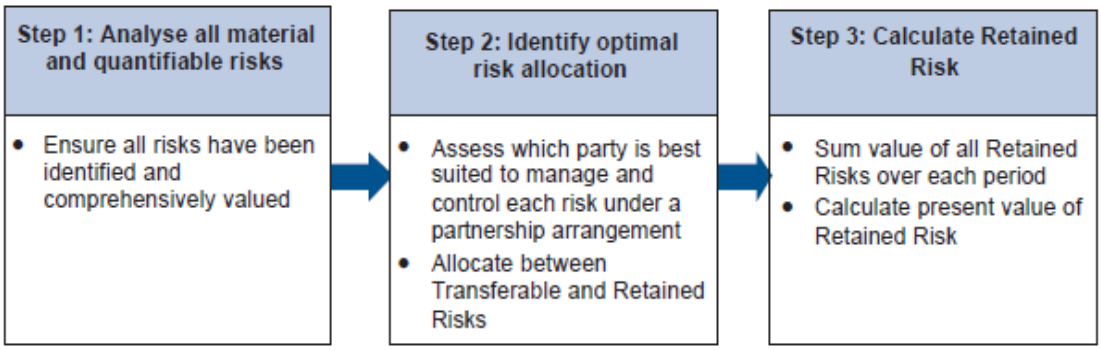


Figure 3.11 Steps in valuing Retained Risk (DTF, 2001: p. 57)

3.2.3 Application

Once we look at the method explains above we also see a long process needed in valuing private' proposal. Similar condition also can be found in the VfM assessment under UK style. Therefore, in sum it can be assumed that the process will also took period of time and end up with high cost needed.

Quiggin (2004) mentions that there might be exist reduction in cost. But then it realize that reduction cost is only part of reduction wage and condition, which means it is not about reduction for social welfare but to transfer cost from employee to purchaser of services.

3.2.4 Risk Management

Once again since VfM is almost all about how to manage risks, as in UK, Victoria Australia also looks at the risks as it has to be, distributed to the one who can manage it best. Risks management under Victoria partnership is obliged to find a result of optimal risks rather maximum risk. Moreover, Victoria tries to organize a clear and enforceable risks allocation including its financial consequences. There are risks list that identify in the guideline that need to be considered, which are: commissioning risk, construction risk, demand (usage) risk, design risk, environmental risk, financial risk and force majeure risk. A complete definition about risks can be found in the appendix.

Partnership Victoria divide the technique is assessing risks into two technique simple and advance. The technique chosen is depend on size and complexity of the project, but whatever the choice is both technique is should be done thoroughly.

3.3 ACHIEVABLE ECONOMY, EFFICIENCY AND EFFECTIVENESS

Achievable of economy, efficiency and effectiveness is value for money all about, as defined by Butt and Palmer (1985). However, PFI is not only about how to finance capital investment rather than to search for a full range of private sector management, commercial and creative skills. Thus, come on assumption that private would likely able to provide services more effectively and efficiently compare to public sector (Nisar, 2007). Therefore, UK and Australia needs PSC and VfM assessment in order to realize that.

The reviewed by Grout (2005) summarize that VfM test in the United Kingdom and other countries using PSC, which part of VfM test, is a model of sophisticated version. Under this method, they value differences in benefits as well as costs. By doing The PSC, there would be a comparison between cost and quality before and after PFI implementation. But, it is also said that doing the VfM assessment is took time and that means costly. The reason behind it is that VfM assessment with its PSC is a complex process. Nevertheless, overall assessment from qualitative and quantitative analysis shows a result that the project under assessment would like to achieve effectively and efficiently (Grout, 2005).

CHAPTER 4

VALUE FOR MONEY AND PPP IN INDONESIA

In 1997, when crisis crash Indonesian economic, can be said as a significant step of PPP started to pull out government intention to raise partnership to the privates. Therefore, this chapter will discuss about the development of PPP and the importance of VfM assessment under PPP procurement, and also the process applied to deliver PPP procurement.

Even though there is an improve progress has been done by government in supporting the development of PPP, there seems accessible information not quite adequate. Regards to that matter, data limitation, PPP development information mostly will be obtained from Asian Development Bank (2009) in their Evaluation Study. This is regarding PPP Unit in Indonesia established around 2007 and PPP guideline published in 2010; moreover, information gathered so far is an economic characteristic only in form of list of feasible project to be delivered under PPP scheme.

4.1 Public Private Partnership

In early 1990s, under the second president of Indonesia regime, was likely the first moment of government involving in issue of using public private partnership in infrastructure development. But, it was likely a moment which has no significant meaning to the scheme of providing infrastructure in Indonesia. Public sector remains the prime actor in providing infrastructure to public.

Since huge economic crisis took place in 1997, government paid full attention to the developing of PPP. The reason under that decision is that because Indonesia holds high demand for infrastructure development; but at the same time, national budget halted government to accomplish the demand. Asian Development Bank (ADB) in their evaluation report of assistance PPP development (2009) clarified that among developing countries, Indonesia is one country that its government intentionally move towards encouraging the involving privates in infrastructure investment. The economic recovery has been boost up importance existence of PPP not only from governments, but also investors and developers. Government starts to find a solution on how to develop PPP. It mostly puts on the developing of PPP framework and PPP institution, also secure the investment climate by giving a proper incentive to private hence they would invest in infrastructure development; similar condition also happen on most developing countries (ADB, 2009). The following data (ADB, 2009) shows

PPP initiative identified by ADB; Indonesia, as also another member of developing countries that is Bangladesh; PRC; India; Lao People's Democratic Republic; Philippines; Sri Lanka; and Viet Nam, is a country that somehow holds unclear sector priorities for PPP. Projects under PPP scheme is typically only cover power, transport, and occasionally water. From 1994 to 2006, ADB through its Private Sector Operation Department (PSOD) motivated the country by catalyzing partnership in sector power, gas, ports and water.

Power project, so far is the most feasible project which is run under PPP scheme. According to ADB (2009) the reason behind it because power project can deliver high cost revenue and supported by politician compare to other project. Other than that, toll road also part of project that favoured by private because of its high cost recovery; the major constraint over toll road project is risk of land acquisition which not only took long time to negotiate the land and price of land it self too high and difficult to compensate. Toll road project has the longest history in applying PPP scheme. As presented by Ministry of National Planning that since early 2005 Ministry of Pubic Works introduced 1,951 km toll road development which was offer under PPP procurement. But the result is unsatisfactory. Further, Indonesia has also carry out infrastructure summit which the last summit was held in 19-20 January 2005 in Jakarta, capital city of Indonesia. This occasion is also purposely to find out how far private interesting in investing in Indonesia. This also shows unsatisfactory results since there were only three projects of toll road that proceed from 36 targets of projects.

Figure 4.1 Toll road project in Indonesia (JICA, 2009)

Picture 4.1 shows the location of proposed toll road in Indonesia. But, from those number proposed, six among them stated by JICA is the most feasible one and just arrived at the very beginning of PPP process under first screening with

content technical highlight is feasible, implement ability, and has strong impact to local industry. Further under government evaluation, those unsatisfactory results shows result of difficulty in land acquisition process including uncertainty in land price and time to complete the acquisition process. Land price relates to price that offered by people who legally own the land. Moreover, lack of understanding of risks and risk allocation between the government and the bidders.

Those stories are common issues that can be found in the national level. The author found the obstacles in developing PPP scheme is based on the plan of Port development in South Sumatera Province. As discussed in the first chapter South Sumatera government put a lot of effort in realizing the development of sea port as solution that associate with the river port which no longer can accessible due to some major obstacles. Government effort in trying to realize the development of port is by using private investment under PPP scheme. But, up to now nothing really happen due to some problem associate with the project among other: The project is solicited type of project which means the project is proposed by local government. Therefore, local government have to prepare Feasibility Study which is an expensive document to do.

Feasibility study is said to be expensive since it cover wide range of research. There are some study gathered in feasibility study including Technical Feasibility, Economic Feasibility, Environmental Feasibility, Schedule Feasibility, and Operational Feasibility. And it has to be done under qualified consultant which used to be international consultant with high fee needed. For local government, South Sumatera for instance, it is difficult to do since government has limited budget to realize FS. While, if local government ask private to do that then the idea must come from private; moreover, there is a possibility that private who finally do the FS not the one whose get the job. If that is happen then they will get what is called by government intellectual compensation. But, it is not attractive to private due to period of time needed to do the FS and not to mention money spent for the study while there is no guarantee on what they did.

4.2 Value for Money

In that early 90s, some projects have been appointed to deliver public service under partnership of public and private, for example for power ‘Independent Power Producers’. However, that partnership is formed by direct contracting only; which means public sector directly appoint one single bidder to implement the project without any competition which unfortunately generate unsuccessful project. But recently, direct contracting is no longer allowed; competition through competitive bidding is a must.

Competitive bidding as mentioned above is following a series of process which has been outline in the 'Investor Guideline in Infrastructure Investment' published by Coordinating Minister of Economic (CME) of Indonesia.

