

SPECIAL PURPOSE ENTITIES AND THE PUBLIC SECTOR¹

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I. INTRODUCTION

This paper aims to investigate the complex and evolving nature of so called “special purpose entities” (SPEs), raises awareness of the difficulties in dealing with those entities in analytical and statistical systems, and encourages further discussion on these matters.

The paper is divided into four parts. Section II describes the general features that characterize SPEs. Section III describes the activities performed by SPEs and intends to show that SPEs are entities set up with different legal arrangements to perform specific economic and financial activities. Section IV describes the measurement challenges that arise from SPEs. Section V highlights the statistical issues with regard to SPEs and Section VI identifies issues for discussion.

II. DEFINING SPECIAL PURPOSE ENTITIES

Standard setters in the area of accounting and macroeconomic statistics recognize these entities by their characteristics rather than by definition. The SPE is an entity that is created through the transfer of assets, liabilities or rights to carry out a well-specified activity or series of transactions directly related to the specific purpose for which it was formed. The general characteristics of SPEs can be summarized as follows:

Economic activities conducted by SPEs

The scope of activities that can be conducted by SPEs is very broad. Depending on the purpose of the entity, the operations of SPEs range from being a pure conduit or intermediary vehicle, to a vehicle that plays an active role in reinvesting or reshaping the economic flows arising from the entities’ transactions. Although they historically originated in the *non-financial corporate sector*, the use of SPES has spread to all sectors in the economy. In the *financial services industry*, the most common application of SPEs currently can be found in the asset-backed securities market, such as collateralized debt obligations and mortgage-backed securities.

In the *public sector*, the activities of SPEs are often conducted through public-private partnerships, build-own-operate-transfer (BOOT)² schemes and joint ventures to construct

¹ Special purpose entity (SPE) is a term used interchangeably with the term special purpose vehicle (SPV). This paper will use the terminology SPEs to refer to those entities.

² Not all public private partnerships and BOOT schemes will necessarily be SPEs.

infrastructure, manage financial assets or liabilities or to deliver services on behalf of government. In addition, securitization also exists with regard to assets expected to arise in the future, such as future receivables and expected income flows, which are often referred to as “future flows securitization.”

Participants (may involve only two parties)

The participants in SPEs often comprise three groups. The entity that transfers the assets, liabilities or rights is the *transferor*, also referred to as the originator or sponsor, to the creation of the SPEs. The transferor, with or without the involvement of a partner, creates the SPE. Equity ownership could be vested in the transferor and/or the partners of the transferor. Traditionally, owners of the equity of SPEs seldom provide more than three percent of the capital employed by the SPE. The *transferee* is the newly created SPE that receives the transferred assets, liabilities or rights. The third type of participant in the SPE is the investors who typically provide virtually all the funding requirements of the activities of a SPE through loans extended to the SPE. The borrowing of SPEs often takes the form of issuance of marketable securities.

Pre-conditions

Two conditions are required for the successful use of SPEs.

- A robust financial infrastructure should exist. This enables the efficient transfer of assets and liabilities from the transferor to the SPE, while also adequately protecting investors' interest. Such financial infrastructure will comprise a legal, accounting and regulatory environment that does not impose significant compliance or administrative costs on the transferor, and recognizes the rights of both the transferor and investors.
- The existence of strong investor demand is a key determinant of successful SPEs. Investor demand is facilitated by the degree of protection attained through credit enhancement facilities, as well as by the role credit agencies play in the assessment of risks. Strong investor demand engenders lower financing costs for the transferor.

Legal form

The structure of most SPEs is inherently complex, involving the formation of various types of legal entities, and the creation of multifaceted financial arrangements between the participants.

The legal form of SPEs varies and could take the form of a corporation, trust, partnerships or an unincorporated entity and could be either onshore or offshore. The legal entity may have a limited or infinite lifespan, determined by the purpose for which it was created. Financial arrangements embedded in the legal form of SPEs are complex and often referred to as types of “structured finance” or “financial engineering.”

Autonomy of SPEs

The management depends on the nature and use of the SPE and ranges from control by the transferor to independent management. Some SPEs are so limited by charter that they are often described as “brain dead” or on “auto-pilot.” By contrast, other SPEs have full operational independence within the purpose for which they were created.

Some categories of SPEs

SPEs that contain contractual cash flows to investors can broadly be classified into two categories:

- *Pass-through* structures, which pass through all of the principal and interest payments of assets to the investors. This grants the investor security certificates that secure proportional beneficial interest in all the assets held by the SPE.
- *Pay-through* structures, which allow the SPE to reinvestment cash flows, restructure assets and liabilities and purchase or construct additional assets.³ Investors in pay-through vehicles are usually paid on predetermined fixed dates, not necessarily matching the dates when activities are undertaken by the SPEs.

III. USE OF SPECIAL PURPOSE ENTITIES

SPEs could be misused to conceal the extent of involvement by the transferor in certain activities (e.g., purposely manipulating financial outcomes). They can also be justifiable and legitimate business purposes exist for the use of SPEs.

Securitization of assets

SPEs are often used in the securitization of assets.⁴ Securitization of assets through SPEs is structured financing whereby an transferor pools together its interest in identifiable assets or cash flows over time, and transfers the ownership rights to an SPE at an agreed price. The SPE sells securities to investors with the support of collateral on the transferred assets, and thereby indirectly finances the transferor. Although the end-result of securitization could be seen as

³ An example would be credit card receivables transactions, which use pay-through structures to allow reinvestment and restructuring, so that bonds of a longer average life could be issued to investors.

⁴ Asset-backed securities are not necessarily associated with the creation of SPEs. A financial corporation can have a loan portfolio on its balance sheet and issue securities that are specifically backed by the loan portfolio. The loans and securities could be on its own balance sheet, rather than moved to the balance sheet of an SPE.

financing, it is not financing based on the general credit of the transferor. The entity securitizing its assets is selling an asset or future stream of cash flows that would otherwise be paid to it over time in exchange for a determined sum of money at the present time.⁵

Securitization (recognition of liabilities)

Securitization of liabilities through SPEs is attained when an transferor pays an SPE an agreed amount of money in exchange for the debt of the transferor. This type of securitization is often used to make implicit liabilities (obligations not backed by a contractual agreement explicit or to reschedule liabilities. Liability securitization is a means of formalizing these implicit debt obligations, providing a degree of certainty to creditors and enhancing credibility and marketability. Securitization improves creditors' welfare by allowing them to reallocate their resources in an equitable, transparent, and efficient manner.

Among others, governments have used securitization as a means of addressing expenditure arrears problems, often arising from using a cash basis of accounting. When government has expenditure arrears, creditors end up with implicit claims for which they have no title and which will be honored, at best, at some unspecified future date and for an uncertain amount. These claims do not show up as debt of government, when government uses a cash basis of accounting. Having no title to their claims, limits creditors' financial management capacity, since they cannot trade or enforce the claims. Government would typically pay the SPE to take over the accumulated arrears by issuing government securities with defined terms to the SPE. Then, a liability would appear in the accounts of government. At the time of the transaction, has a zero net effect on government cash flows, but creates an explicit liability in exchange for an implicit liability (the arrears). Government securities are used as collateral by the SPE to issue securities in the capital market to raise funds to redeem the arrears. In this way, the original implicit claim of creditors on government becomes an explicit claim of creditors on the SPE. If used by governments, securitization of implicit liabilities has the potential to enhance fiscal credibility by increasing transparency, signaling the government's commitment to honor its liabilities, and allowing the transfer of legal title. Default on these securities will be as damaging to internal and external credibility as defaulting on any other transparent claim. However, fiscal affordability is a prerequisite for the securitization of such liabilities; otherwise, the debt may be perceived as having a low market price, resulting in steep discounts in the secondary market.

