

Private Financing for Armed Forces: Practice and Explanation

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Abstract

This contribution addresses the concept of Private Financing (PF). First, the way in which PF has been successfully applied in the United Kingdom is described. Second, the core of PF is discussed. Third, the method itself is elaborated upon together with the economic principles and hypotheses in an attempt to explain the fundamental elements of the method.

Introduction

Generally speaking, and seen from within a historical context, armed forces have always been regarded as being an autonomous organization capable of taking care of business themselves and getting the job done properly. First and foremost, this viewpoint applied to the efficient procurement of weapons and, subsequently, to the acquisition of a diverse array of support services.

These support services encompassed:

- resources for logistic support (i.e., transport ships, means of communication, supplies, weapon repair facilities, IT, and food supplies);
- training resources (i.e., flight simulators); and
- infrastructure (i.e., barracks, schools, and offices).

During recent decades, however, this self-sufficient method of procurement of supplies and services has undergone a gradual metamorphosis in Western countries. Weapons are still procured by the armed forces themselves but an increasing appeal is being made on commercial parties for other secondary deliveries. This subtle shift has manifested itself in several ways. If necessary resources are readily available and being offered by commercial parties, then it would seem to be a simple and logical transaction to purchase these resources on a contractual basis from within this public-sector market. This could also possibly be combined with a downsizing of resources within the armed forces.

A concrete example, which is being applied in the Netherlands in the container transport sector, is the repair of military wheeled-vehicles. In the past, these vehicles were

always repaired in the army's own workshops, however, this work is now outsourced to a private-sector company, which has resulted in the closing down of the army's workshop.

Privatization is another option. This alternative has not been used very frequently in the Dutch armed forces. The most recent example which can be given occurred approximately 20 years ago when the army contracted out the production of ammunition to EuroMetaal in Hembrug, Netherlands.

A new development is that the armed forces take the initiative to invite market parties to invest in means of production which are specifically intended for the armed forces. Subsequently, the armed forces pay these market parties a "user fee" for access to these services. This method is applied on a regular basis in the United Kingdom (UK). Due to its apparent success in the UK, the Netherlands has decided to tentatively follow suite. Plans exist to establish a new Dutch army headquarters with supposed financial backing of private funding; these office buildings will be constructed on existing MoD property in the city of Utrecht and will accommodate 2,000 people. The Dutch army will subsequently pay a "user fee" based upon the number of employment positions available.

The introduction of Private Financing (PF) for the Dutch armed forces is a good reason to delve into this relatively new subject matter. This contribution highlights this concept so as to enable others to acquire an insight into its applications, as well as in the procedures and principles that can explain the success of PF. Firstly, the example of how PF has been successfully applied in the UK will be looked at; secondly, the core of PF will be discussed in depth; thirdly, the method itself will be further elaborated upon together with the economic principles and hypotheses in an attempt to explain the fundamental elements of the method. Finally, the essential issues will be summarized.

Examples in the United Kingdom

The country that is most advanced in putting theory into practice is the UK. In 1992, private financing was introduced in the UK under the name of "Private Finance Initiative" (PFI). The first projects which were contracted out by the British Ministry of Defense (MoD) occurred in 1996. Table 1 shows that the private investment sum has fluctuated quite strongly in the past few years. Compared to the MoD's annual investment amount of between £5 billion (2001) and £6.2 billion (2005), private financing certainly does not take the lion share in gathering capital goods. The types of projects are also quite diverse. Private financing was used in several simulation projects, in particular, flight training for fixed-wing pilots as well as for helicopter pilots. Also infrastructure was privately funded, varying from: offices, to the reconstruction of the MoD-headquar-

ters in Whitehall, London, to barracks which are the property of private parties. The largest infrastructural project which has been undertaken is the reconstruction of barracks, where 18,000 service personnel - 20 % of the British Army - are accommodated in one large complex (see table 1, with a Capital Value of £1.257 billion).

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Infrastructure			219	40	429	112		20	584	27	1257
Simulation		206	165	105	22	92					
Telecom/IT	41	104	12		67	15		1361			
Transport						105	175				
T e c h n i c a l											
Equipment.			17		35		83	165	450	114	
Total	41	310	413	145	553	324	258	1564	989	141	1257

Source: NAO (2006); amounts in M£, recorded in the years the contracts were signed.