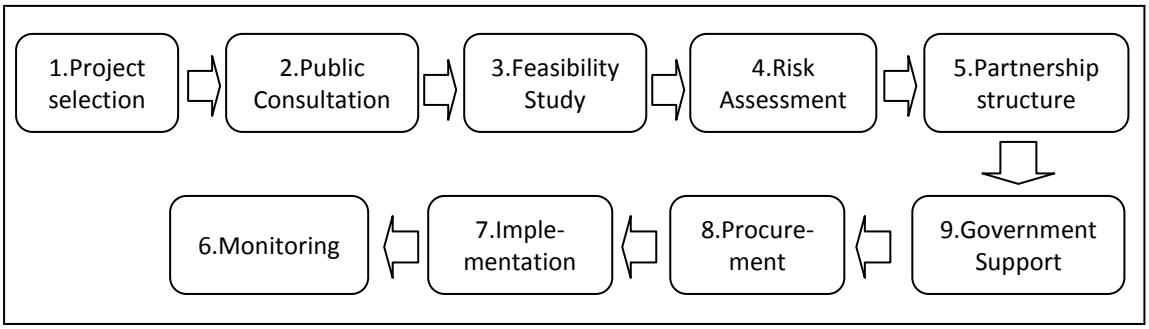


Figure 4.2 PPP Process (CME, 2010)

Before the process as shown in picture 4.1 is explained step by step, first of all that author would like to mention is that VfM assessment under this guideline is different with the one that applied by UK or Victoria-Australia. Under this guideline VfM assessment is likely a process to determine the structure of partnership, such as management contract; BOT; etc, which will be done as the step arrive at the middle of the process (under partnership structure). Brief explanation upon the process can be clarified as follows:

Project selection

The objective of this step is to identify projects that qualified enough to be executed under PPP scheme and attract private to invest in the project. In addition, the process is necessary in order to inform bidder candidate that the project has economic and politic value to secure the continuity of the project. The result of this process is a list of feasible projects.

Public consultation

This step is part of effort to achieve a process that efficient, transparency, and also increase public involvement. Public consultation is also part of market sounding which purposely to find out privates general acceptance upon the project which is done before project is implemented. Once the project almost implemented then it is become a responsibility of private who win the project to launch and introduce its project in front of public.

Feasibility study (FS)

‘‘The feasibility study should examine three main areas; market issues, technical and organizational requirements, and financial overview”[5]. So, it can be said that doing FS is also time consuming and expensive. FS comprises basic plan of the project which also include financial analysis and other important analysis. Other than that, what also include is structure of partnership; type and level of government support needed; implementation plan; result of public consultation; and other information needed as ruled out by the guideline. Based on the initiation of project then there are two type of project which are solicited and unsolicited. Solicited means once the initiation of the project is coming from government side; on the other hand, unsolicited means if the project initiated by private. Further, in unsolicited project the private company who willing to construct the feasibility study in the first place, and that is the way it should be, under circumstance that the company failed in the bidding process then they would got what is called by intellectual compensate for the FS made. But in practice, privates seem not too attracting with the offering once they recall doing FS is time consuming and need a lot of money.

Risk Assessment

As also discuss in UK and Victoria-Australia PPP, risk allocation is put on side who can handle it best; similar clarification is also defined in this guideline. Commonly risk allocation is identified under FS process. Type of risk that discuss in the guideline is not as much as like the one discuss in UK and Victoria-Australia VfM assessment. Following are risk list as defined in the guideline:

- Land acquisition risk. Risk that associate with land acquisition withdrawal; or, the increasing land price more than limit determined (land capping).
- Tariff risk. Political considerations can affect future tariff needed that could reduce rates of return.
- Demand risk. The possibility of inappropriate the use of project built which causing revenue decrease.
- State and Politic risk. Unstable political situation and credit rating which sometimes below investment rating is kind of obstacles for investor, therefore government offers guarantee upon this problem.

[5] From: http://faculty.ksu.edu.sa/ZSiddiqui/The%20Feasibility%20Study/The%20Feasibility%20Study.pdf

- Off-taker risk. Off-taker is state company that responsible in purchasing the product of the project if financial crisis present in the project. Government guarantees that off-taker will not influenced by financial crisis.

Under Ministry of Finance Regulation No. 38/2006, demand risk defines as the risk that might occurs because of demand goods or services under the partnership are lower than stated in the agreement.

Risk that mentioned above is a common risks that covered by PPP unit in Indonesia. Since toll road is the most project that run under PPP scheme, this kind of project has its own typical of risks variables. Ministry of Public Works of Indonesia has defined list of risk variable for toll road under the guideline for toll road provision. There are risks which identified as follows: design risk, land acquisition risks, interest rate risk during construction phase, construction risks, instrument risk, disaster risk in the construction phase, operation and maintenance risk, toll revenue risk, interest rate risk, disaster risk in the post construction phase (Bagoes Oka and Pradono, 2010).

Partnership structure

Some countries are using VfM assessment, under method such as PSC, in deciding whether to apply conventional procurement or under PPP scheme. But, it could not be applied to Indonesia since PSC assume that project implementation under public financial is realistic; on the contrary, government will not be able to do that due to financial and capacity limitation.

As a solution, alternative procedure has been suggested by Inter-American Development Bank, which is:

- Widening scope of project implementation that was fully under public authority, move to fully under private authority.
- Identifying parameters that would likely influence the project such as economic and social factor, institutional, and technical.
- Identifying appropriate structure needed using qualitative analysis
- Considering risk minimizing to improve the feasibility of structure needed
- Continuing to quantitative analysis to define the appropriate structure needed by using financial evaluation under Net Present Value

Government support

Government of Indonesia has set up various support mechanisms for PPP infrastructure projects. Support mechanisms are available for various specific projects, depending on the findings in the feasibility study as also related to transfer of risk and partnership structure.

There are some supports from government in form of land acquisition, tax incentives, and conditional support for certain risk. Moreover, once private intend to invest infrastructure project in specific area which is located in exclusive economic zone then more incentives will be offered by government.

Procurement process

All PPP projects, solicited or unsolicited, should be done through a competitive procurement process (Figure 4.3), which is preceded by a process of pre-qualification process. This stage can be said as main stage of the whole PPP process. Steps needed in procurement process as follows:

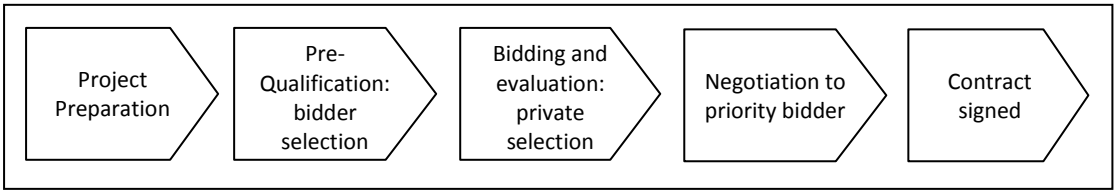


Figure 4.3 procurement process (CME, 2010)

Implementation

Implementation project covers the period when the contract signed until the end of the project, or as the assets are returned to the Government or re-tendered project. Steps needed in order to implement the project including the establishment Project Company by project sponsor, acquisition of funding or financial close, construction, commissioning, operation and maintenance

Monitoring

Private company performance is monitored by government contracting agency under working agreement. This process is organized under contract and will be implemented in every stage of the plan which is pre-construction, construction, operational and asset hand over or re-tender.

CHAPTER 5

ANALYSIS

This chapter will analyze what has been discussed in three previous chapters in order to bring out the possibility framework to assess VfM. Therefore, what will be discuss here is the comparison of those three countries under criteria method, application, risks management and achievable of economy, efficiency and effectiveness. At the end of the chapter will provide with the result gained as a lesson learnt from international experience.

5.1 Method

Method is a tool or sequence process picked to use in selecting bidder through their proposal. The chosen one is the one that shows result of VfM. Public Sector Comparator (PSC) is the common tool used. Both countries, UK and Australia utilize similar method in performing PPP scheme. No doubt that UK has an improved method in assessing VfM under PFI scheme as discussed by IMF (2006). UK has actively provided the method needed by providing information and guideline which can be easily accessed. UK also revised PSC guideline under Technical Note No 5 into VFM Assessment Guideline which is said simpler than PSC Guideline. VfM Guideline is made purposely to assist procure department in assessing private' proposal under the same criteria. It is that method published by HM Treasury make any departments, that have plan to run a project under PFI scheme, would much easier since they have standardize process both qualitative and quantitative assessment. Even though each project has its own characteristic, they still can applied the same method; unless, the project seems more complex than it used to be, and if it is then innovation from procuring department is necessary (HM Treasury, 2006).

More or less same situation is happen in Australia particularly Victoria government has their own policy in PPP development. Victoria also provides their authority with guideline and information needed for developing partnership between public and private under partnership Victoria. While in UK, in assessing VfM they include both analyses, quantitative and qualitative, in one guidance where PSC is part of it. On the other hand, Victoria, VfM assessment is put biggest in PSC method. In fact, Victoria applied PSC based on UK experiences. The difference is Victoria still using old version of UK PSC, while UK has revised their method which clearly divide between qualitative and quantitative analysis. While Indonesia, even though PPP is not a new thing in

this country, there seems not much progress in developing PPP scheme. PPP unit is established around 2007 and the guideline for the PPP process is published in 2010. Information and guideline is easy to access but unfortunately it seems that it will be informed clearly about the process by discussion in person to the spoke person in the PPP unit. Both Victoria and Indonesia applied method that cannot be seen clearly the division between qualitative and quantitative analysis.

Moreover, Indonesia has totally different style compare to UK and Victoria. Typically, framework used by Indonesia is more likely a traditional process of procurement. The major reason that author can found is that a method like PSC is based on an approach where it is realistic to implement the project by public funding. Different situation for Indonesia, it considers that public sector could not afford to implement the project; not only from budgeting but also government capacity. On the contrary, government of Indonesia is more favour to choose a method of applying process like providing Feasibility Study (FS); whereas in fact, it needs more money to spend to do this process. Other than that, as part of its mature PFI development, UK also adds up in the guideline some important notice for each stage of the process which emphasis on: early assessment, single bidder and soft service analysis (HM Treasury, 2006). Early assessment defines as a process taken prior to engagement with market; it is necessary step in order to prevent changes in procurement process which likely will erode VfM. Next is about clarification of single bidder procurement is allowed; single bidder is happen sometimes and when it happens it seems it will eliminate a competitive bidding. Then, soft services which generally associate with day-to-day supporting services needed in the running of an asset. Those are important consideration in order to ensure that the partnership is finally chosen because private will run the project better than the public will. However, the step prepared by UK can be found yet in Victoria and Indonesia guideline. Table below describes valuation of each country in using method of VfM assessment. Plus (+) sign indicate that the country running the method well as clarified by the explanation in each box, and same for minus (-) sign explanation.