⁵ The difference could be explained by the following example. If an entity wants to own a car and rent it out, it could take a loan with which it could buy the car. The loan is a liability and the car is an asset. This is simple financing. Securitizing assets would use the car to generate rent income flows over time, and sell a part of this expected cash flow during a stipulated period in order to raise enough money to buy the car. The investor has a claim on the cash flow, which is not affected by any other liabilities of the entity, and the entity has the asset (the car) and can also use it for other purposes.

Pre-funding certain payments

SPEs could be used to pre-fund certain payments resulting from demographic expectations or future commitments. This type of arrangement is often used to secure future acquisition of fixed assets or to provide for future expense in areas such as health, social protection and education resulting from dramatic demographic changes. The transferor invests the present value of the future commitment in SPEs. In exchange, the SPE issues securities to the transferor with maturity structures that match the expected future commitment. The SPE invests funds acquired from the transferor to yield a return. Such financial structuring would result in an implicit future commitment (liability) becoming explicit within the SPE.

Managing risks in financial entities

Financial institutions are increasingly resorting to securitization, along with other innovations to manage risks. Credit, interest rate prepayment and maturity risk are the key uncertainties that concern domestic lenders. By passing on these risks to investors in SPEs, or to third parties when credit enhancements are involved, financial institutions are better able to manage their risk exposures. The financial sector has used these arrangements to facilitate bank balance sheet management, which also resulted in the creation of new investment asset classes.

Investors risk can also be managed through the creation of SPEs. Because SPEs are designed to conduct just one pre-specified activity, the flows and risks of the venture are clearly spelled out to investors. By contrast, when an investor makes an investment in a normal corporation, the corporate management can take on a variety of transactions and activities that were not specified by prior agreement with the investor. Many investors may prefer the isolated and uniquely identifiable nature of a SPE to a more diffusely defined corporate form. For this reason, SPEs have been used for several decades as a preferred form to acquire financing for large one-off projects, and projects with well defined cash flows and risk characteristics.

SPEs enable investors to make their investment decisions independently of the credit standing of the transferor. The structures of SPEs are often set up to be “bankruptcy remote,” meaning that the financial position of the transferor can not affect the investors’ right to the cash flows of the SPEs. The investor’s investment decision is informed by the degree of protection provided by the structure of the SPE, the instruments used by the SPE, and the capacity of securitized assets to meet the promised principal and interest payments. The credit rating of the transferor therefore becomes practically irrelevant.

Use of SPEs is also beneficial because they mitigate funding risk by diversifying funding sources. This enables financial institutions to eliminate interest rate and maturity mismatches because they can offer long-term fixed rate financing without significant risk, by passing the interest rate, currency and other market risk to the investors in the SPE that seek long-term fixed rate assets.

Reducing cost of financing

Well-structured financial arrangements of SPEs could lead to a reduction in the cost of financing projects. Reduced costs in the SPE could result from administrative savings due to specialization, increases in liquidity of securities issued and increases in marketability of securities issued by the SPE. Financial restructuring could lead to a reduction in the entities' weighted average cost of capital. This is possible because equity capital is no longer required to support the assets, and highly rated debt can be issued into financial markets where investor demand could drive down financing costs. However, the public sector would probably not benefit in this way from the use of SPEs because governments' power to tax their citizens reduces the risk of default and should thus result in lower borrowing costs for government. Whether the use of a SPE results in savings for government will depend on the net fiscal savings resulting from improved asset management and the productivity of the resources released.

Improving balance sheet structures

Securitization can enhance managerial control over the size and structure of an entity's balance sheet. Accounting de-recognition of assets and/or liabilities (i.e., removal from the balance sheet) can improve gearing ratios,⁶ as well as other measures of economic performance (e.g., return on equity). Financial institutions use securitization to achieve capital adequacy targets, particularly where assets have become impaired.⁷ Securitization also releases capital for other investment opportunities. This may generate economic gains if external borrowing sources are constrained, or if there are differences between internal and external financing costs. In the public sector, securitization is often used to "structure" debt to meet debt targets.

Facilitating market development

Securitization creates asset markets that are more complete by introducing new categories of financial assets that suit investors risk preferences and by increasing the potential for investors to achieve diversification of investments and benefits. In meeting the needs of different market segments, securitization transactions can generate gains for both transferors and investors. The purpose of securitization is often to ensure marketability of financial assets. Securities issued by the SPEs can be sold in the secondary market, thereby contributing to the liquidity in financial markets.

⁶ Gearing ratio measures the percentage of capital employed that is financed by debt and long term finance. This ratio is used as a indicator of long term liquidity and sustainability of operations.

⁷ An impaired asset involves a "loss event"; see IAS 39..

Limiting tax liabilities

SPEs are often set up in offshore tax-friendly environments so that the transferor could benefit from tax advantages resulting from the financial restructuring. The goal with such SPEs is to attain zero tax leakage in the process of financial restructuring, thereby reducing cost and increasing investors' yields.

Gaining efficiency

Entities could enter into SPE agreements to benefit from specialized knowledge and expertise not available within the transferor. This type of arrangement often prevails in governments which seek to benefit from the knowledge and expertise of the private sector in specific development projects. Specialization within the SPE could lead to efficiency gains with regards to production, services, management and eventually yield on investment. SPEs created by governments for this purpose often take the form of a public-private partnership.

IV. MEASUREMENT CHALLENGES ARISING FROM THE USE OF SPECIAL PURPOSE ENTITIES

Existing financial and economic analytical frameworks and tools available to managers, investors and analysts, do not always capture the financial and economic activities of SPEs sufficiently. This is generally due to both lack of transparency and difficulty in identifying who is accountable.

Lack of transparency

The lack of disclosure transparency is a major characteristic usually built into financial engineering and structured finance arrangements, such as those used in the creation of SPEs. This lack of transparency makes it very difficult to untangle the financial statements of entities with these complex financial engineered structures. It is of paramount importance to be able to untangle these financial records to understand and analyze the economic substance of these transactions. The lack of transparency could lead to the following analytical problems:

- Off balance sheet liabilities or assets: If a liability is held off-balance sheet, there is not much an analyst can do to identify the debt or predict when and whether the debt will affect the reported financial performance of an entity. Off-balance sheet debt can theoretically be refinanced indefinitely through the creation of additional layers of SPEs. Off-balance sheet financing, or hiding of debt is the primary reason for several SPE controversies. In these cases, the main purpose of creating an SPE is to let the SPE borrow funds while not showing the debt in the books of the transferor.⁸

⁸ The originator creates an SPE to purchase a building with borrowed money. The building is then leased to the sponsoring entity in such a way that it is reported by the company as an

- Hiding of poorly performing assets: The inherent and built-in lack of transparency of financial engineering provides ample opportunities to hide poorly-performing assets. Sub-prime lenders often use SPEs to hide poorly performing receivables, to move bad investments off-balance sheet, and to hide uneconomic long-term contracts.
- Gain-on-sale-accounting or management of earnings: This type of risk arises when an SPE is reported as a separate and unconsolidated entity, but is still dependant in some way on the transferor entity. This arrangement can easily provide several potential opportunities for earnings management. In particular, there is the potential to manipulate and misstate the value at which the assets are transferred to the SPE, which results in gain-on-sale accounting. The transferor could manipulate the earnings and asset values that could lead to financial misrepresentation.