Table 1 Private investment MoD UK 1996-2006

Infrastructure and simulation are far removed from normal military operations, a fact that makes their use of private funding not so unusual. The areas of telecom, transport and technology, however, are projects that can really be considered as “support-to-the-frontline” as can be seen in the following overview:

- “Naval Communications” for submarines (Telecom, Capital Value M£58; contract in 2000);
- “Heavy Equipment Transporter”, a contract to ensure the availability of heavy transport capacity, encompassing an investment in 92 vehicles (Transport, Capital Value M£65; contract in 2001);
- Field Electrical Power supplies, providing generators to support the requirement of electricity in the field (Technical Equipment, Capital Value M£74; contract in 2002);
- Strategic Sealift, a contract to ensure the availability of ferry services for exercises and operations, entailing six ships (Transport, Capital Value M£175; contract in 2002);
- Skynet, a consortium of, amongst others, EADS, provides SHF and UHF connections, encompassing the launch of three satellites (Telecom, Capital Value M£1,316; contract in 2003);
- Engineer vehicles, which encompass the delivery of engineer vehicles in operative condition, to a total of 4,000 vehicles in 100 different types (Technical equipment, Capital Value M£114 m.; contract in 2005).

The largest privately-funded project is not listed in Table 1 since the negotiations have not yet been completed. It concerns the “Future Strategic Tanker Aircraft” (STA); an airplane used for the delivery of airlift and tanker services (air-to-air refueling) which

will supersede the fleet of VC10 and Tristar airplanes. In 2005, the AirTanker consortium, composed of EADS, Rolls Royce, Cobham and Thales companies, was chosen as “preferred bidder”.

The PF method

Characteristics

The PF method was developed by the UK Treasury and is used by several British governmental bodies. It is used in a similar manner by the governments of other countries, amongst others, the Netherlands. For this reason, the method can be described in a general sense, and this is best done by means of a defense example. Suppose that certain armed forces have a requirement for simulation training for fighter pilots and that this training cannot be provided by commercial parties in the desired form, since the specific means are not available. One is confronted with the following choice: either procure a trainer or invite the market to do it. In the latter case, the PF method requires that not the trainer itself, but what must be achieved with it, should be the central issue. This is done by specifying the number of pilots to be trained, the quality standards of the training, and the period over which the performance must be realized. Subsequently, market parties are invited to come up with ideas to meet these requirements. The best proposal from an economic perspective wins. The winning consortium then builds the trainer and provides the accommodation services. The ministry pays a user fee, for instance, per trained pilot.

Apart from private ownership, the PF method also has another characteristic, namely, the combination of service delivery as seen in relation to the ownership of the capital good. This additional characteristic emphasizes that it is not just about the capital good itself, but also about the use of the flow of services that can be provided with that capital good. An airplane has use because it can transport passengers or freight. A barracks derives its use from the possibility to accommodate and train a number of service personnel there. In the PF method, then, the use is expressed in a specification of the performance to be realized with the capital good, such as the transport of a number of passengers in a certain period of time, with indicated quality, or the number of service personnel to be accommodated in a certain way. Implicit in this is the expected support required. The method results in the successive phases of a capital good - which are usually contracted out separately or which the government provides partially itself - being combined, as much as possible, in a single long-term contract. Apart from design and construction, the above-mentioned reconstruction of the MoD in London encompassed “asset management, cleaning, reprographics, mail, catering, management information,

reception, portering and internal planting, text preparation, records management, conferences and meeting, space planning, overnight accommodation and laundry, grounds maintenance, parking management, pest control, nursery, space planning” (NAO, 2002: 38). These services are to be delivered over a period of thirty years. Their large volume is also borne out by present value of the user fee. This was more than M£700, while the capital value of the projects amounted to about M£200 m. in the year 2000.

The example indicates that the service delivery can be extremely diverse -- and expressed in money -- voluminous. It means that it is inescapable that PF is always linked to putting out to contract, which nowadays is often indicated as “outsourcing” or “contracting out”. It subjects service delivery to competition, something it used to be immune from (Domberger and Jensen). This is the third characteristic of PF.