Table 5.1 Classification under 'method' criteria

Criteria	Countries		
Methods	United Kingdom	Victoria-Australia	Indonesia
Structure	+ *Clearly defined*	*+/-* *Old with unclear division of analyses*	- *Unclear structure*
Quantitative and qualitative	+ *Usage of both quantitative and qualitative techniques*	+ *Usage of both quantitative and qualitative techniques*	- *Unclear analyses*

5.2 Application

VfM assessment is now become an important step that attach stronger to PPP scheme. There are at least six main consideration in VfM assessment which are risk transfer, the long-term nature of contracts (including whole-life costing), output specification, competition, performance measurement and incentives and private' management skill (Andersen, 2000 in Grimsey and Lewis, 2005). As already mentioned, UK and Australia attach to this process, but not Indonesia.

Somehow, there is a big different between reasons of choosing PPP in delivering public service between Indonesia and UK or Australia. For developing country like Indonesia, choosing PPP means government cannot afford to develop the infrastructure needed; whereas the infrastructure itself has an important economic value to the country. The worse is sometimes local government unconcern enough with the private' investment proposal as long as they build the infrastructure needed and fair revenue for both side. Therefore, a thorough assessment like VfM assessment seems not so in favour in Indonesia, not only because the assessment itself need a certain amount of money which also might cannot be affordable for government, as also mentioned in the guideline, but also human capacity to prepare the benchmark needed due to lack of experience dealing with private proposal under PPP scheme.

On the contrary, for developed country like UK and Australia, financial is not the major obstacle in delivering infrastructure nor experience; and, not to mention that the process of VfM assessment itself which is a complex process that can causes time consuming and more expensive process. However, both countries keep using private's skill and technology which sort out through VfM assessment. They need it for certain reason that is for a better quality of outcome of the project and at the end VfM is a necessary process in delivering good quality services to public. Table 5.2 below describes valuation of each country in apply VfM assessment whether it is costly in applied the process or need skill government staff instead private' skill. (+) sign indicates that the country gain a good result for the criteria, while (-) signs is the contrary.

Table 5.2 Classification under 'application' criteria

Criteria	Countries		
Application	United Kingdom	Victoria-Australia	Indonesia
Cost	*(-)* *High but clear allocation*	*(-)* *High but clear allocation*	*(-)(-)* *High but unclear allocation*
Human Capacity	*(+)* *Employ qualified skilled government staff instead private*	*(+)* *Employ qualified skilled government staff instead private*	*(-)* *Employ private' staff*

5.3 Risk Management

Even though it explained that there are at least six major point that need to be considered when assessing VfM, risks and competition is said the most important thing in VfM assessment. Under UK style, risks are thoroughly analysis both in qualitative and quantitative method. In risk management, one of private' skill is tested here; the skill is tested under the question how does private sector pricing and managing all risks that attach to the project. There are nine risks allocation clarified in the VfM guideline (HM Treasury, 2006: p.20) which are in term of design, financing, implementation, operation, usage, regulatory change, obsolescence (in technology), service provider lock-in, and residual value/disposal. Private has to be able enough to price the risks that might occur from the beginning of the project until contract life.

For Victoria, they identified type of risks based on project risks database that gather from earlier project. Those risks database will further justify meeting current project condition. Furthermore, from those risks they will distribute it to who best can manage it. If the risks are better on private side then it will transfer to private; and it's called transferable risks. The risk that can only managed by public is called retained risks. Type of risks that identified by partnership Victoria are commissioning, construction, demand (usage), design, environmental, financial, force majeure, industrial relation, latent defect, operating, performance, change in law, residual value, technology obsolescence, and upgrade risk (Department of Treasury and Finance of Victoria, 2001: p.33). Those risks seem too many in number and perhaps no meaning or no economic consequence to the current project. But, Victoria did that in order to avoid any consequence that likely has significant effect to other or similar project in the future; for instance environmental risk, it might has no meaning for current project but perhaps it will be useful for similar project in the future.

Whereas Indonesia, it explains that risks written in the guide are only part of risks that identified; there are other identified risks but not include in the guideline. Why is that? Risks include in the guideline are land acquisition, tariff, demand, state and political, off-taker (Coordinating Minister of Economy, 2010: p.22). It seems that those risks are the most important risks that defined by the Indonesia' PPP unit and give impression mostly risks that about going to associate with the projects are uncertainty and will become a retained risks, as in the Victoria' phrase. Giving the explanation of uncertainty, for example, demand risk; under Ministry of Finance Regulation No. 38/2006, demand risk defines as the risk that might occurs because of demand goods or services under the partnership are lower than stated in the agreement. From the definition it seems that one project proposed is delivered without uncertain economic

value. Whereas under quantitative analysis, net present value and internal rate of return is represent a quantity that shows whether or not the project will generate economic value in term of revenue. Perhaps, this kind of situation is produced by political will of one regime that in the future will affect the continuity of the project if regime changes. Hence, a political risk is also including as most important risk. Above all, those risks seem too risky for private to involve in the project.

Table below (table 5.3) describes valuation of each country in assessing risks that associate to the project. There are two possibility valuations: covers many types of risk which generate from project to project, and how they manage the distribution of risk whether it is mostly managed by private (+), or mostly by government (-), or in between (+/-).

Table 5.3 Classification under 'risks management' criteria

Criteria	Countries		
Risks Management	United Kingdom	Victoria-Australia	Indonesia
Risk type	+ *Covers wide range of risk type*	+ *Covers wide range of risk type*	- *Covers limited range of risk type*
Risk allocation	+ *Mostly transferable risk to private*	*(+)(-)* *Mostly balance between transferable and retained risk*	- *Mostly retained risks*

5.4 Achievable of economy, efficiency, and effectiveness

These 3e, the economy, the efficiency, and the effectiveness are value for money all about. Are they accomplishing within the process? Under structure that explained in each guideline, particularly for UK and Victoria, the three component would likely achievable. In UK, questions under qualitative analysis shows a stronger point of efficiency and effectiveness, while economy point of view in gaining result in lowest cost can be seen in the process under quantitative. Same thing also occur in the VfM assessment under Victoria partnership. Whereas Indonesia, as also discussed in previous sub chapter that VfM is not including in the PPP process for a reason that it is not realistic to implement the assessment while government could not afford to deliver the project by themselves.

However, there is another consideration regarding budget spent in delivering the process of VfM assessment. As it says that its complex sequences of process makes the assessment need longer time to spent and end up with higher budget needed. Is that consideration including as part of

result in applying VfM assessment? It can be a different part from desire to trigger bidding process to achieve VfM. That consideration perhaps another value or advantages that we can achieve once the assessment process held in certain period of time means we can reduce budget needed for the process.

5.5 Critiques

Other than those four criteria, critiques seem appropriate enough to be considered in order to know how wide the VfM assessment under those three countries is applied. This Concern emerges from scholars regarding method used in PPP; to comprehend more about the difficulties in practicing VfM assessment. Or, to ensure that VfM assessment method is agreeable among scholars. As mentioned in chapter 3, Grimsey and Lewis (2005) discuss that among the concerns is about validity of the VfM methodology; application on PFI to a certain sector/project; or, about VfM and accountability issue. Thus, if it narrowed down to a more specific issue then the major concerns in the critiques raised by scholars can be classified into risk transfer, discount rate, and financial evaluation.

Critiques upon assumption about risk transfer, the discount rate and financial evaluation regarding long contract are not purposely as a critiques that go up against the VfM assessing under PSC method. It is more likely concern to find a better solution to the method used (Grimsey and Lewis, 2005: p.362). For that reason, Victoria for instance, has put a lot of concern by publishing separate policy regarding Risk Allocation and Contractual Issues. Or, such a critique that mentions PSC is such a financial modelling that not even experts understand it is can be understood. This is perhaps part of the condition where the benchmark is made by public sector which can causes a doubt that government made PSC as poor as possible in order to make private' proposal looks good. However, that is not necessary step that would likely taken by government once we remember that borrowing the money for the infrastructure development by government is might be lower compare to if the private does. Then, as Grimsey clarified that government put a lot of attention to PPP for cost overruns because of delays reason. Different reason will occur in Indonesia situation; all the reasons come together that conclude government need the partnership, which are financial, skill, technology and human capacity.

In sum, once again, critiques emerge among the scholar is part of the concern to improve the method particularly PSC method in process of building a partnership between public and private. The critiques is not trying to halt the existence of process needed instead make authorities in both countries keep improving the assessment process; therefore, it seems that critiques raised by

scholar is not a big concern for this report in getting VfM framework as a lesson learned from both countries. Valuation can be seen in table below which describes the emerge of critiques due to its widely used in the world and are those critiques is something that to worry about in implementing VfM assessment

5.6 Summary

From the discussion of VfM assessment in those three countries, some findings can be earned from issues discussed which can be assume as part of lesson learned for Indonesia.

In sum, UK gain more weight compare other two other countries under criteria methods; application; risk management; and achievable economy, efficiency and effectiveness, which are mostly gain plus (+) point; whereas Indonesia gain the lowest point. This means that most of framework design that can be copied for the development PPP scheme in Indonesia is UK PSC revised under VfM Assessment Guideline; however there must be some adjustment needed particularly policy, law and regulation, and human capacity. Therefore, the adjustment needed will be further discuss in next chapter as part of the recommendation for the framework applicable enough to be implement in Indonesia.