Establishing accountabilities

SPEs are often created in several layers and with differentiated relationships to the transferor and other entities (including other SPEs) in the same group structure. Within the group structure, it is often very difficult, if not impossible, to establish who all the participants to the SPEs are and how different types of risks, rewards and control are divided among all the participants.

V. STATISTICAL ISSUES ON THE TREATMENT OF SPECIAL PURPOSE ENTITIES

SPEs, are a relatively new phenomenon and are not explicitly dealt with in the *1993 SNA*, and other related manuals⁹ as discussed extensively in *Statistical treatment of Special purpose Vehicles and related issues* (European Central Bank, September 2004). The European Central Bank (ECB) investigated current guidance and summarized the findings of their comparative study on the treatment of these entities in Table 1.

operating lease. By this arrangement both the building and the associated debt are moved to the SPE balance sheet.

⁹ *Balance of Payments Manual 5 (BPM5)*, *External Debt Guide*, *Government Finance Statistics Manual 2001 (GFSM 2001)*, *Monetary and Financial Statistics Manual (MFSM)*, *European System of Accounts 95 (ESA95)*, and *ESA95 Manual on Government Deficit and Debt (MGDD)*.

Table 1: The following table provides an overview of the terms used in the different international statistical standards. *(The same colour shading indicates broadly similar statistical treatment)*

	SNA93	ESA95	BPM5	GFSM	MFSM	MGDD
Special purpose vehicle (SPV)					Like ancillary corporation (passive role); institutional unit if active management of portfolio (72)	Institutional unit if active management of portfolio; places itself at risk (ESA95: 2.33, 2.55)
Vehicle company					Like SPV	
Financial vehicle corporation (FVC)		Like SPV				
Special purpose unit	Non-resident institutional unit (XIV)					
Special purpose enterprise			Non-resident institutional unit (79)			
Special purpose entity (SPE)			Non-resident institutional unit (365)			
Ancillary corporation	No institutional unit (4.44)				No institutional unit if resident, but institutional unit if non-resident (71)	
Ancillary unit				No institutional unit, if non-financial, but institutional unit, if financial (2.38)		

The ECB indicates differences in terminology used in statistical guidelines and concludes that the status of these units as institutional units depends largely on their economic activities. Broadly, the statistical issues that arise from the use of SPEs concern the organizational structure and scope of activities of SPEs, their status as institutional units, their sectorization and accounting for SPEs to reflect economic substance.

Organizational structure and scope of activities

As noted in section III, SPE arrangements vary and involve a variety of economic activities including, but not limited to, financial asset securitization. Guidance on the statistical treatment of SPEs should therefore focus on broad principles rather than exact rules concerning the organizational structures operating as SPEs, as well as on the activities in which they are involved. This is especially important given the evolving nature of SPEs.

The status of SPEs as institutional units

To what extent can SPEs be classified as institutional units? The 1993 SNA identifies two main kinds of institutional units, namely households and legal entities (SNA93, par 1.13). Although SPEs are legal constructs of society, statistical systems agree that the economic substance rather than legal form should determine whether entities are institutional units. SNA93 regards

institutional units to be essentially units that are capable of owning goods and assets, incurring liabilities and engaging in economic activities and transactions with other units in their own right. In addition, a complete set of accounts can be compiled, including a balance sheet. SPEs are intentionally created as separate legal entities, with various degrees of operational autonomy, and various arrangements establishing their relationships to the transferors, partners and investors.

In some instances, the activities of SPEs could be such, that it could be seen to be ancillary units as defined in guidelines currently available. Ancillary activities as defined by the *SNA93* comprise productive activity undertaken with the sole purpose of producing one or more common types of service for intermediate consumption within the same enterprise (*SNA93*, par. 4.41). These ancillary corporations are not treated as separate institutional units in the SNA system (*SNA93*, par. 4.43), but are treated as an integral part of the parent institutional unit.

Following this line of thinking, the *GFSM 2001* indicates two units that are to be seen as ancillary units and classified to the general government unit that controls it:

- Internal service organizations selling their output mainly to other government units, and
- a unit that appears to be a financial corporation, that borrows on the market at commercial terms, but lends only to general government units.

It follows that SPEs complying with the above two criteria would not be seen as separate institutional units under the current treatment. The treatment of ancillary units in statistical systems is under discussion by an Electronic Discussion Group of the Inter Secretariat Working Group on National Accounts.¹⁰

The sectorization of SPEs

For the SPEs that are identified as institutional units, the next issue is the sector in which to classify them. Owing to the almost limitless combinations of legal arrangements, organizational structures, assets, liabilities, and participants involved in SPEs, it is not practical to have specific classification criteria applicable only on SPEs. The first principle of sector classification guidelines should be used to determine the sector classification of SPEs. This section discusses indicators that could be used to do the sector classification, and raise further discussion points that may need clarification in statistical guidelines. The following should be considered:

- *Determine whether the SPE is a resident or non-resident institutional unit:* The residency of SPEs is under discussion by the Balance of Payments Technical Expert Group (see Outcome Paper BOPTEG # 9 and 10). Preliminary indications are that all

¹⁰ United Nations, Statistics Division, *Treatment of Ancillary units in the 1993 SNA*, July 12, 2004.

non resident SPEs should be considered an institutional unit and that residency should be determined according to the territory of incorporation or legal domicile.¹¹

- *Determine whether the domestic SPE is under public or private control:* Some intended accounting effects of SPEs, such as balance sheet restructuring, hiding assets and liabilities and manipulating outcomes could only be achieved if SPEs are reported as unconsolidated entities. Transferor entities for this reason often keep their legal ownership in SPEs low enough so that they do not have to consolidate the SPE according to general accounting rules. However, using indicators of control¹² other than those related to the legal ownership of SPEs to determine the need to consolidate, could solve the problem of intended misrepresentation of economic substance.

The Task Force on Harmonization of Public Sector Accounting (TFHPSA) has established a working group on Government/Public Sector/Private sector delineation issues. They are currently considering indicators of control and further discussions on the control of SPEs should emanate from their work. It should also be noted that the International Accounting Standards Board is deliberating consolidation issues, including those pertaining to SPEs. In the Project summary,¹³ it was indicated that deliberations are focused primarily on the notion of control and that it is the Board's intention that the consolidation principles it develops would apply to all entities, including SPEs.