Method

The basic principle of PF is that the bringing together of the characteristics of private ownership, outsourcing, and the combination of the service delivery into one contract will ultimately lead to increased efficiency. The process begins with the government specifying its long-term goals. Market parties unite in consortiums and make (innovative) proposals to meet certain standards. These proposals are tendered in competition, which guarantees the lowest possible user fees. Since the contracts have such a long duration, the economic considerations by the consortiums are made over the entire period. The emphasis on the specification of the performance eventually required, lessens the requirements for design and construction. This gives room for the private parties to:

- determine for themselves the manner in which the various phases are designed; and
- decide which composition of labor and capital will meet the required performance standards; and
- strive for such a cash flow pattern of expenditure that the present value is as low as possible.

Financing banks play an important role in the way this leeway is used. Since their money is at stake, they will provide the necessary pressure on the quality of the proposals. The combination of competition with the abovementioned activities is an incentive for the market parties to carefully size up the risks of what the government asks them to do, and to come up with efficient solutions.

However, this approach does not always work. The British example shows that certain preconditions must be met in order for PF to become a success. Thus, the Treasury states, ‘Evidence suggests that PFI is appropriate where there are major and complex

capital projects with significant ongoing maintenance requirements. Here the private sector can offer project management skills, more innovative design and risk management expertise that can bring substantial benefits. However, PFI is unlikely to deliver value for money on other areas where the transaction costs of pursuing PFI are disproportionate compared to the value of the project or where fast paced technological change makes it difficult to establish requirements in the long term' (2003: 2). Apparently, PF works well when the projects are complex and large. It is not recommended when:

- the transaction costs are high compared to the value of the contract; these are costs related to drawing up and carrying out the contract
- the performance to be delivered is unclear.

It is for this reason that PF is no longer used in the UK for IT projects, since technological changes became too unpredictable (Treasury, 2003: 87).

The uncertainty about whether PF generates excess value, or "Value for Money" (VfM), as it is known in the UK, makes it necessary to determine this per project. This is done by comparing the user fee to be paid with the expenditures which the State would incur if it were to finance the capital good itself and were to operate it in the usual manner, taking into account the transactions costs that would be incurred with these options.

The efficiency of PR explained

Explanation

PF has three characteristics: private ownership, outsourcing, and combination of services. In the previous section, another precondition was added: the use of PF must yield VfM. The principles and contentions that can help explain why -- and in which cases -- PF leads to VfM, will be presented below.

First of all, the characteristics will be discussed from the private-public perspective. The principle in this is that the government should only be granted means of production in exceptional cases, for instance, when the market fails, and generates services with them. Secondly, the characteristics will be viewed on the basis of the proposition derived from economic organizational theory that an organization should only produce services itself and have ownership of means of production if the transaction costs are lower than when those means of production were not owned by itself. Thirdly, there will be a discussion on life-cycle management as an explanation for the combination of services, after which the calculation of VfM will be briefly looked at. Finally, these insights will be combined and related to PF.

Private-public relationship

The first angle with regard to ownership and outsourcing is the role of the government. Defense is seen as a truly public good because it does not cost anything extra to let an additional individual benefit from it, and it is difficult to exclude any individuals from benefitting from it. The consequence of this is that defense is financed by compulsion: taxes. Being a public good does not necessarily mean that the government produces this good itself: financing and production are two different things. The fact that the needed weapons are usually produced by companies, already makes this distinction clear. The Defense organization is the owner and soldiers use those weapons, however, not everything is outsourced. A defense organization also owns companies, schools, and infrastructure. For this type of situation, it can make use of companies, for instance, by hiring offices and outsourcing weapon maintenance. Apparently, it is a matter of choice who is going to be the owner or who produces services. This brings up the issue of what this choice between public and private should be based upon.

There are a number of reasons not to embrace ownership and production by the government in advance. Stiglitz (1988: 198-205) mentions, amongst others, the following:

- Organizational incentives provided by government are different from those of companies. Government units do not have to worry about bankruptcy and generally do not face competition, causing the absence of a built-in mechanism urging for efficiency in decision making. There is no price mechanism, nor are there competitive forces to ensure the delivery of services at minimal costs.
- Personal incentives are different. On the one hand, in contrast to the world of business, in a government organization, salaries rarely reflect the success of that organization. On the other hand, it is easier to lay off personnel in the business world, which makes the incentives of reward and punishment for good or bad performance, respectively, stronger in business companies. These incentives must be related to the objectives of an organization, which in a business company are profit and market share. As personal incentives are also directed at success of the company, this will ensure a central position of the objective. This is not so with the government, whose objectives are more numerous and not always unambiguous. Social (employment) and other political objectives blur the image and, in the absence of personal incentives to strive for efficiency, give occasion to pursue other, personal, objectives.