CHAPTER 6

CONCLUSION AND RECOMMENDATION

This chapter is the last part of this thesis report which will outline the conclusion and recommendation. The conclusion is derived from the discussion in previous chapters which focusing particularly on VfM assessment from three different countries which are United Kingdom, Victoria-Australia and Indonesia. United Kingdom and Australia are two countries that chosen under criteria as a country with well-develop PPP scheme; whereas Indonesia as a country whose might obtain lesson learned from those two countries. Thus, sub chapter of conclusion will derived an explanation as a solution to all research question under chapter one.

At the end of this chapter will also present the recommendation as reflection to literature that has been discussed in previous chapters, to practice and finally to study needed in the future with similar topic.

6.1 Conclusion

As outlined by Asian Development Bank in their report (2009), developing member countries including Indonesia is started to boost up PPP by improving the condition needed for private to invest through strategic approaches like developing PPP framework and institution. Indonesia has established P3CU (public private partnership central unit) as a central institution which mostly its activity is developing PPP from all aspects needed like institution and regulation. They also have introduced the process needed for investment under PPP scheme. Somehow, not too many projects under PPP are successfully implemented. Reasons that mostly came up associate with that unsuccessful are uncertainty about to get land or land acquisition, or government regulations regarding the project, or the process itself which some steps seems not appropriate for private to deliver it, such as conduct a feasibility study. For more conclusion that can be achieved from all the discussion in this report, starts with the answer to research question of this report.

6.1.1 What are theories that driving VfM?

There are different definitions about Value for money (VfM) that can be found among literatures; Butt and Palmer (1985) define that VfM is about economy, efficiency and effectiveness. By dictionary, VfM definition can be conclude as amount of money that spent for a fair return. However, under PPP

scheme VfM defined by “the effective use of public funds on a capital project, can come from the private sector innovation and skills in asset design, construction techniques and operational practices, and also from transferring key risks in design, construction delays, cost overruns and finance and insurance to private sector entities (Grimsey and Lewis, 2002, in Darvish, 2006)

6.1.2 What are lesson learned achieved from United Kingdom and Australia?

Under VfM Assessment Guideline published by HM Treasury, they define VfM as “the optimum combination of whole-of-life costs and quality (or fitness for purpose) of the good or service to meet the user’s requirement”; and in the process of procurement under PFI explains that PFI is not going to happen unless unless it shows prove of VfM in procurement. While under PSC guideline published by Department of Treasury and Finance of Victoria, there is no VfM definition only an identification that through a competitive bidding can help deliver VfM.

Both countries have their own scope of work in assessing VfM; but, both deliver qualitative and quantitative technique in the process of assessing VfM. Furthermore, both countries put the most important thing of risks management and competition as the most valuable thing in assessing private’ proposal in delivering VfM. There are not many differences found in their process of VfM assessment; however, there are small differences in the technique chosen which are UK under their new version of PSC divide clearly between the technique of quantitative and qualitative analysis; while Victoria unclear division between those two analysis. UK has revised its qualitative analysis into certain question in order to have standardized analysis under the same criteria. While for Indonesia, they have a different kind of process, in fact Indonesia seems not applied a process of comparing the private proposal against government benchmark but against feasibility study.

The assessment itself is taking account early before the procurement process. This step is taken in order to decide whether one project will be under PPP/PFI scheme or under traditional procurement. Once the decision upon that question then private’ proposal will be valued using VfM assessment process.

6.1.3 What is the possibility framework on how to assess VfM in measuring private’ proposal for Indonesia circumstances?

Infrastructure development has a strong relation to economic development within the country. Therefore government tries to provide it well in order to deliver appropriate services to public. However due to limited budget,

government need a partner to realize that. Thus, partnership between public and private is chosen and obviously for Indonesia situation, budget is a constraint therefore government not only need private' skill in several fields but also private' financial capacity.

For that reason, Indonesia government took a different kind of method in valuing private' proposal, compare to UK and Victoria-Australia. Those two countries which is known for its well-develop PPP/PFI are using PSC method in valuing private' proposal. One major stages in the process in Indonesia is that its used of Feasibility Study (FS) as a standard in valuing private proposal which is made by the one private against other private' proposal. Furthermore, the making of FS is considered expensive. Therefore, from analysis, using those four criteria which are method used, application, risks management and achievable of economy, efficiency and effectiveness also considering critiques exist with method then the appropriate framework on how to assess VFM to be implemented in Indonesia circumstances is likely can be attained from method used in UK under its VfM Assessment Guideline published by HM Treasury. The rationale behind this choice lead to reasons:

- UK is a country with well-develop PFI scheme and method of assessing VfM
- UK has improved its VfM assessment with clear division between qualitative and quantitative analysis. This also to make any department job, which would run the project under PFI scheme, is easier and work under the same criteria
- There are numbers of country which has follow UK PSC old version with some adjustment such as Canada, Japan, South Africa and some other country in Europe.
- There are critiques upon the method which mostly point toward time spent and cost needed to execute the process or other economic technique such as discount rate or risks calculation, but UK government keep the method of assessing VfM before bids and after bids.

However, in order to ensure that the method is applicable enough to Indonesia culture then the method call for an appropriate adjustment regarding policy and regulation and increasing government staff capacity as the one who will do the assessment process.

6.2 Recommendation

UK style in doing VfM assessment is likely would be possible to be implemented in Indonesia, but no doubt that it would need many adjustments in order to fit in to Indonesia situation and culture. So far in Indonesia, as also defined by ADB (2009) private sector contribution in infrastructure investment is

halted by lack of “institutional capacity, weak governance system, and unclear or unsuitable rules and regulation” which by the end would increase transaction cost and risks in process. Therefore, what should be done in order to improve the environment for sustain PPP and the application of VfM assessment government also needs to improve:

6.2.1 General Issue

- Proper infrastructure provision objective

Even though it is that the need of one particular infrastructure provision is based on economic and social value, somehow the need to implement the plant is not purely that way but attach to political driven. For Indonesia, once the plan has become part of long-term development planning then it should be undisturbed with the changing of leaders; however sometimes it is not goes that way. New leader will have new idea which as desired to be implemented in such a short notice. To fulfil what has been ordered by the leader, the project would likely sell to the investor without insufficient information which will be affect, at least for two reasons: first, the project is not attractive enough to the private particularly in form of benefit; and second, doubt appears from the private regarding the continuity of the project.

The need for political stability is perhaps the highest concern in developing a good environment for PPP stability. The things that worries private in investing in Indonesia is that the changing of leadership whether it is al local government or national level. Regime changing mostly effect to policy changes, once it happen it means the changes for almost structure of development process in the region including in the investment process.

- Review on various regulation to support investment environment

Other reason that halt private invest in Indonesia is regarding unclear and unnecessary rules and regulation. Railway and Port for instance, regulations under these types of project still employ regulation which made and composed by Dutch government in 1960s. Further, sometimes international privates found unnecessary or unusual rules in the regulation. If that is happen then it would likely increase the transaction cost and not to mention risks that must handled by private. Therefore maybe it is best for government from many sectors to sit and discuss together concerning all rules and regulation which is unnecessary and overlap.

- The development of Institutional capacity

Including here is governance system which means starts from government human resource to the institution framework itself. Government needs to increase their staff capacity in form of skill and experience, perhaps by learning

from other advance country and also evaluate job description of department relate to PPP development.

- Creating proper investment environment

As clarified by ADB (2009), there is a possibility that some sectors are more conducive compare to other sector. The reason behind it is mostly because the sector chosen holds an argument of able to generate high cost recovery and the project also important for economic growth and thus it supported by politician. However, government should able to turn the situation of other dispute project come into climate investment needed as the one in favour. If the project proposed looks like showing minimum cost recovery then government will provide incentives which can replaced the minimum cost recovery.

6.2.2 Limitation

In composing this report, there are some major limitations which perhaps students who write thesis are also stick to similar limitation particularly when the information needed is mostly based on online data. Following are limitation found which mostly regarding data, and possibility solution for the problem:

- Data acquisition. Data and information needed is not always available in common place like library therefore data is mostly attained from internet. Therefore some adjustment needed when we are not getting an appropriate data and information. The solution for this kind of limitation perhaps it is necessary to search thoroughly for the availability data and information needed. Further, mostly data gathered is from theoretical point of view, academic written and not practical data.
- Data interpretation and analysis. Regarding data limitation, we might difficult to understand the incomplete data. Thus, it will affect the analysis needed.

6.2.3 Reflection on Theory

From the discussion in all chapters, some how the finding shows that there is a gap between a theory and practice. Moreover, to realize that it is not only about what is the appropriate framework but it need more than that such as human capacity and financial. Some reflection upon theoretical can be summarize as follows:

PPP or PFI in United Kingdom has become a major scheme in delivering public services, not only for economic infrastructure but also for social infrastructure. Public Sector Comparator (PSC) is a method accompanying the implementation PPP. There are opinions about role of PSC which one of them is

from World Bank Institute (2009). World Bank states that the key roles of PSC among other are “ensure the procurement method gives the best value for money; promote whole life costing early in the project’s development; or provide a consistent benchmarking and evaluation tool; etc. Further, there are also doubt and critiques about VfM assessment where PSC is lying in there, among other from Grimsey and Lewis (2005); Murray (2006); Quiggin (2004) and many other. Theoretically, for overall VfM under PPP scheme would be achieved then the process should be well planned, managed, executed and transparent (HM Treasury, 2006). But, in practice particularly for developing countries those concept seems would not be achieved due to specific circumstance as clarified by Jamali (2004) “where distrust of government prevails”. Further, there seems no particular discussion about how PPP and VfM assessment applied in the developing countries (Roseneau, 1999). Therefore, in order to have the process as discussed by HM Treasury, need a lot of effort to comply with the condition under developing countries; as suggested by Jamali “PPPs must begin with careful groundwork and preparation, including a comprehensive feasibility study and economic evaluation for each potential partnership project”. Even though, that also would need qualified human capacity.