- *Determine whether the domestic SPE is operating at market or non-market prices:* If it was determined that an entity is under the control of government, the price at which the SPE activities are concluded will determine whether the entity is classified to the public corporation sub-sector or the general government sector.
- *Determine whether the activities of the domestic SPE is of a financial or non-financial nature:* The nature of the primary activities of the SPE should be considered to make a final distinction between financial and non-financial institutional units, both in the case of entities controlled by government and other private sector entities. The European System of Central Banks (ESCB) has agreed to specify six groupings¹⁴ of institutional

¹¹ This discussion was reopened in Issues Paper (BOPTEG) #9B.

¹² Indicators of control are currently regarded as a) determining the corporate policy, b) appointing the majority of directors, c) ownership of more than half of the voting shares, d) special legislation/regulation determining corporate policy.

¹³ International Accounting Standards Committee Foundation, *Consolidation (including special purpose entities) Project Summary*, 23 November 2004.

¹⁴ These groupings are (1) investments funds (IFs), (2) financial vehicle corporations (FVCs) created to be the holders of securitized assets, (3) financial corporations engaged in lending

(continued)

units belonging to the sub-sector *Other financial intermediaries, except insurance corporations and pension funds* (OFIs). The ESCB considers two of the groupings, Financial Vehicle Corporations and Financial Holding Corporations, to include some categories of SPEs. The ESCB classification does not recognize some SPEs separately because the nature or their activities result in them being included in the broader categories for either financial auxiliaries or investment funds.

The ECB indicated that SPEs involved in securitizing government assets would only be considered financial if the government assets to be sold to the SPE existed in the government's balance sheet before the arrangement started and if the SPE has taken over the full risks of the assets, so that the transactions can be considered a true sale. Otherwise, the SPE would not be an institutional unit but be classified with the transferor government unit.

Accounting for SPEs to reflect economic substance

As indicated in Section II of this paper, some SPE arrangements are used to secure financial assets and liabilities, but some SPEs could also be involved in raising financing for the construction of non-financial assets and/or be directly involved in the construction and operation of the non-financial asset. Governments often create such SPEs in collaboration with private sector partners. SPEs in the public sector therefore could take on the form of Public-Private Partnerships (PPPs) or Build-Own-Operate-Transfer (BOOT) schemes.¹⁵

Pitzer¹⁶ 2004 pointed out that it is often not clear which unit is the economic owner of the fixed assets of PPPs because contracts stipulate a complex sharing of the risks and rewards of asset ownership. It was also pointed out that a transfer of legal ownership at the end of the contract at a less than market price implies that some other mechanism within the contract enables the private enterprise to earn a market rate of return. Pitzer examined the nature of BOOT schemes, categorized these schemes, compared various proposals for the accounting of BOOT schemes, and indicated a proposed accounting treatment for each category with reference to the impact on fiscal data. The Canberra II group that took this matter up for discussion, concluded that members of the group would be asked to indicate a preference for one of the alternative treatments, while further discussions and revisions would inform the next meeting of the Canberra II group.

(FCLs), (4) financial holding corporations (FHCs), (5) security and derivative dealers (SDDs), and (6) other which comprise all OFIs not covered by the first five groupings.

¹⁵ Not all public private partnerships and BOOT schemes are SPEs.

¹⁶ Pitzer, John S., *Accounting for Boot schemes*, Canberra II group on the measurement of non-financial assets, August 13, 2004. Attached for convenience at the end of this paper.

While Pitzer primarily focused on assigning the ownership of non-financial assets to either the private or the public sector, Hemming¹⁷ calls for an approach to accounting and reporting that places more emphasis on identifying, quantifying and disclosing the longer-term costs and risks borne by the government under these special arrangements. While structured financial arrangements within PPPs often provide for the private sector to take on the responsibility of financing and management, the government often continues to bear substantial risks.

Eurostat¹⁸ identified three types of risks inherent to transactions involving the public and private sector in partnership. These are:

- Construction risks, covering events such as late delivery, non compliance to specified standards, additional costs, technical deficiencies and external negative effects;
- Availability risk, covering the ability of the service provider to provide the agreed upon service according to agreed upon standards; and
- Demand risk, covering variability of demand for the service resulting from factors such as the business cycle, new market trends, direct competition or technological obsolescence.

Eurostat decided that assets involved in PPPs should be classified as non-government assets, and therefore recorded off balance sheet for government, if the private partner bears the construction risk and one of either the availability risk or the demand risk. Hemming points out that the private sector usually bears the construction risk and availability risk, which entails recording the majority of PPPs assets recorded on the balance sheet of the private sector under the Eurostat criteria. He argues that not only will the government usually bear the demand risk in full, but that the Eurostat decision also ignores the residual value risk usually borne by the government due to the transfer of the asset to government at the end of the life of the agreement. A fundamental concerns raised by Hemming is that classifying PPP investment as either public or private does not do justice to the fact that PPPs are designed to share risks according to which party is best placed to manage them.

An indicator that could be considered in the case of SPEs is the level of explicit and implicit risks transferred to the SPE and the extent to which the creditors of the SPE have recourse to the resources of the transferor. If a SPE and the investors in a SPE bear little risk, it could serve as

¹⁷ Hemming, Richard, Fiscal Accounting and Reporting Issues Raised by Public-Private Partnerships.

¹⁸ Eurostat, 2004, News Release No. 18, February 11, Treatment of Public Private Partnerships.

an indicator that a “true sale”¹⁹ of the assets and liabilities did not occur which may lead to the conclusion that the SPE should be consolidated with the transferor.

Similarly, it is argued that risks assigned to the private sector is often reduced or eliminated through explicit government guarantees. Financing risk could be reduced through loan guarantees; demand risk of profit guarantees could be reduced through guaranteed minimum payments for services sold and, the government guaranteeing the price at which it will purchase an asset when the contract ends could reduce residual value risk. The statistical treatment of guarantees is under discussion by the TFHPSA and the Balance of Payments Technical Committee.

VI. CONCLUSIONS

The following conclusions derived from this paper should be considered for further discussion by the working group on SPEs.

- Although there is no generally agreed definition of SPEs, these entities could be identified as an entity that is created through the transfer of assets, liabilities or rights to carry out a well-specified activity or series of transactions directly related to the specific purpose for which it was formed. These entities are defined by their specific characteristics.
- SPEs involve various participants with a specific pre-determined role by the transferor.
- The legal form of SPEs varies, is inherently complex, and includes multifaceted financial arrangements between the participants.
- SPEs are active in all sectors of the economy and the level of operational independence from the transferor could vary.
- The legal framework within which these entities operate does not always reflect the economic substance of their transactions.
- Although SPEs could be misused to manipulate financial outcomes, justifiable and legitimate business purposes also exist for the use of SPEs.

¹⁹ A “true sale” is evidenced by the relationship between the selling price and market value and the recourse the originator has to reverse the transaction on demand.

- Measurement challenges arising from the use of SPEs result from the lack of transparency usually build into the financial arrangements, and difficulty with establishing accountability.
- Due to the complex and evolving nature of SPEs, and the fact that SPEs are a relatively new phenomenon, accounting and statistical guidelines currently lack explicit guidance on the treatment of transactions of these entities.
- Due to the variety in the nature of SPEs guidance on the statistical treatment of SPEs should be focused on broad principles rather than exact rules.
- Although it might be analytically useful to identify certain SPEs, together as a group, (such as the treatment of Financial Vehicle Corporation as proposed by ESCB) guidelines applicable to all the units of the economy should be used and enhanced to make them applicable explicitly to SPEs.
- SPEs status as institutional units should be measured by complying with the standard criteria set for units to be recognized as institutional units. However, the measurement of the level of autonomy of SPEs should be considered as an important indicator of whether the SPE engage in economic activities in their own right.
- The sector classification of SPEs should consider residency, the nature of the economic activity, and the control of the SPE.
- In considering the control of SPEs, the extent to which a “true sale” occurred, the level of risks transferred and the impact of implicit and explicit guarantees could be valuable indicators of control.