Stiglitz (1989: 32) also stresses that inefficiency is not exclusively a government thing. Business companies, too, especially the larger ones, where ownership and management are not unified in one person, find it difficult to make their employees act in the interest of the organization -- known as "agency costs". However, Stiglitz (1989) expects that the combination of the abovementioned organizational and personal incentives is a reason to expect more inefficiency within the government.

This expectation is supported by research. Because of the ready availability of data, most scientific research deals with comparable companies that may or may not be owned by the government in certain countries. One such research was held into the relation between ownership of 23 comparable air lines and their growth. It was found that companies financed by the government had a slower growth and made fewer efforts in cutting costs than those in private hands. Not all research leads to the conclusion that private ownership is preferable. Caves and Christensen (1988) compared two Canadian railway companies, one in private, the other in public hands. They showed that in this case it was not so much ownership that determined efficiency, but that competition forced the public company to be more efficient. Vining and Boardman (1992) brought all this research together and they conclude that ownership does matter and that, where there is enough competition, private ownership is preferable from an efficiency perspective.

An interesting research, though not directed at companies, was conducted by Karpoff (xxx), who investigated 92 Arctic expeditions for their degree of efficiency in the period between 1818 and 1909. Fifty-seven of these expeditions were privately financed and the others were initiated by governments. Karpoff (xxx) found that the public expeditions had the largest monetary resources, lost the most ships, and suffered the most fatalities and scorbutic patients. The private expeditions, in contrast, achieved the most prizes. The North-West passage as well as the North Pole were first discovered by them. While searching for an explanation, Karpoff (xxx) discovered that in the public expeditions those who initiated them were never the ones to execute them and that separation caused the expedition leaders to be badly motivated. Besides, insufficient advantage was taken of important innovations at the time with regard to clothing, diet, and mode of transport in Arctic circumstances.

Research conducted by the British National Audit Office (NAO) into PF indicates a preference for private initiative. One example is the construction of the "Joint Services Command and Staff College", which was put into use in 2000. When the costs of PF for this project are compared to those of financing by the government, the offer of the market party proved to be 10 % cheaper. According to NAO, the explanation for this is a better handling of the risks (NAO, 2002: 20). As Table 2 shows, in this contract many risks related to the construction and service delivery were transferred to the market party. Besides, the commercial risk - the use of the buildings, including services - lies partially with the market party. Thus, any possible future reductions of the British armed forces with an ensuing smaller demand of facilities have been anticipated.

Risk	Party bearing risk	Details
Design and construction	Contractor	Contractor did not receive any payment until start of service delivery
Availability	Contractor	Payments to contractor are reduced if it fails to make new facilities available for use by MOD
Performance	Contractor	Payments to contractor are reduced if it fails to provide support services to the required standards
Inflation	Shared	
Demand	Shared	MOD has guaranteed to buy a certain level of usage but the level of this guarantee decreases in later years
Residual value	Shared	

Table 2: Example of risk allocation (NAO, 2002: 19)

Transaction costs

Transaction costs occur when a supplier delivers goods or services to a customer. In fact, they are coordination costs related to this transfer. They can occur within a single organization or between organizations. When, for instance, armed forces decide to do their own weapons maintenance, the costs will be for planning and arrangements about production, management and production monitoring. When supplier and customer belong to two different organizations, they will consist of costs for finding the other party, drawing up a contract, managing the contract and monitoring contractually agreed upon performance. The volume of the production costs together with transaction costs of the various performance modalities determines which method of delivery is the most efficient.

According to the theory developed by Williamson (2003), the level of the transaction costs is related, amongst others, to the uncertainty surrounding the transaction and the specificity of the capital goods. This uncertainty is caused by a lack of information and the “incomplete” contracts as a result of this. It can have several causes:

- the difficulty to specify what the characteristics of products or services should be,
- insufficient measurability of performance, and
- opportunism of contract partners.