REFERENCES

----- 2007.”Country Paper: Public Private Partnership for Infrastructure Development." Accessible: http://www.unescap.org/ttdw/ppp/reports/Indonesia_2July2007.pdf

(IMF), International Monetary Fund. 1999. "Determinants of Public-Private Partnerships in Infrastructure." IMF Working Paper.

Akbiyikli, Dr. R., and Dr. D. Eaton. 2006. "A Value For Money (VFM) Framework Proposal For PFI Road Projects." International Council for Building.

Allen, Grahame. 2001. "The Private Finance Initiative (PFI)." Economic Policy and Statistics Section, House Of Commons Library.

Alshawi, Mustafa. 2009. "Concept and Background to Public Private Partneship (PPP)/Private Finance Initiative (PFI) UK Experience."

Asenovab, Akintola Akintoyea; Cliff Hardcastlea; Matthias Beckb; Ezekiel Chinyioc; Darinka. 2010. Achieving Best Value in Private Finance Initiative Project Procurement. In Construction Management and Economics.

Asian Development Bank. "Public Private Partnership Handbook."

Asian Development Bank. 2009. "ADB Assistance for Public-Private Partnerships in Infrastructure Development−Potential for More Success."

Badan Penelitian Dan Pengembangan Departemen Pekerjaan Umum (2005) Pedoman Penilaian Risiko Investasi Jalan Tol. Jakarta: Departemen Pekerjaan Umum

Bettignies, Jean Etienne De, and Thomas W. Ross. 2004. "The Economics of Public Private Partnership." Canadian Public Policy no. xxx (2).

Bing, Li; A. Akintoye, P.J. Edwards, C. Hardcastle. 2005. "The allocation of risk in PPP/PFI construction projects in the UK." International Journal of Project Management (23):25–35.

Blanken, Anneloes, Mirjam Bult-Spiering, and Geert Dewulf. "Assessing Value for Money In Concessions Contracts: Defining an Improved Framework."

Broadbent, Jane, and Richard Laughlin. 2003. "Control and Legitimation in Government Accountability Processes: The Private Finance Initiative in the UK." Critical Perspectives on Accounting (14):23–48.

Bult-Spiering, Mirjam and Geert Dewulf. 2006. Strategic Issues in Public Private Partnership, An International Perspective. Oxford: Blackwell Publishing.

Butt, Henry, and Bob Palmer. 1985. Value For Money: A Guide to Principles and Good Practice in the Public Sector. Oxford, UK: Basil Blackwell Inc.

Czerwinski, David R and Richard Geddes. 2010. Policy Issues in U.S. Transportation Public-Private Partnerships: Lessons from Australia. Mineta Transportation Institute.

Darrin Grimsey, Mervyn K. Lewis. 2005. "Are Public Private Partnerships Value for Money? Evaluating alternative approaches and comparing academic and practitioner views." Accounting Forum (29):345-378.

Demirag, Istemi, and Iqbal Khadaroo. 2011. "Accountability and value for money: a theoretical framework for the relationship in public–private partnerships." J Manag Gov (15):271–296.

Department of Treasury and Finance, Victoria-Australia. 2001. "Public Sector Comparator: Technical Note."

Department of Treasury and Finance, Victoria-Australia. 2001. "Risk Allocation and Contractual Issues."

Department of Treasury and Finance, Victoria-Australia. 2003. "Public Sector Comparator: Supplementary Technical Note."

English, Linda M. Public private partnerships in Australia: an Overview of their nature, purpose, incidence and oversight. UNSW Journal

European Commision. 2003. Guidelines for Successful Public Private Partnership.

Fewings, P. 1999. "The Implementation Of Public Private Partnerships: The PFI Experience in The UK." International Council for Building.

Fitzgerald, Peter. 2004. "Review of Partnerships Victoria Provided Infrastructure."

Gansler, J. S. 2003. Moving Towards Market-based Government: The Changing Role of Government as The Provider. IBM Endowment for the Business of Government

Gramlich, Edward M. 1990. A Guide to Benefit-Cost Analysis. New Jersey: Prentice-Hall Inc.

Grimsey, Darrin, and Mervyn K. Lewis. 2004. Public Private Partnership: The World Wide Revolution in Infrastructure Provision and Project Finance. UK: Edward Elgar Publishing Limited.

Grout, Paul A. 1997. "The Economics Of The Private Finance Initiative." Oxford Review of Economic Policy no. 13 (4).

Grout, Paul A. 2005. "Value-for-Money Measurement in Public-Private Partnerships." EIB Papers no. 10.

Hardcastle. C, Edwards. P.J, Akintoye. A, and Li. B. "Critical Success Factor for PPP/PFI Projects in the UK Construction Industry: A Factor Analysis Approach."

Heald, David. 2003. "Value for Money Test and Accounting Treatment in PFI Schemes." Accounting, Auditing and Accountability no. 16:342-371.

Hemming, Richard. 2006. "Public-Private Partnerships, Government Guarantees, and Fiscal Risk." International Monetary Fund. Washington, DC.

HM Treasury. "The Green Book: Appraisal and Evaluation in Central Government."

HM Treasury. 2006. Value For Money: Assessment Guidance.

HM Treasuty. 2007. Quantitative Assessment User Guide.

Hossein Darvish, Patrick X.W. Zou, Martin Loosemore, Guo Min (Kevin) ZHANG. 2006. "Risk Management, Public Interests and Value for Money in PPP Projects: Literature Review and Case Studies." International Symposium on “Advancement of Construction Management and Real Estate”.

Ismail, Kharizam; Roshana Takim; Abdul Hadi Nawawi; and Aini Jaapar. 2006. The Malaysian Private Finance Initiative And Value For Money.

Jamali, Dima. 2004. "Success and failure mechanisms of public private partnerships

Kee, James Edwin, and John Forrer. 2002. "Private Finance Initiative—The Theory behind the Practice."

Khadaroo, Iqbal. 2008. "The Actual Evaluation of School PFI bids for Value for Money in the UK Public Sector." Critical Perspectives on Accounting (19):1321–1345.

Leach, Graeme. 2000. "The Private Finance Initiative."

Ministry of Finance Singapore. 2004. "Public Private Partnership Handbook."

Morley, Andrew W and Duncan E W Wainscott. 2006. "Current Challenges Facing PFI/PPP Procurement."

Murray, Stuart. 2006. "VALUE FOR MONEY? Cautionary Lessons About P3s From British Columbia."

National Audit Office. "Getting Value for Money from Procurement."

National Development Planning Agency, Republik Indonesia. 2009. "Public Private Partnership: Infrastructure Projects in Indonesia."

Nisar, Tahir M. 2007. "Value for Money Drivers in Public Private Partnership Schemes." International Journal of Public Sector Management no. 20:147-156.

OECD. 2008. "Public-Private Partnerships In Pursuit Of Risk Sharing And Value For Money."

Pitt, Michael, and Norman Collins. 2006. "The Private Finance Initiative and Value for Money." Journal of Property Investment & Finance no. 24 (4):363-373.

Quiggin, John. 2004. "Risks, PPPs and Public Sector Comparator." Australian Accounting Review no. 14 (2):51.

Regan, Michael. 2009. A Survey of Alternative Financing Mechanisms for Public Private Partnership.

Renda, Andrea and Lorna Screfler. 2006. Public-Private Partnership: National Experiences In the European Union. Centre for European Policy Studies, Brussels

Sarmento, Joaquim Miranda. 2010. "Do Public-Private Partnerships Create Value for Money for the Public Sector? The Portuguese Experience." OECD Journal on Budgeting no. 2010/1.

Sawyer, Malcolm. "The Private Finance Initiative: the UK experience." University of Leeds.

Scott, John T. 2009. "Cost-benefit analysis for global public–private partnerships: an evaluation of the desirability of intergovernmental organizations entering into public–private partnerships." Technol Transf (34):525–559.

Spackman, Michael. 2002. "Public–private partnerships: lessons from the British approach." Economic System (26):283–301.

University of Salford, UK. 2006. "Symposium on Sustainability and Value through Construction Procurement."

Yescombe, E. R. 2007. Public Private Partnership: Principles of Policy and Finance. UK: Elsevier Ltd.

Zerbe, Richard O. Jr, and Dwight D. Dively. 1994. Benefit-Cost Analysis: In Theory and Practice. New York: HarperCollins College Publisher.