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Accounting for BOOT Schemes

John S. Pitzer²⁰

Introduction

1. A Build-Own-Operate-Transfer (BOOT) scheme is a contractual arrangement between two units, one of which is often a government and the other is often a private enterprise. The private enterprise agrees (1) to construct or otherwise acquire a fixed asset or a complex of fixed assets and then (2) to operate the fixed assets over an extended period to produce services that are either sold to the government or sold to the general public and are of a nature usually supplied by a government. At the end of the contract period, the government obtains legal ownership of the assets or has the right to transfer ownership to a different private enterprise. Acquisition of legal ownership often is without any compensating payment or at a price that is clearly less than the market price, but in some cases acquisition is at the current market price. In other cases, the government has the option of not acquiring legal ownership. The land on which the fixed assets are located may also be acquired by the private enterprise or the government may own it and implicitly or explicitly lease it to the private enterprise for the contract period.
2. “BOOT schemes” is just one name for a general class of contracts. Others are public-private partnerships, public-private infrastructure arrangements, private finance initiatives, and service concession arrangements. Until a better title is agreed, BOOT schemes will be used, but with the understanding that there probably is a better title.
3. The fixed assets of BOOT schemes are often described as infrastructure assets, but infrastructure itself is difficult to define and these types of contracts can be used for long-term arrangements for the supply of most any type of service consumed by governments in their ordinary activities, such as information technology services, catering services, or vehicle operating and maintenance services. Thus, any use of the term infrastructure should be interpreted loosely.
4. There are two sources of accounting difficulties. First, it is often not clear which unit is the economic owner of the fixed assets because contracts of this nature stipulate a complex sharing of the risks and rewards of asset ownership. Second, a transfer of legal ownership at the end of the contract at a less than market price implies that some other mechanism within the contract enables the private enterprise to earn a market rate of return. This paper addresses only the second question.

²⁰ Christoph Maier made a large contribution to this work. Our summer schedules did not mesh sufficiently well for him to read the final version of this paper. Given the substantial changes that he was not able to review, it would be unfair to suggest that he has any risk for the errors. He should, however, receive a full share of the rewards. The authors can be contacted at Christoph.MAIER@cec.eu.int and jpitzer1610@msn.com.

5. Two extremes do not present accounting difficulties and provide useful indications of what is not a BOOT scheme. First, if the private enterprise constructs the fixed assets using its own financial resources and transfers legal ownership to the government upon completion of construction for a market price, the transaction is a normal gross fixed capital formation transaction on commercial terms and is governed by the general SNA guidelines. Second, if the private enterprise constructs the fixed assets without a contract with the government but for the express purpose of supplying services to the government or the general public and with no expectation of transferring legal ownership to the government except by mutual agreement and at market prices, then the private enterprise is retaining all of the risks and rewards of owning the assets. It has simply entered a market in which it believes it can compete effectively.

6. Because of the large range of possible BOOT schemes, there is no single accounting treatment applicable to all BOOT schemes. As a way forward, it is suggested that a classification of the broad categories of problematic schemes be developed and the principal aspects of the accounting treatment for each category be described. It is likely that the accounting treatment for variations of these categories can be derived from the principles established for the broad categories.

Classification of BOOT Schemes

7. One of the major characteristics of BOOT schemes is who purchases the services produced by the private enterprise. There are two possibilities: the government or the general public. The government might purchase the services either to use as intermediate consumption in its production of other services or as government final consumption expenditure in place of services normally produced by government and distributed without charge to the public. Examples might be the provision of information technology or catering services for government intermediate consumption and the construction and operation of a prison, school, or hospital for government final consumption. The second possibility is for the services to be delivered to and paid for by individual units in the general public. An example might be a toll bridge or a recreation facility.

8. A second major characteristic of BOOT schemes is that it is often difficult to know which unit possesses economic ownership of the fixed assets. In all cases, the private enterprise possesses legal ownership, but the SNA employs the principle of economic ownership, which assigns ownership to the unit that will obtain the majority of the rewards and bear the majority of the risks associated with the assets. It is quite possible for the private enterprise to be the economic owner. Frequently, however, the fixed assets in BOOT schemes are constructed according to the design, quality, and capacity stipulations of the government and are maintained during the contract in accordance with government requirements. In this case, economic ownership likely belongs to the government. As stated in paragraph 4, there is no attempt in this paper to provide guidelines for making this decision. Eurostat has published one set of guidelines,²¹ and the IMF is expected to provide a second set at the September 2004 meeting of the Canberra II group. The International Accounting Standards Board (IASB) is considering a criterion based on control rather than risks and rewards,²² and the UK

²¹ Eurostat, *Treatment of Public-Private Partnerships*, News Release 18/2004, 11 February 2004.

²² IASB, *IFRIC Update*, July 2004, pp. 2-4. This publication is available at www.iasb.org.uk.

authorities have published extensive guidance.²³ In this paper, it is simply assumed that either unit could be the economic owner.

9. A third, less important, feature BOOT schemes is the nature of the services provided. In all cases it is assumed that the private enterprise constructs or otherwise acquires the fixed assets using its financial resources. If the government is the economic owner, the role of the private enterprise might be restricted to supplying the finance for acquiring the fixed assets, but more likely the private enterprise will have operational control of the assets and use them to produce services. The same choices are possible if the private enterprise is the economic owner, but there is no substantive difference in the accounting treatment between these two possibilities and, therefore, there is no provision in the classification for this choice. If the services are to be sold to the general public, the only practical possibility is for the private enterprise to use the assets as an input to its own production process.

10. Combining these three features produces the following classification of BOOT schemes:

Proposed Classification of BOOT Schemes

1 SERVICES ARE PURCHASED BY THE GOVERNMENT

1.A THE ASSETS ARE ECONOMICALLY OWNED BY THE PRIVATE ENTERPRISE

1.B THE ASSETS ARE ECONOMICALLY OWNED BY THE GOVERNMENT

1.B.i THE PRIVATE ENTERPRISE DOES NOT SELL SERVICES TO THE GOVERNMENT

1.B.ii THE PRIVATE ENTERPRISE DOES SELL SERVICES TO THE GOVERNMENT

2 SERVICES ARE PURCHASED BY THE GENERAL PUBLIC

2.A THE ASSETS ARE ECONOMICALLY OWNED BY THE PRIVATE ENTERPRISE

2.B THE ASSETS ARE ECONOMICALLY OWNED BY THE GOVERNMENT

Sources Consulted

11. Several proposals have been put forward for the accounting for BOOT schemes, some by national accountants and some by business and government accounting standards setters. This paper attempts to compare and contrast the major features of these proposals, but a definitive comparison is difficult because some of the proposals are still in development. The sources consulted for this compilation were:

- a. Eurostat. The accounting proposals are published in the 2002 edition of the *ESA95 manual on government deficit and debt* (hereafter referred to as the EDD manual), pp. 182-194. This section of the manual is currently being revised, but the revision had not advanced far enough to be included in this paper. The EDD manual covers three of the four major categories in the classification: categories 1.A, 1.B, and 2.A. Eurostat does not consider it possible for the government to be the economic owner when services are sold to the public (2.B).