A situation which presents little uncertainty, for instance, is the delivery of bread to a barracks. When a barracks needs bread to feed its personnel, it will be decided not to bake it oneself, but to buy it. From a transaction cost perspective the explanation for this is as follows. There are many customers and suppliers for bread. This makes it a clear product and negotiation about the price is hardly necessary. Therefore, such a contract will bring along few costs related to the drawing up of the contract and performance

monitoring. At the other extreme are military actions. It is virtually impossible to draw up a contract with a supplier, as it is not known in advance what actions are going to be like. This is caused in particular by the fact that the decision about which means to deploy is related to the means the adversary is going to field. Because of this, a contract for military action will, as Fredland states, “inevitably be quite incomplete” (2004: 207). Besides, it is very hard to determine whether the soldiers deployed have had enough training and the measurability of their performance is very difficult. Therefore, according to the theory, the transaction costs are so high that it is better that one’s own troops carry out the actions.

The level of transaction costs is also determined by the extent to which specific means are needed for contract performance. These special resources may be physical, such as buildings or machines, or they may be intangible, such as specific training or know-how of personnel. A means is specific when the possibilities for application are limited, excluding alternative use. When a supplier is invited to invest in resources that are specific, it is clear that an alternative use of these means is much less profitable. The supplier will try to limit the risk by demanding a contract with a long duration, or by making allowance for it in the price of the service. Such a mutual dependency will lead to protracted and difficult negotiations, resulting in high transaction costs.

Seen from a statistical perspective, the evidence for the role of transaction costs is found by studying contracts. Thus, Keith Leffler and Randal Rucker investigated the structure of 200 contracts for uprooting trees. They found that the choice for the manner of payment (a lump sum for all trees versus payment on the basis of the number of uprooted trees), in line with the transaction cost theory, was related to the costs of drawing up the contract and monitoring performance. Paul Joskow investigated investments of electricity companies in relation to the contract duration for 277 coal deliveries. He found that when the companies were built in proximity of a single mine, the contracts were considerably bulkier than the contracts for coal delivery to companies that were not dependent on a single mine. Kirk Monteverde and David Teece collected data on the extent to which specialist design expertise influenced the structure of American motor companies. They found that the large companies produced their own components if specific expertise was required. Aric Rindfleisch and Jan Heide, amongst others, have compared this type of empirical studies and in general they support the theory.

The theory on transaction costs has been complemented by Sanford Grossman and Oliver Hart, amongst others, with regard to specific investments, with the notion that “property rights” have consequences for the motivation to either reduce the costs of the contract during the term of agreement, or to improve the quality of the service, or to innovate it. They assume that contracts can never fully specify the rights and obligations of the partners. On the assumption that a private partner is the owner, this can motivate

him to invest during the term of agreement if this means a reduction in costs. Because of the incompleteness of the contract, the private owner can combine this with a reduction of quality. Being the owner, the profits will fall to him. The expectation is that he will be somewhat less inclined to innovate or improve the quality of the service delivery. After all, he will have to negotiate about this with the partner, which might mean he will have to share the profits. Still, according to Andrei Shleifer, this is not a reason for the government to seek ownership, for, “The weak incentives of government employees with respect to both cost reductions and quality innovation underlie the basic case for superiority of private ownership” (1998: 138). With this, he concurs with Stiglitz’ arguments in the first perspective and he supports it by giving the same empirical evidence. According to Shleifer, from an economic perspective, there is a limited number of circumstances in which the government should hold property. Amongst others, he mentions:

- when there is a considerable chance that cost reduction could lead to a reduction in quality which cannot be covered by the contract,
- when innovation is relatively unimportant,
- when competition is weak,
- when damage to reputation is unimportant (this means that firms for which reputation is important in the acquisition of orders, are less inclined to lower costs and quality simultaneously).

Therefore, Shleifer thinks that it is a logical decision that the United States airplane ‘Air Force One’ is not in private hands. A private party might see an opportunity to reduce personnel costs by lowering the quality of the personnel, or to cut costs by choosing perilous flight routes in order to save fuel. However, the ultimate safety of the President of the United States warrants public ownership.

The proposition that uncertainty and specificity of the investments influence the transaction costs is confirmed by the use of the PF method. There are three reasons for this. First of all, the long term nature of agreement of the contracts - 25 years is not unusual - ensures the absence of a competitive element that would otherwise keep the supplier on his toes. This requires incorporating a “regulatory framework”, containing elements such as standard of service delivery, payment structure of the basis of output, penalty clauses, standards of delivery of the agreed output (Fourie, 200: 22). Secondly, the contracts are voluminous, as the combined service delivery is very diverse, indeed. Thirdly, this kind of contract is unusual in its length and composition, which affects the certainty. Standards are lacking and the result is a protracted, expensive contracting-out process. Apart from the fact that the drawing up of the contract requires a lot of effort and specialist know-how for both sides, government and business companies, numerous hired advisers, such as lawyers, economists, and corporate finance specialists are