Roseneau, P. (1999), “The strengths and weaknesses of public private policy partnerships”, Behavioral Scientist, Vol. 43 No. 1, pp. 10-34

Other references (newspaper and magazine online):

http://us.finance.detik.com/read/2006/12/21/165257/722960/4/infrastructure-summit-2005-baru-hasilkan-3-jalan-tol

http://www.thejakartapost.com/news/2010/08/21/a-breakthrough-ri%E2%80%99s-infrastructure-financing.html

http://pkps.bappenas.go.id/index.php/publikasi/majalah-kps

http://www.adb.org/Documents/Conference/INO-Infrastructure-Summit/IN33-05.pdf

APPENDIX 1

Stage 1 Qualitative Assessment

VIABILITY For PFI to be viable the investment objectives and desired outcomes need to be translated into outputs that can form the basis of a contract and a sound payment mechanism; for example, the quality and quantity of the outputs need to be ones that can be clearly defined and measured. Many service areas can be described in contractual terms, but some areas will be inherently 'non-contractible as outputs.	
Issue	Question
Programme level objectives and outputs	Is the department satisfied that long-term contracts could be constructed for projects falling in this area? Can the contractual outputs be framed so that they can be objectively measured? Is the requirement deliverable as a service and as a long-term contractual arrangement? Could the contracts describe service requirements in clear, objective, output-based terms? Can the quality of the service be objectively and independently assessed? Is there a good fit between needs and contractible outcomes? Can the contracts be drafted to avoid perverse incentives and deliver quality services? Will there be significant levels of investment in new capital assets? Are there fundamental issues relating to staff transfer or other workforce issues? If there are interfaces with other projects, are they clear and manageable?
Soft services	Are there good strategic reasons to retain soft service provision in-house e.g. longer-term implications of skill transfer? What are the relative advantages and disadvantages? Is optimal risk allocation achieved by transfer or not? Is there a commitment that the assumed benefits can be deliver-ed without eroding the overall terms and conditions for staff?
Operational flexibility	Is there a practical balance between the degree of operational flexibility that is desired and long term contracting based on up-front capital investment? What is the likelihood of large contract variations being necessary during the life of the contract? Can the service be implemented without constraining unacceptably the flexibility of the department to deliver future operational objectives?

Equity, efficiency and accountability	Are there public equity, efficiency or accountability reasons for providing the service directly, rather than through a PFI contract? Does the scope of the service lend itself to providing the contractor with "end-to-end" control of the relevant functional processes? Does the service have clear boundaries? Are there regulatory or legal restrictions that require services to be provided directly?
OVERALL VIABILITY	Overall, in considering PFI, is the department satisfied that suitable long term contracts with sufficient flexibility can be constructed, and that strategic and regulatory issues are appropriate for departments to proceed with PFI?

DESIRABILITY

PFI can provide better risk management and produce incentives to develop innovative approaches to output delivery. Consistent high quality services can be incentivised through performance and payment mechanisms. However, risk transfer is priced into the contract. The purpose of these questions is to consider whether the benefits of PFI are likely to outweigh any additional costs and disbenefits.

Issue	Question
Risk management	Is the private sector likely to be able to manage the generic risks associated with the programme more effectively than the procuring authority? Bearing in mind the relevant risks that need to be managed for the programme, what is the ability of the private sector to price and manage these risks? Can the payment mechanism and contract terms incentivise good risk management?
Innovation	Is there scope for innovation in either the design of the solution or in the provision of the services? Does some degree of flexibility remain in the nature of the technical solution/service and/or the scope of the projects? Is the solution adequately free from the constraints of imposed by the procuring authority, legal requirements and/or technical standards? Does a preliminary assessment indicate that there is likely to be scope for innovation in the programme?
Contract Duration & residual value	How far into the future can service demand be reasonably predicted? What is the expected life of the assets? What are the disadvantages of a long contract length? Are there constraints on the status of the assets after the contracts end?
Incentives and monitoring	Can the outcomes or outputs of the investment programme be described in contractual terms, which would be objective, specific and measurable?

	Can the service be assessed independently against an agreed standard? Would incentives for delivery of service levels be enhanced through a PFI payment mechanism?
Lifecycle costs	Is it possible to integrate the design, build and operation of the projects in the programme? Are there significant ongoing operating costs and maintenance requirement? Are these likely to be sensitive to the type of construction?
OVERALL DESIRABILITY	Overall, is the accounting officer satisfied that PFI would bring sufficient benefits that would outweigh the expected higher cost of capital and any other disadvantages?

ACHIEVABILITY

While PFI may allow a more efficient and effective combination of public and private sector skills, determining the rules that will govern the relationship between the two sectors does involve significant transaction costs. In particular, the procurement process can be complex and significant resources, including senior management time, may be required for project development and the ongoing monitoring of service delivery. Authority capacity and capability, together with private sector side aspects will have direct consequences for procurement times and the level and quality of market interest. PFI needs a robust competitive process to fully deliver its benefits and so the choice of procurement route should be informed by an assessment of the likely market appetite.

Issue	Question
Market Interest	Is there evidence that the private sector is capable of delivering the required outcome? Does a significant market with sufficient capacity for these services exist in the private sector? Is there likely to be sufficient market appetite for the projects in the programme? Has this been tested robustly? Is there any evidence of market failure for similar projects? Have any similar programmes been tendered to market? Has the procuring authority's Commitment to a PFI solution for projects of the type covered in this programme been demonstrated?
Other Issues	Is the procurement feasible within the required timescale? Is there sufficient time for resolution of key procuring authority issues? Is the overall value of the contract significant (sufficient for the public and private sector to justify their transaction costs?) Do the nature of the deal and/or the strategic importance of the work and/or the prospect for further business suggest that it will be seen by the market as a potentially profitable venture? Does the procuring authority have the skills and resources to define, deliver and support the service throughout the procurement and the subsequent delivery period?

OVERALL ACHIEVABILITY	Overall, is the accounting officer satisfied that a PFI procurement programme is achievable, given an assessment of the market, procuring authority resources and the attractiveness of the proposal to the market?

Stage 2 Qualitative Assessment

VIABILITY

For PFI to be viable the investment objectives and desired outcomes need to be translated into outputs that can form the basis of a contract and a sound payment mechanism; for example, the quality and quantity of the outputs need to be ones that can be clearly defined and measured. Many service areas can be described in contractual terms, but some areas will be inherently 'non-contractible as outputs.

Issue	Question
Projects level outputs	Is the project delivery team satisfied that a long term contract can be constructed for this project? Can the contractual outputs be framed so that they can be objectively measured? Is the requirement deliverable as a service and as a long term arrangement? Can the contract describe the requirements in clear, objective, output-based terms? Can the quality of the service be objectively and independently assessed? Is there a good fit between needs and contractible outcomes? Can the contract be drafted to avoid perverse incentives and to deliver quality services? Does the project require significant levels of investment in new capital assets? Are there fundamental issues relating to staff transfer? Would any transfer be free from causing any loss of core skills that have strategic and/or long term importance to the procuring authority? Is service certification likely to be straightforward in terms of agreeing measurable criteria and satisfying the interests of stakeholders? Does the project have clear boundaries (especially with respect to areas of procuring authority control)? If there are interfaces with other projects are they clear and manageable? Can the service be provided without the essential involvement of Authority personnel? To what extent does any involvement negate the risk transfer that is needed for VfM? Is the contractor able or likely to have control/ownership of the intellectual property rights associated with the

	performance/design/development of the assets for the new service? Will existing or planned elements within the scope of the project - or interfacing vitally with it – be complete before the start of the new service?
Operational flexibility	Is there a practical balance between the degree of operational flexibility that is desired and long term contracting based on up-front capital investment? What is the likelihood of large contract variations being necessary during the life of the contract? Can the service be implemented without constraining the delivery of future operational objectives? Is there confidence that operational flexibility is likely to be maintained over the lifetime of the contract, at an acceptable cost?
Equity, efficiency and accountability	Are there public equity, efficiency or accountability reasons for providing the service directly, rather than through a PFI contract? Does the scope of the service lend itself to providing the contractor with "end-to-end" control of the relevant functional processes? Does the service have clear boundaries? Are there regulatory or legal restrictions that require services to be provided directly? Is the private sector able to exploit economies of scale through the provision, operation or maintenance of other similar services to other customers (not necessarily utilising the same assets)? Does the private sector have greater experience/expertise than the procuring authority in the delivery of this service? Are the services non-core to the procuring authority? Is a PFI procurement for this project likely to deliver improved value for money to the department as a whole, considering its impact on other projects?
OVERALL VIABILITY	Overall, in considering PFI, is the department satisfied that suitable long term contracts with sufficient flexibility can be constructed, and that strategic and regulatory issues are appropriate for departments to proceed with PFI?
DESIRABILITY PFI can provide better risk management and produce incentives to develop innovative approaches to output delivery. Consistent high quality services can be incentivised through performance and payment mechanisms. However, risk transfer is priced into the contract. The purpose of these questions is to consider whether the benefits of PFI are likely to outweigh any additional costs and disadvantages	

Issue	Question
Risk management	Bearing in mind the relevant risks that need to be managed for the programme what is the ability of the private sector to price and manage these risks? Can the payment mechanism and contract terms incentivise good risk management?
Innovation	Is there scope for innovation in either the design of the solution or in the provision of the services? Does some degree of flexibility remain in the nature of the technical solution/service and/or the scope of the project? Is the solution sufficiently free from the constraints imposed by the Authority, legal requirements and/or technical standards? Does a preliminary assessment indicate that there is likely to be scope for innovation in the programme? Could the private sector improve the level of utilisation of the assets underpinning the project (e.g. through selling, licensing, commercially developing for third party usage etc)?
Contract Duration & residual value	How far into the future can service demand be reasonably predicted? What is the expected life of the assets? What are the disadvantages of a long contract length? Are there constraints on the status of the assets after the contracts end? Given the possibility of changes to the requirement, the assets and the operating environment, is it possible to sustain value for money over the life of the contract utilising as appropriate, mechanisms such as benchmarking and technology re-fresh?
Incentives and monitoring	Can the outcomes or outputs of the investment programme be described in contractual terms, which would be objective and measurable? Can the service be assessed independently against an agreed standard? Would incentives for service delivery be enhanced through a PFI payment mechanism?
Lifecycle costs	Is it possible to integrate the design, build and operation elements of the project? Are there significant ongoing operating costs and maintenance requirement? Are these likely to be sensitive to the type of construction?
OVERALL DESIRABILITY	Overall, is the accounting officer satisfied that PFI would bring sufficient benefits that would outweigh the expected higher cost of capital and any other disadvantages?