²³ See paragraph 11e.

- b. John Pitzer. See *The Treatment of Boot Schemes in System of National Accounts 1993*, paper presented at the October 2003 meeting of the Canberra II group. This paper covers all four major categories in the classification.
- c. Brian Donaghue. See *Statistical Treatment of 'Build-Own-Operate-Transfer' Schemes*, IMF Working Paper WP/02/167, International Monetary Fund, October 2002. Donaghue concludes that the government should always be considered the economic owner because it typically bears such a large residual risk and the contracts often have protections for the private enterprise, such as guaranteeing a minimum demand for the services or a minimum return on the private investment. As a result, he considers only categories 1.B and 2.B.
- d. International Accounting Standards Board. A task force consisting of representatives from the United Kingdom, Australia, France, and Spain did some initial research in 2003. The International Financial Reporting Interpretations Committee (IFRIC) has continued to work on the topic, which the IFRIC refers to as service concession arrangements. A summary of IFRIC's progress through its May 2004 meeting is given in *Service Concession Arrangements*, May 18, 2004, available on the internet at http://www.iasb.org/current/ifric.asp?showPageContent=no&xml=17_52_70_18052004.htm. IFRIC continued its discussion at its July 2004 meeting. A summary of that meeting is available in the source given in footnote 3. At this point, IFRIC considers all categories to be possible, but has concentrated on categories 1.B and 2.B.
- e. United Kingdom Accounting Standards Board (ASB). Financial Reporting Standard number 5 requires that transactions be recorded in a manner that reflects the true economic substance. The Board has published several "application notes" to provide details in selected circumstances. The relevant note for this subject is: *Application Note F: Private Finance Initiatives and Similar Contracts*. The UK Treasury has published additional guidance on how to apply Application Note F in *Technical Note No. 1: How to Account for PFI Transactions*, available on the internet at http://www.hm-treasury.gov.uk/media/8E294/PPP_TTF_Technote1.pdf.
- f. Australian Accounting Standards Board. Australian accountants have studied the issue for several years. The current status of this work is summarized in *Project Summary: Accounting for Service Concession Arrangements (formerly Public Infrastructure Disclosures)*, July 15, 2003. It is available on the internet at <http://www.aasb.com.au/>. This summary effectively refers users to Application Note F of the UK Financial Reporting Standard number 5. Earlier the Australian Accounting Research Foundation published a draft statement: *Arrangements for the Provision of Public Infrastructure by Other Entities—Disclosure Requirements*, Exposure Draft 100, December 1999. This draft dealt only with disclosure of the existence and nature of BOOT schemes and has not been finalized.
- g. US Federal Accounting Standards Advisory Board. This organization establishes standards for the federal government. It is only beginning a comprehensive study of leases and similar arrangements, and BOOT schemes are included within that broad topic. A preliminary research report is available at <http://www.fasab.gov/pdffiles/combinedleasev4.pdf>.

Important Accounting Events

12. The tables attached to this paper illustrate the accounting treatments of BOOT schemes proposed for each of the categories in the classification. A standard set of possible accounting events is included in each table. The various entries in the tables indicate whether the events apply to each

category and, if necessary, how they are to be treated. The rest of this section describes this list of events.

1. Attribution of gross fixed capital formation. Fixed capital formation takes place at the beginning of the scheme when fixed assets are constructed or otherwise acquired by the private enterprise. Depending on which unit is deemed to be the economic owner, the capital formation is attributed either to the private enterprise (1.A and 2.A) or the government (1.B and 2.B).

2. Is there an imputed financial lease? If the government is deemed to be the economic owner (1.B and 2.B), the purchase can be accomplished by means of a financial lease, which requires the imputation of a loan liability.

3. Is there an operating lease? If the government is deemed to be the economic owner but the private enterprise operates the assets (1.B.ii and 2.B), then the government must provide the services of the assets to the private enterprise. An operating lease with the government as lessor and the private enterprise as lessee is a possibility for accomplishing this transfer of control.

4. How much are the operating lease payments? If there is an operating lease, the amount of the payments should be only for the services of the assets. If the payments implicitly include an amount for the government to purchase the assets at the end of the contract, then the apparent lease payments will be greater than what would be market-determined lease payments.

5. What is the price of the services? The government payments, ostensibly for the services, may be set at the current market price of the services or they may be higher than the market price because an amount is implicitly included for the purchase of the assets at the end of the contract. If the services are sold to the general public, the price may be the current market price of similar services or it may be higher because the private enterprise has been granted a monopoly.

6. Does the government incur interest expense on a financial lease? If there is a financial lease (event 2), there will be an imputed interest expense.

7. What is the interest rate? If there is interest expense (event 6) and if the private enterprise also produces and sells services to the government, the periodic payments by the government will be greater than they would be for a pure financial lease. If the interest rate is estimated without taking the value of the services into account, the estimated rate will be higher than the current market interest rate.

8. How does the government acquire the assets at the end of the contract? If the private enterprise is deemed to be the economic owner of the assets during the contract, then economic ownership changes to the government at the end of the contract. The change of ownership can occur as a sale at the current market price or for something less than the market price. If the price is less than the market price, including zero, some type of transfer payment must exist.

9. Are there any taxes? If the private enterprise is granted a monopoly to sell services to the general public, the government may assert a claim against a portion of the monopoly profits and use that claim to purchase the assets at the end of the contract. Such a claim amounts to an imputed tax.

10. Are there debt payments? If there is a financial lease, the lease payments represent repayments of the imputed debt.

11. Does the government have a claim against the private enterprise? If the change in ownership of the fixed assets is deemed to take place at the end of the contract as a purchase, but there is no payment at the end of the contract, then the government must possess a financial claim against the private enterprise that can be used as an imputed payment.

12. What is the character of regular payments by the private enterprise to the government? In some arrangements the private enterprise may make regular payments to the government. Depending on the interpretation of the scheme, the payments could be rent for the use of government land, taxes, or dividends on government-owned equity.

13 to 15. Effect on the government deficit. In the EDD manual, it is important to determine the effect of the BOOT scheme transactions on the government deficit (net lending/borrowing) at the beginning of the contract, during the contract, and at the end of the contract.

16 to 18. Effect of government debt In the EDD manual, it is important to determine the effect of the BOOT scheme transactions on the level of government debt at the beginning of the contract, during the contract, and at the end of the contract.

Proposed Accounting Models

Category 1.A

13. Category 1.A (Table 1) consists of schemes in which the private enterprise is the economic owner of the fixed assets and uses them to produce services that are sold to the government. It is assumed that the government makes regular payments throughout the contract, which presumably represent the purchase of the services produced by the private enterprise. The government may consume the services as either intermediate or final consumption. The initial gross fixed capital formation is private, there is no financial lease, no interest expense, and no debt payments. The government obtains legal and economic ownership at the end of the contract term. The primary question is whether the transaction representing the acquisition of the assets by the government is a purchase at the market price or a capital transfer. Depending on the choice, there are consequences for other transactions.