needed. Moreover, they are needed right at the onset, even before the construction starts, and this is a heavy burden on the Present Value of a project. In the reconstruction of the MOD in London, for instance, the expenditures for advisers of the State amounted to almost GBP 9 m., GBP 7 m. for financial economic experts, and GBP 2 m. for legal advice (National Audit Office, 200b: 18). This is a lot of money, especially when taking into consideration that this was not the first project in this field, so that those involved could profit from the experience gained with other PF infrastructural projects.

Government reports in the Netherlands as well as in the UK regularly announce initiatives to reduce these costs, for instance, by standardization of the contracts. However, the costs remain higher than for the usual contracts, due to of their “tailor-made” character.

Life Cycle Management

When the investment within a budget is the sole objective, there is a tendency to place less emphasis on the importance to issues that will emerge later in the life cycle. This may lead to the use of cheaper materials with a shorter working life or a design that could demand extra operational costs. It is argued, however, that if the entire life cycle is taken into account from the start, combined with performance standards for use, the various phases can be tuned much better.

Benjamin Blanchard and Wolter Fabrycky defend this proposition, indicating that in the construction of any capital good, more should be taken into account from the outset than just the design and construction alone, ‘Experience in recent decades indicates that a properly functioning system that is competitive cannot be achieved through efforts applied largely after it comes into being. Accordingly, it is essential that engineers be sensitive to utilization outcomes during the early stages of system design and development, and that they assume the responsibility for life-cycle engineering’ (Blanchard & Fabrycky, 1998: 19). This method of designing must start with a “definition of need”, in which a needs analysis is linked to “system operational requirements” (Blanchard & Fabrycky, 1998: 20). This is similar to the performance standards used in the PF method. They acknowledge that this approach is not widespread as yet, which they attribute to the fact that the producer of a capital good is usually not the user and that ownership, use, and maintenance are not in one and the same hand. In their views, armed forces are positive exceptions to this rule, as they are often involved in design, construction, and operations which gives them an interest in overseeing and controlling the entire life cycle.

Unfortunately, this interest is presented too optimistically. There are two reasons for this. First of all, the division between the responsibilities for technology, procurement, supply, maintenance, and the use of the systems appear to cause too little attention for optimizing the entire system. The United States Army is currently trying to break them

down, by introducing the “Soldier Focused Life Cycle Management” in 2005. It is a program which focuses on performance per system and the costs incurred for that and it is intended to bring the various organizations into line (James Pillsbury, 2005: 4).

The second reason is of a budgetary nature. In most countries, as in the Netherlands, budgets are directed at the means that have to be purchased: personnel, weapon systems, supplies. The division runs almost parallel to the organizational division indicated above. This method ensures optimization of the partial budget. Thus, it can be imagined that from a stock management perspective ammunition is purchased for systems that are not used for military actions, whereas there is no budget for maintenance of systems that are employed. David Osborne and Ted Gaebler give many instances of this. Ever since their book “Reinventing Government” was published fifteen years ago, people have been aware that more should be budgeted on the basis of what must be achieved.

It is often called the biggest advantage of PF that it enforces de-partitioning and budgeting on what must be achieved. The method combines the functions of design, construction, maintenance, logistics and operations. By not specifying in the long-term contracts how and what must be built but instead, laying down what requirements the service delivery must meet, the supplier will be stimulated to make the present value of the costs for the total life cycle as low as possible. As Grout states it, “there are strong incentives to build the right type of asset when revenues depend on a flow of suitable quality services from the asset” (Grout, 1997: 63). This forces entrepreneurs to think long-term and, “This is generally seen as a tremendous competitive advantage over traditional contract” (DeWulf et al.: 78).

Determination of Value for Money

The PF method uses guidelines, laid down in the manuals in the UK and the Netherlands, for the financial determination of Value for Money. As VfM is a pre-requisite for using the method, it is useful to carefully consider this calculation. The first point of criticism is that the risk approach is too limited, since it is only directed at measurable risks.