ACHIEVABILITY

While PFI may allow a more efficient and effective combination of public and private sector skills, determining the rules that will govern the relationship between the two sectors does involve significant transaction costs. In particular, the procurement process can be complex and involve significant resources, including senior management time which may be required for project development and the ongoing monitoring of service delivery. Authority capacity and capability, together with private sector deliverability will have direct consequences for procurement times and the level and quality of market interest. PFI needs a robust competitive process to deliver fully its benefits and so the choice of procurement route should be informed by an assessment of the likely market appetite.

Issue	Question
Market Interest	Is there evidence that the private sector is capable of delivering the required outcome? Does a significant market with sufficient capacity for these services exist in the private sector? Is there likely to be sufficient market appetite for the projects in the programme? Has this been tested robustly? Is there any evidence of market failure for similar projects? Have any similar projects been tendered to market? Has the procuring authority's commitment to a PFI solution for this type of project been demonstrated? Does the nature of the project suggest that it will be seen by the market as a profitable venture? Are the risks associated with design, development and implementation manageable bearing in mind the likely solutions to the project?
Other Issues	Is the procurement feasible within the required timescale? Is there sufficient time for: resolution of key Authority issues; production/approval of procurement documentation; staged down-selection and evaluation of bidders, negotiation, approvals and due diligence? Is the overall value of the project significant and proportionate to justify the transaction costs? Does the nature of the deal and/or the strategic importance of the work and/or the prospect for further business suggest that it will be seen by the market as a potentially profitable venture? Does the Authority have the skills and resources to define, deliver and support the service throughout the procurement and the subsequent delivery period?
OVERALL ACHIEVABILITY	Overall, is the accounting officer satisfied that a PFI procurement programme is achievable, given an assessment of the market, Authority resources and the attractiveness of the proposal to the market?

Soft Services assessment for stage 2

Issue	Question
Integration	How will the soft FM providers be bought into the design process? How early will this happen? What mechanisms can be used to ensure this? Will different PFI structures affect the incentives for the inclusion of important providers in the design stage in different ways? To what extent does design integration impact on VfM? If considerable, then is it possible to ensure that correct incentives are included in the project? (e.g. if this is fundamental to delivering VfM then can it be included in the tender assessment criteria?).
Whole of life costs	What and where is the scope for whole life savings? How material are the maintenance costs? Do these have any environmental/other externalities (e.g. more energy efficient buildings)? Do the proposed risk transfers incentivise the correct behaviour by the bidders?
Lower interface issues & a single point of contact	Which mechanisms will be used to ensure that the benefits will be delivered? Are they achievable and measurable (e.g. interface key performance indicators (KPIs))? What is the consequence if this does not happen? Would a single point of contact provide VfM? What form would be most appropriate for the project (e.g. general manager or helpdesk)? Is this feasible? Is there sufficient contract management expertise on both sides?
Effective management of resources	Will inclusion under PFI allow providers opportunity to exploit bargaining power in the supply chain? Will the soft service provider be able to cost inputs more cheaply due to bulk buying to cover all other projects they are working on, and how much is this saving valued at? Is there potential for shared overhead costs, provision of spares where combined holding is reduced and distribution costs shared, or bulk buying savings? How big is the potential? Is it possible to incentivise desired behaviour in PFI context e.g. can management KPIs be used? Are differences in training incentives likely and how will affect workforce incentives (e.g. private sector likely to offer accredited training scheme)?

Interim Services	What are the benefits of including interim services? When will interim services be considered? Will they be part of the bid criteria? Are there any issues which make providing interim services harder within the PFI contract (e.g. will the authority be able to account for transitional costs which are not covered in existing service budget such as one-off costs necessary to implement interim services)? Has proper account been taken of differences in quality/quantity provision for cost comparisons? Which services are most important to the operation of the asset? What are the risks to the delivery of soft FM in the steady state stage if interim services are not provided? – Procuring authorities must weigh the balance of additional costs against benefits provided and not use interim services provision as a way to manage short-term affordability issues. Rather than assuming that the existing service budget is sufficient for interim services, an assessment is needed of the difference in service standards and quality covered by existing and interim soft FM. – Interim services will add value where they have been specified early and budgeted for correctly. Analysis of the benefits and risks must be made in the context of a budget which accurately reflects the difference between existing services and interim service provision.
Flexibility requirements	Do the cost estimations take account of flexibility issues which may arise for particular services in the future, and what level of contingencies will be included for these? Is it possible to include specified re-assessment or break periods in the contract to take account of changes in service needs?
Financial Incentivisation	Will it be possible to test the suitability of the performance regime (e.g. re-checking minimum thresholds after a certain period, and/or the suitability of the monitoring system)? Is there experience with similar live projects to compare that performance mechanisms are properly calibrated and that monitoring (e.g. self-monitoring versus user feedback) drives the right incentives? Does benchmarking and market testing provide a sound way of managing the risks associated with pricing and ensuring continuing quality of soft services?
Overall do the benefits of including soft services in PFI outweigh any additional costs and constraints from inclusion?	

Stage 3 Qualitative Assessment

MARKET FAILURE PFI needs a robust competitive process to deliver fully its benefits. Delivering the long term outcomes at a good price relies on competitive tension during the procurement phase.	
Issue	Question
Market abuse or failure	Is there any evidence from similar projects (in scope or location) to suggest that there will be a shortage of good quality financially robust bidders? Is there any evidence of market abuse?
Procurement issues	Was there a good response to the PIN/OJEU notice? How many potential bidders passed the PQQ criteria? Are the financial robustness and capacity of the bidders sufficient? Is there evidence of good competitive tension in pricing of risks etc?
OVERALL	Overall, in considering this procurement, is the project team satisfied that there is a sound competition?
EFFICIENT PROCUREMENT PROCESS A good procurement is important to sustain market interest.	
Issue	Question
Efficient Procurement	Is there a realistic project plan, and has this been adhered to without undue delays? Are bid costs likely to be proportionate to the contract value? Will any aspect of the procurement impact adversely on market interest? (e.g. restrictions imposed by Competitive Dialogue procedure) Are there any problems emerging with the way the procurement are structured?
Authority Resources	Does the procuring authority have the necessary resources to conduct a good procurement? Are sound project governance arrangements in place?
OVERALL	Overall, is the way that the procurement process is proceeding likely to have an adverse impact on the delivery of VfM?
RISK TRANSFER The decision to proceed with PFI is dependant on the market appetite for the project	
Issue	Question
Wider issues	Is the competition delivering the proposed risk transfer being?

	Does the Authority confirm that the nature of the deal and/or the strategic importance of the work still make it suitable for delivery through PFI? Is there still confidence that all the key VfM drivers will be preserved.
OVERALL	Overall, is the risk transfer achievable, given an assessment of the competition, and the procuring authority's constraints?

APPENDIX 2

Input and Assumptions Sheet

Input	Values		Assumptions & Rationale	Source
Timings				
Contract period (years)		34		
Initial CapEx period (years)		5		
Year when OpEx is first incurred (years)		5		
Proportion of UC during initial CapEx period payment		50%		
Escalators				
	Rates	**Base Year**		
CapEx escalator	4.5%	0		
OpEx (non employment) escalator	2.5%	0		
OpEx (employment) escalator	3.5%	0		
Unitary charge escalator	50%	0		
COSTS AND REVENUES				
Whole Life Costs				
CP				
Initial CapEx (£'000)		65,250		
Lifecycle costs at each LC date (£'000)		6,525		
Lifecycle intervals (yrs)		10		
OpEx (non employment)(p.a.) (£'000)		1,075		
OpEx (employment per person) (p.a.) (£'000)		20		
OpEx (employee number)		20		
PFI				
Initial CapEx (£'000)		71,775		
Lifecycle costs at each LC date (£'000)		1,076		
OpEx (non employment)(p.a.) (£'000)		1,183		
OpEx (employee number)		15		
Transaction Costs				
CP		1,320		
PFI		750		
Third Party Income				
CP		475		
PFI		575		
OPTIMISM BIAS	Optimism bias pre-FBC	Optimism bias post-FBC		
Whole Life Costs				
Initial CapEx	10%	30%		
Lifecycle costs at each LC date	10%	30%		
OpEx	10%	20%		
Transaction Costs (CP option)	10%	10%		
Third Party Income (CP option)	10%	10%		
Flexibility				
Scope change year		10		
Probability factor (%)		50%		
Level of scope change (%)		50%		
Premium Flexibility Factor (PFI option)		10%		
Indirect VfM Factors				
CP Amount NPV (£000s)		0		
PFI Amount NPV (£000s)		2,000		
Tax				
CP adjustment factor (%)		6%		
PFI Funding				
Gearing (%)		90%		
Sterling swap rate (%)		5.15%		
Credit spread (bps)		12		
Bank margin (bps)		100		

Input sheet

General				
Timings	*(Yrs)*	***Rates - Escalators & Discount***	*Rates (%)*	*Base Year*
Contract period	34	CapEx escalator	4.5%	0
Initial CapEx period	5	OpEx (non employment) escalator	2.5%	0
Year when OpEx is first incurred	5	OpEx (employment) escalator	3.5%	0
Proportion of UC in initial CapEx period payment (%)	50%	Unitary charge escalator	50%	0
		Nominal discount rate	6.09%	NA