14. In the EDD manual, this category is represented by its case 1.A.²⁴ The acquisition of legal ownership by the government is treated as a capital transfer and the periodic payments are treated entirely as purchases of services. The manual admits, however, that the selection of the capital transfer is just a simplifying solution. In fact, the transaction must be a purchase, which implies that a part of the periodic payments are to purchase the assets. Thus, the price of the purchased services must be above the market price.

15. Pitzer treats the change of ownership as a purchase at the market price. In this characterization, the periodic payments would be for more than the market value of the services received. The excess of the actual payment over the current market value of the services is treated as an increase in a financial claim of the government against the private enterprise. The financial claim earns interest throughout the contract period and at the end of the period equals the expected market value of the fixed assets. The claim is then exchanged for the fixed assets at the end of the contract.

²⁴ It is also possible that the private enterprise could be deemed to be the owner of the fixed assets and engage in no production other than operating leasing services. It is possible to read the current edition of the EDD manual in this way, but it is believed that the EDD manual is being revised to exclude this possibility. There is no functional difference between the two possibilities. The only difference is in the description of the output produced by the private enterprise.

16. Donaghue considers the government always to be the economic owner and, therefore, does not discuss this category. The IASB considers this category to be possible, but has not developed and guidance for the government's acquisition of assets at the end of the contract. The UK ASB states that if the purchase price of the assets in the contract differs from the expected residual value of the assets, then the difference should be accrued over the term of the contract. This treatment is believed to be the same as Pitzer's proposal, with the exception that the UK ASB does not mention accruing imputed interest on the financial claim against the private enterprise.

17. Depending on the model chosen, there is a slight difference in the effects on the government deficit. In the EDD manual, there is no effect at the beginning or end of the contract. During the contract the deficit would be increased by the amount of the periodic payments, which are entirely characterized as the purchase of services. In the Pitzer and ASB models, the deficit is increased during the contract period by the amount of the purchases of services, but that amount is only part of the periodic payments. The other part is the acquisition of a financial asset, which does not affect the deficit. The receipt of interest revenue during the contract period as a property income of the imputed financial claim will reduce the deficit. At the end of the contract period, the deficit is increased by the amount of the purchase of the fixed assets.

Category 1.B

18. Category 1.B (Table 2) is the same as category 1.A except that the government is the economic owner of the fixed assets. The EDD manual assumes that the private enterprise only acquires the assets and places them at the disposal of the government. The private enterprise does not produce any services (category 1.B.i). The government is assumed to produce the services related to the assets on own account. Thus, the periodic payments by the government to the private enterprise relate only to the financial lease and the implied interest rate can be derived directly from the number, timing, and amounts of the payments. At the beginning of the contract, the government deficit is increased by the purchase of the assets and the debt is increased by the same amount but in the form of a loan. During the contract period, the government deficit is increased by the costs of producing the services on own account, other than consumption of fixed capital, and by the interest expense on the financial lease. The level of government debt decreases each period by the amount of debt repayments. At the end of the contract, the debt has been extinguished, so there is no impact on the deficit or debt.

19. Pitzer and Donaghue assume that the private enterprise uses the assets to produce services that are sold to the government (category 1.B.ii). This assumption complicates the treatment because an operating lease must be imputed in addition to the financial lease so that the private enterprise can have operational control of the assets. Donaghue imputes the payments of the operating lease to be equal to the payments of the financial lease. Both are unknown, but can be worked out if an interest rate is assumed. The actual payments by the government are assumed to represent the purchase of the services produced by the private enterprise. While the financial lease payments can be set equal to any amount depending on how rapidly the loan is to be repaid, there is a market for operating leases and there is no reason to believe that the price of an operating lease will equal the periodic payments on a financial lease

20. Pitzer assumes that the actual payments by government are a combination of a purchase of services and the acquisition of a financial claim against the private enterprise, just as in category 1.A. The financial lease payments can then be lower, equal to the market rate for an operating lease, but the debt associated with the financial lease will not decrease as rapidly. At the end of the contract, the financial claim of the government is exchanged for the remaining debt of the financial lease.

21. The IASB also considers an operating lease to be possible, but suggests that it will be applicable infrequently. Instead, it is considering two other models. In one, the private enterprise constructs the assets and sells them to the government, receiving an accounts receivable as payment. The subsequent payments are then partitioned between a payment for services and a repayment of the receivable. This model is the same as a financial lease except that there is no indication whether interest is payable on the receivable as it would be on a financial lease. In the other model, the constructed assets are exchanged for an intangible asset of some nature. This asset is then written off against the sales of the services as an expense.

22. The UK ASB uses a financial lease to give the government economic ownership. The rest of its proposal appears somewhat simpler than Donaghue and Pitzer. The ASB suggests that the debt service payments be imputed based on an appropriate current interest rate and then treat the difference between the total government payment and the imputed debt service payment at the purchase of the service. This approach understates the true value of the services because it does not take the cost of the services of the fixed assets into account, but results in the same net cost to the government.

Category 2.A

23. Category 2.A (Table 3) includes schemes in which the private enterprise is the economic owner of the assets, uses the assets to produce services, and sells the services to the public. There are no regular payments by the government to the private enterprise, but there may be regular payments by the private enterprise to the government.

24. The EDD manual considers two cases. Its case 2.A assumes the private enterprise operates the assets for the contract period and then transfers legal and economic ownership to the government by means of a capital transfer. If the private enterprise makes regular payments to the government during the contract period and if the payments are deemed to be in exchange for the use of government land, then the payments are classified as rent. If the payments are not in exchange for the use of any government assets, they are classified as other taxes on production.

25. Case 2.B in the EDD manual is based on the possibility that the government may transfer existing assets to the legal and economic ownership of the private enterprise at the beginning of the contract period for use in producing the services. This transfer is treated as the acquisition by the government of equity in the private enterprise, carried out by a non-transaction other change in the volume of assets. The reason for treating the flow as a non-transaction rather than a transaction is not stated. At the end of the contract, the assets are assumed to be transferred back to the government together with the assets acquired by the private enterprise using its own financial resources. This reverse transfer is also a non-transaction. If the assets transferred by the government to the private enterprise are fixed assets, then their value will decrease during the contract. This decrease in value is treated as a revaluation of the equity asset. Any payments by the private enterprise to the government during the contract are classified as dividends.

26. To avoid the unrealistic capital transfer, Pitzer assumes that the private enterprise has been granted a monopoly for providing its services and is able to charge monopoly prices. In exchange for the monopoly, the government claims a portion of what otherwise would be the profits of the private enterprise as an implicit tax. Because the private enterprise does not actually pay the tax each period, the government accumulates a financial claim against the private enterprise throughout the period of the contract. The claim is then used to purchase the assets at the end of the contract.

27. As in category 1.A, Donaghue considers the government always to be the economic owner and, therefore, does not discuss this category. The IASB considers this category to be possible, but has not developed and guidance for the government's acquisition of assets at the end of the contract. The UK

ASB has not addressed this category specifically. It clearly considers the transfers of legal and economic ownership at the end of the contract as a purchase, but does not indicate how the government acquires a financial claim against the private enterprise that it can use to exchange for the fixed assets.