Froud (2003) conducted research into all hospitals in the UK that were built with PF in the period 1987-1998. If risk transfer was not taken into account, she found that public financing was preferable for all hospitals. With risk transfer, the balance was tipped in favor of private financing (Froud, 2003: 576). This also applies for the building of Staff College in the UK, mentioned above. Without risk transfer, the public option cost M£197 and the private option M£200. By the risk transfer of M£26, the private option was more efficient (NAO, 2002: 20). Apparently, the determination of VfM is very sensitive to risk transfer. This may prompt the question whether, as Stroud says, the method was designed precisely in this way, ‘while effectively disguising the extent to which the

public sector retains the inherent risks of the project' (Froud, 2003: 577). The argument for this is that uncertainties and non-measurable risks are left out of the equation. In fact, they are actually created by the way in which PF is put out.

Risk is the measurable chance that the outcome is different than intended. This can be assessed statistically for construction, operations and profitability of projects. However, there are also non-measurable or unmeasured risks here. Non-measurability refers to those situations in which various outcomes are possible, but for which no historical data exist. The changing East –West relation and its consequences for armed forces is an example of this. A PF contract, with a duration of 20-30 years, restricts the possibility of the government to respond to a changing environment. In other words, it limits the flexibility. The criticism is that PF is too focused on measurable risks, which is a technical approach. It leaves out of consideration what Fourie and Burger call “guestimates” (2000: 13). On top of that, according to them, the PF also creates risks which are not taken into account either. The most important created risk is caused by the service delivery approach, in which services have to be identified beforehand. It is unlikely quality standards for service delivery will remain the same during the 25 years of a PF contract. A changing quality or volume means new negotiations, with the ensuing extra costs.

At the same time mention must be made of risks which also exist in other contracts, but which become bigger due to the specific PF construction. Froud (2003) and Fourie and Burger (2000) point out the risks which ensue from dependency on market parties, in particular:

- Risk of underachievement. When investments are made specifically for service delivery, the entrepreneur may assume that, should they occur, the government will bail him out of difficulties. In that case a “moral hazard” appears: not the contract party but the government itself bears the risk, whatever the contract says (Fourie and Burger: 2000: 27). An example is the privately funded “The Royal Armouries” museum, where the commercial risk lay with the private party. The number of visitors was lower than expected and closure threatened. The government deemed this unacceptable and lent a financial helping hand and assumed the commercial risk (Froud, 2003: 584).
- Risk of bankruptcy. In crucial services the above-mentioned moral hazard will occur in case of failure. In case of an impending failure of less crucial services, whose temporary suspension is surmountable, a bank which has lent the money for the realization of the capital good, will go in search of a company to take over the activities. That this is not a hypothetical situation is shown by the failure of the Jarvis firm, which had concluded many PF contracts. The losses for shareholders and banks were heavy and the contracts were sold on. According to “The Economist”, the failure was caused by the fact that Jarvis ‘was a famously bad contractor’. If the failure is caused by the

contract, the companies will be reserved and ask the government for more money. In both cases, the government bears a certain risk (Fourie and Burger, 2000: 26). Incidentally, this risk can be limited by demanding, prior to concluding the contract, that the contract party contribute capital of its own. A more favorable debt/equity ratio can absorb shocks.

What Froud (2003) and Fourie and Burger (2000) see as risk should be expressed in the transaction costs. In the theory on this topic, there is much attention for “moral hazard” and “hold up”. If these situations occur, the transaction costs will rise. Needless to say, this is possible in a conceptual sense, in reality it will be difficult to estimate these expenditures. It is a reason not to rely exclusively on the figures for VfM when taking decisions about whether a project is suitable for PF.

The second point of criticism concerns the comparison of private and public financing. A government bond has the lowest possible interest, because there is no risk involved. After all, there is certainty that the government will always honor its obligations, as it has the power to collect the necessary money by levying taxes. Investing in capital goods means that one denies oneself something with a view to future profits. As the future is uncertain, so is future profitability. The question is whether this uncertainty must be expressed in present value calculations of investments undertaken by the government itself, as it can borrow without any risks. The starting point in PF constructions is that there should be an equal “risky rate” for private as well as public financing. Hirshleifer (1966) supports this view when he argues that if the government undertakes projects with a lower profitability than is customary in the private sector, this will push out private projects with a higher profitability. This is not Pareto-efficient with uncertainty (Hirshleifer, 1966: 268). Another argument for this is offered by the comparison of taxpayer and shareholder. The latter bears the financial risks in a company. Similarly, the taxpayer can be seen as the shareholder in government investments, because he bears the risks there. The argument is that the market is better able to diversify the risks, as the capital market is many times bigger than the government’s purse (Van Ewijk and Vollaard, 1999: 110).