Costs						
Whole Life	*CP*	*OB Pre (%)*	*OB Post (%)*		*PFI*	*OB Pre (%)*
Initial CapEx (£'000)	65,250	10%	30%		71,775	10%
Lifecycle costs at each LC date (£'000)	6,525	10%	30%		1,076	10%
Lifecycle intervals (yrs)	10	NA	NA		1	NA
OpEx (non employment)(p.a.) (£'000)	1,075	10%	20%		1,183	10%
OpEx (employment per person) (p.a.) (£'000)	20	NA	NA		20	NA
OpEx (employee number)	20	NA	NA		15	NA
Transaction						
Public sector (£'000)	1,320	10%	10%		750	10%
Private sector (£'000)	0	0%	0%		1,077	10%

Third Party Income	*CP*	*OB Pre (%)*	*OB Post (%)*		*PFI*	*OB Pre (%)*
Income (p.a.) (£'000)	475	10%	10%		575	10%

Flexibility	*CP*	*PFI*
Scope change year	10	10
Probability factor (%)	50%	50%
Level of scope change (%)	50%	50%
Premium flexibility factor (%)	0	10%

Indirect VfM Factors	*CP*	*PFI*
Amount (Npv)(£'000)	0	2,000

Tax	*CP*	*PFI*
CP adjustment factor (%)	6%	NA

Lifecycle Related Adjustments	
Lifecycle / residual cost benchmark	50%
CP lifecycle VfM adjustment if lower than benchmark	40%
CP lifecycle VfM adjustment if higher than benchmark	40%
CP residual cost factor if lower than benchmark	70%
CP residual cost factor if higher than benchmark	35%

PFI Funding	
Gearing (%)	90%
Sterling swap rate (%)	5.15%
Credit spread (bps)	12
Bank margin (bps)	100
Tail for bank debt (yrs)	2
Commitment fee (bps)	50
Upfront fee (bps)	90
Grace period (yrs)	1

Pre Tax IRR Targets	
High	18%
Medium	15%
Low	13%

bps	Basis Points
CapEx	Capital Expenditure
LC	Lifecycle Costs
NA	Not Applicable - ***no input required***
OB Pre	Pre-FBC Optimism Bias
OB Post	Post-FBC Optimism Bias (for CP only)
OpEx	Operational Expenditure
CP	Conventional Procurement
	Input required (can link from previous sheet)
	Hard-wired Assumption - ***no input required***

Output sheet

Output Box	
Scenario name	Indicative VfM -18% IRR
IRRs	
Pre Tax Equity IRR	**18.00%**
Pre Tax Project IRR	8.52%
VfM	
"Indicative" PFI VfM	**5.11%**
Indifference Points (IP)	
CP	
Initial CapEx	0%
OpEx (Non Employment)	0%
OpEx (Employment)	0%
Transaction Costs	0%
PFI	
Unitary Charge	0%
Other Values	
CP Costs (NPV)	-163
PFI Costs (NPV)	-153
Unadjusted Annual Unitary Charge	11.0

CP Sensitivity Multipliers	
CapEx(%)	0%
Lifecycle (%)	0%
OpEx (non employment) (%	0%
OpEx (employment) (%)	0%
Transaction (%)	0%
Residual cost (%)	0%
Third party income (%)	0%

Check	
Senior Debt Fully Repaid?	TRUE
Pre Tax IRR = Target?	TRUE
Total Cashflows = Zero?	TRUE

Explanations

Switches

IRR

13% Pre Tax Target

15% Pre Tax Target

18% Pre Tax Target

The "Indicative" PFI VfM value is determined by selecting the target IRR switch which corresponds closest to the PFI Contractor's expected return.

Indifference Points (IP)

CapEx IP

OpEx Non Employ

OpEx Employ IP

Transaction IP

Unitary Charge IP

Running an Indifference Point switch gives the percentage increase/decrease in the variable required to give the point of indifference between the two procurement options.

Stabiliser

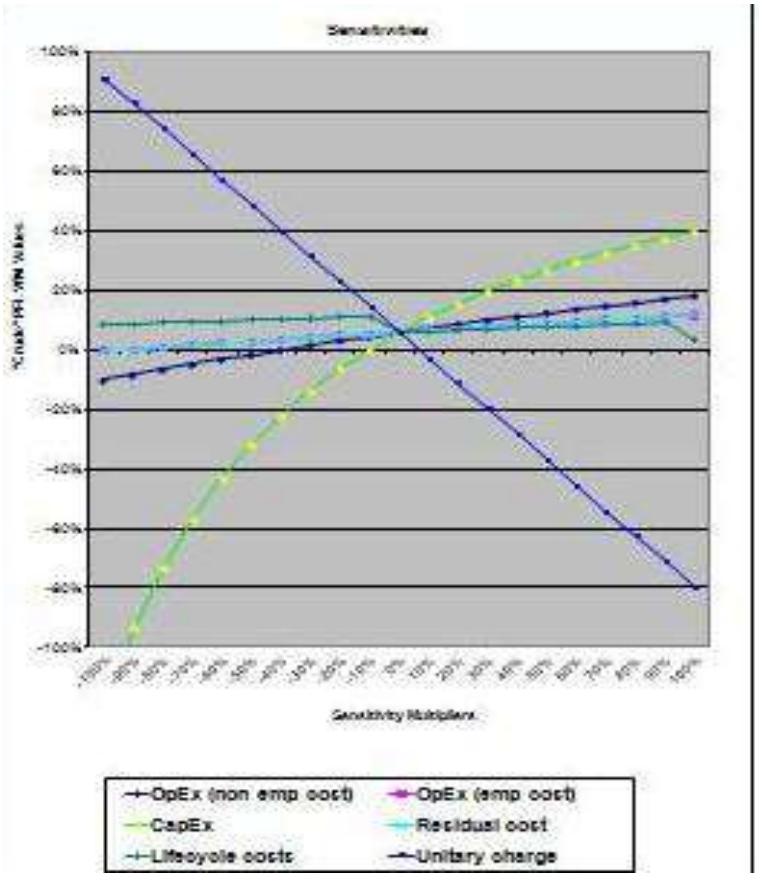
In the event that #DIV/0!s, #NUM!s or other error messages appear in the Output Box, having updated the relevant inputs, the stabiliser switch should be used to clear the errors.

A separate shadow bid model should be developed to calculate the projected unitary charge. There are a number of simplyfying assumptions underpinning the VfM Spreadsheet which means that Local Authorities should not use the Unadjusted Annual Unitary Charge figure shown in the Output Box as a proxy for affordability purposes.

Stash Scenarios

The Output Box results may be recorded in the separate "Output-Stashed Scenarios" spreadsheet by clicking the Stash Scenarios switch.

PRINT



"Indicative" PFI VfM Sensitivity Values

Multiplier	OpEx (Non Employee)	OpEx (Employee)	CapEx	Residual Cost	Unitary Charge	Lifecycle Cost
-100X	-18.5X	-8.7X	-115.8X	-8.8X	31.5X	8.2X
-90X	-8.5X	8.8X	-99.4X	-8.1X	82.7X	8.6X
-80X	-8.2X	8.7X	-79.1X	8.6X	74.2X	8.5X
-70X	-5.8X	1.9X	-58.7X	1.9X	65.6X	9.2X
-60X	-3.5X	2.8X	-49.2X	2.8X	57.1X	9.6X
-50X	-1.7X	2.6X	-31.8X	2.6X	48.5X	9.9X
-40X	-0.1X	5.3X	-22.8X	5.3X	40.0X	10.2X
-30X	1.4X	5.3X	-13.7X	5.3X	31.4X	10.5X
-20X	2.5X	4.5X	-6.5X	4.5X	22.5X	10.5X
-10X	4.4X	5.2X	0.1X	5.2X	14.5X	11.2X
0X	5.8X	5.8X	5.8X	5.8X	5.8X	5.8X
10X	7.1X	6.4X	10.8X	6.4X	-2.8X	6.1X
20X	8.4X	7.8X	15.4X	7.8X	-11.5X	6.5X
30X	9.7X	7.5X	19.5X	7.5X	-19.5X	6.8X
40X	11.0X	8.1X	23.5X	8.1X	-28.4X	7.2X
50X	12.2X	8.7X	26.7X	8.7X	-37.8X	7.5X
60X	13.4X	9.3X	29.8X	9.3X	-45.5X	7.9X
70X	14.5X	9.8X	32.6X	9.8X	-54.1X	8.2X
80X	15.6X	10.4X	35.3X	10.4X	-62.6X	8.5X
90X	16.7X	10.9X	37.7X	11.0X	-71.2X	8.9X
100X	17.8X	11.5X	40.0X	11.5X	-79.7X	9.3X

The chart shows the impact on the "indicative" PFI VfM Value of inflating and deflating the relevant tabulated PSC cost variable and the Unitary Charge by different multiplier values, varying from -100% to 100%.

(i) Where the x axis (corresponding to a zero VfM Value) is traversed, the point of indifference between the two procurement options has been reached.

(ii) Various hard-wired lifecycle related assumptions, (i.e.) in connection with the Residual Cost and the VfM Adjustment factor, will result in adjustments only in the event that pre-determined benchmarks are reached. Since such adjustments are "stepped", rather than gradual, it is likely that the lifecycle cost line will be skewed.

For further information, please refer to section < > of the User Guide.

Output sheet - Stashed Scenarios (see see "Quantitative Assessment User Guide" pp. 10-15)

Scenario name

IRRs

Pre Tax Equity IRR

Pre Tax Project IRR

VfM

"Indicative" PFI VfM

Indifference Points

CP

Initial CapEx
OpEx (Non Employment)
OpEx (Employment)
Transaction Costs

PFI

Unitary Charge

Other Values

CP Costs (NPV)
PFI Costs (NPV)

Unadjusted Annual Unitary Charge

CP Sensitivity Multipliers

CapEx
Lifecycle
OpEx (non employment)
OpEx (employment)
Transaction
Residual cost
Third party income