Category 2.B

28. Category 2.B (Table 4) includes schemes in which the private enterprises produces services and sells them to the public, but uses fixed assets in that production that are owned economically by the government.

29. The EDD manual does not address this possibility. Donaghue treats this case similarly to category 1.B. The government purchases the fixed assets by means of a financial lease and then transfers control of the assets back to the private enterprise with an operating lease. The payments for the two imputed leases are set equal to each other. At the end of the period, the loan created by the financial lease is extinguished and the government takes control of the assets.

30. Pitzer also treats this case similarly to his proposal for category 1.B. The private enterprise is presumed to have been granted a monopoly and the government claims a portion of the monopoly profits, thus creating a financial claim throughout the contract period. This claim is used to extinguish the balance of the loan created by the financial lease at the end of the contract. As a result, the balance of the loan is not reduced completely during the contract as with Donaghue, which means the payments on the financial and operating leases are lower than Donaghue estimates.

31. The IASB is considering the same models for this category as for category 1.B. The UK ASB has not addressed this category specifically. It can be assumed that a financial lease would be used for the government's acquisition of the fixed assets at the beginning of the contract period, but the net residual expense method of category 1.B can not be applied.

Table 1: Category 1.A

Services are Purchased by the Government and the Private Enterprise is the Economic Owner

	Event	Eurostat 1.A	Pitzer	UK ASB
1	Attribution of gross fixed capital formation at beginning of the contract	Private	Private	Private
2	Does government have a financial lease loan liability?	No	No	No
3	Is there an operating lease with the private enterprise as the lessee?	No	No	No
4	Level of operating lease payments	n/a	n/a	n/a
5	Price of services	Above market	Market	Market
6	Does government incur interest expense	No	No	No
7	Level of the interest rate	n/a	n/a	n/a
8	How does government acquire the fixed assets at the end of the contract?	Capital transfer	Purchase	Purchase
9	Is there an imputed tax?	No	No	No
10	Are there imputed debt payments?	No	No	No
11	Is there an imputed financial claim of the government against the private enterprise?	No	Yes	Yes
12	Character of payments by private enterprise to government	n/a	n/a	n/a
Effect on Government Deficit				
13	At the beginning of the contract	None	None	None
14	During the contract	Purchases of services (above market price)	Purchases of services (market price) less interest revenue on imputed financial claim	Purchases of services (market price). Interest revenue on financial claim not clear.
15	At the end of the contract	None	Purchase of assets	Purchase of assets
Effect on Government Debt				
16	At the beginning of the contract	None	None	None
17	During the contract	None	None	None
18	At the end of the contract	None	None	None

Table 2: Category 1.B

Services are Purchased by the Government and the Government is the Economic Owner

Event	Eurostat 1B (1.B.i)	Pitzer (1.B.ii)	Donaghue (1.B.ii)	UK ASB (1.B.ii)
1 Attribution of gross fixed capital formation at beginning of the contract	Government	Government	Government	Government
2 Does government have a financial lease loan liability?	Yes	Yes	Yes	Yes
3 Is there an operating lease with the private enterprise as the lessee?	No	Yes	Yes	Not stated
4 Level of operating lease payments	n/a	Market	Above market	n/a
5 Price of services	n/a	Market	Above market	Below market
6 Does government incur interest expense	Yes	Yes	Yes	Yes
7 Level of the interest rate	Market	Market	Market	Market
8 How does government acquire the fixed assets at the end of the contract?	n/a	n/a	n/a	n/a
9 Is there an imputed tax?	No	No	No	No
10 Are there imputed debt payments?	Yes	Yes	Yes	Yes
11 Is there an imputed financial claim of the government against the private enterprise?	No	Yes	No	No
12 Character of payments by private enterprise to government	n/a	n/a	n/a	n/a
Effect on Government Deficit				
13 At the beginning of the contract	Purchase of assets	Purchase of assets	Purchase of assets	Purchase of assets
14 During the contract	Interest expense plus cost of own account services, except CFC	Interest expense plus purchase of services less operating lease payments received and interest on imputed claim	Interest expense plus purchase of services less operating lease payments received	Interest expense plus purchase of services
15 At the end of the contract	None	None	None	None

Effect on Government Debt

16	At the beginning of the contract	Imputed loan	Imputed loan	Imputed loan	Imputed loan
17	During the contract	Loan repayments	Loan repayments	Loan repayments	Loan repayments
18	At the end of the contract	None	Debt extinguishment	None	None

Table 3: Category 2.A

Services are Sold to the Public and the Private Enterprise is the Economic Owner

	Event	Eurostat 2A	Eurostat 2B	Pitzer
1	Attribution of gross fixed capital formation at beginning of the contract	Private	Private, including other change in volume of assets	Private
2	Does government have a financial lease loan liability?	No	No	No
3	Is there an operating lease with the private enterprise as the lessee?	No	No	No
4	Level of operating lease payments	n/a	n/a	n/a
5	Price of services	n/a	n/a	Monopoly
6	Does government incur interest expense	No	No	No
7	Level of the interest rate	n/a	n/a	n/a
8	How does government acquire the fixed assets at the end of the contract?	Capital transfer	Capital transfer plus other change in volume of assets	Purchase
9	Is there an imputed tax?	No	No	Yes
10	Are there imputed debt payments?	No	No	No
11	Is there an imputed financial claim of the government against the private enterprise?	No	No	Yes
12	Character of payments by private enterprise to government	Rent or taxes	Dividends	n/a
Effect on Government Deficit				
13	At the beginning of the contract	None	None	None
14	During the contract	Rent or taxes	Dividends	Receipt of imputed taxes
15	At the end of the contract	None	None	Purchase of assets
Effect on Government Debt				
16	At the beginning of the contract	None	None	None
17	During the contract	None	None	None
18	At the end of the contract	None	None	None

Table 4: Category 2.B

Services are Sold to the Public and the Government is the Economic Owner

Event	Pitzer	Donaghue
1 Attribution of gross fixed capital formation at beginning of the contract	Government	Government
2 Does government have a financial lease loan liability?	Yes	Yes
3 Is there an operating lease with the private enterprise as the lessee?	Yes	Yes
4 Level of operating lease payments	Market	Above market
5 Price of services	Monopoly	Monopoly
6 Does government incur interest expense	Yes	Yes
7 Level of the interest rate	Market	Market (imputed)
8 How does government acquire the fixed assets at the end of the contract?	n/a	n/a
9 Is there an imputed tax?	Yes	No
10 Are there imputed debt payments?	Yes	Yes
11 Is there an imputed financial claim of the government against the private enterprise?	Yes	No
12 Is there an imputed financial claim of the government against the private enterprise?	n/a	n/a
Effect on Government Deficit		
13 At the beginning of the contract	Purchase of assets	Purchase of assets
14 During the contract	Interest expense less receipt of imputed taxes	Interest expense less operating lease payments
15 At the end of the contract	None	None
Effect on Government Debt		
16 At the beginning of the contract	Imputed loan	Imputed loan
17 During the contract	Debt repayments	Debt repayments
18 At the end of the contract	Debt extinguishment	None