There is also an economist school that advocates a “riskless rate”. Renowned economists, such as Paul Samuelson and Kenneth Arrow, indicate that the more there are mutually independent investment projects, the better the risks can be diversified; windfalls and setbacks will compensate each other. This “risk pooling” (the principle of insurance) can be done far better by the Government than any company, provided it is of a considerable size. Coupled with a large population, which has to bear the risks, it makes the remaining risk in fact negligible. Only for very big investment decisions (such as the Delta Works in the Netherlands) should a higher risk be taken into account. These contending visions also call for caution with regard to conclusions, often presented as “firm”, about the VfM calculation carried out according to the guidelines.

Conclusion

Efficiency within private companies is deemed to be better than that within government, ‘Only because the continued health and survival of the firm is at risk due to seller competition and consumer freedom of choice, are managers sufficiently ‘incentivised’ to deliver maximum efficiency’ (Fourie and Burger, 2000: 7). In other words, the starting point of PF is that since an entrepreneur deals better with risks than the government, and since the risk is efficiency’s engine, the entrepreneur is more efficient than the government. The discussion in the previous section, however, shows that this principle requires some qualification.

Firstly, this is required for a situation in which there are few market parties. Since competition will be limited, this is precisely the type of circumstances armed forces often find themselves in with respect to their military means.

Secondly, the costs of the transaction have not been taken into account. These costs can be so high that private production is not efficient. This can be caused by the modest volume of the investment, the high specificity of the means, but also by an uncertainty about required level of service delivery in the further future. In general, the specificity of military means is less than is often supposed since most of them can also be used by other armed forces. The British situation is a case in point, with Skynet now being used by other nationalities as well. The uncertain future is a different story. Military operations are subject to change and will, therefore, make other demands. This uncertainty will influence the style of contracting.

These qualifications of the basic principles, however, should not lead to abandoning private production. Apart from Schleifer’s argument, from an economic perspective, effects of scale and shared use of overcapacity are reasons for this, as is borne out by British defense projects. An example of effects of scale is the PF of engineer vehicles, encompassing more than 100 different types, which are also available commercially. PF was chosen here as controlling these many types seemed to be too costly, given the small scale on which they occur within the armed forces (NAO, 2006b: 49). An example of the effect of shared use of capacity is the “Strategic Airlift”. Here, the overcapacity was consciously created in case a deployment in a major conflict would require ferry capacity. The overcapacity is commercially exploited as long as the MOD does not need it. Yet another example is the FSTA project, in which it is intended that air planes are used in an alternative way by the consortium. Both effects can contribute to efficiency.

In the previous sections, efficiency and VfM have been presented as leitmotifs for PF. It was already suggested that caution is required in the calculation. A further qualification must be made towards the end of this contribution, because one may ask oneself whether VfM, as it is used in the PF method, is such a good motive. In contrast with a private company, in which profit and shareholder value are leading, the government has

many -- often conflicting -- objectives. Thus, contracting out, can be undesirable from a political motive -- such as electoral loss -- even if it may be efficient. At the same time, these other objectives can lead to PF.

This situation may occur when a government organization wants to undertake a project for which there is no money. For the short term, PF may give the impression that the problem becomes smaller since more funds can be invested than was originally anticipated. This reason why the British MoD embraced PF in the construction of their Staff College, for “it was questionable whether the large capital outlay involved was affordable” (NAO, 2002: 1).

A Minister of Finance can be faced with a similar problem when his government must make certain investments whereas the reality of the national debt simply does not allow this as a viable option. PF will help him out because when the economic ownership of a capital good is in the hands of a market party, the national debt is not burdened. In the short term, this may seem like an adequate solution. However, PF can unfortunately not be used structurally for this purpose because it ultimately does mean “buy now, pay later”. This is the reason why the motif of VfM remains paramount.

Finally, it must be said that, apart from VfM, there may be other factors of importance in the determination whether PF can be used in any individual case. This calls for cautionary measures and convincing argumentation. When the necessary prerequisites and criteria can be met within a competitive market situation, when the service delivery requires innovative thinking, and when the created capacity can be used by others too -- whether they be market parties or armed forces -- it is a realistic expectation that PF is a good method for acquiring capacities.

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