Accounting for public–private partnerships

How should governments report guarantees and long-term purchase contracts?

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¹ World Bank. Comments welcome. The paper has benefited already from comments from Ian Mackintosh and Ronald Points.
Contents

1 Overview ................................................................................................................................. 4
    1.1 The topic ...................................................................................................................... 4
    1.2 The problem ............................................................................................................... 4
    1.3 Adopting existing standards as part of the solution ................................................. 5
    1.4 Implications of adopting such standards ................................................................. 5
2 A framework for further progress ...................................................................................... 7
    2.1 A true and fair view .................................................................................................... 7
    2.2 From historic cost to fair value ................................................................................ 7
    2.3 From a binary to a continuous view of assets and liabilities .................................... 8
    2.4 Information costs ...................................................................................................... 9
3 Guarantees and contingent benefit sharing ....................................................................... 10
    3.1 The issue .................................................................................................................... 10
    3.2 Overview of traditional accounting treatment ........................................................ 10
    3.3 Some important standards ....................................................................................... 13
        3.3.1 International Financial Reporting Standards ............................................. 13
        3.3.2 International Public Sector Accounting Standards .................................. 18
        3.3.3 Generally accepted accounting principles in the United States .................. 19
    3.4 Conclusions .............................................................................................................. 24
4 Long-term purchase contracts ............................................................................................ 26
    4.1 The issue .................................................................................................................... 26
    4.2 Overview of traditional accounting treatment ........................................................ 27
    4.3 Some important standards ....................................................................................... 28
        4.3.1 International Financial Reporting Standards ............................................. 28
        4.3.2 International Public Sector Accounting Standards .................................. 33
        4.3.3 Generally accepted accounting practice in the United Kingdom ............... 34
    4.4 Conclusions .............................................................................................................. 41
Glossary .................................................................................................................................. 45
References ............................................................................................................................. 49
Boxes, Figures, and Tables

Box 1: Microsoft’s disclosure of guarantees ................................................................. 22
Box 2: The US government’s reporting of pension guarantees ................................. 23
Box 3: Accounting and disclosure for *Partnerships Victoria* projects ....................... 32
Box 4: Treatment of IPP contracts in Napocor’s financial statements ....................... 33
Box 5: Accounting’s influence on PFI decisionmaking ............................................... 35
Box 6: A private company’s accounting for PFI projects ............................................ 35
Figure 1: Probability distributions of property risks .................................................. 40
Table 1: Putative trends in financial reporting standards ........................................... 9
Table 2: Types of guarantee and benefit-sharing instruments ..................................... 10
Table 3: Traditional accounting for contingent obligations and benefits .................... 12
Table 4: IFRS applying to guarantee and benefit-sharing instruments ....................... 15
Table 5: US GAAP applying to guarantee and benefit-sharing instruments ............... 21
Table 6: US GAAP treatment of guarantee and benefit-sharing instruments ............. 24
Table 7: UK Treasury’s illustrative PFI asset ............................................................. 39
Table 8: Determining economic ownership of the illustrative PFI asset ..................... 41
“The basic needs of humans are simple: to get enough food, find shelter, and to keep debt off the balance sheet”\textsuperscript{2}

1 Overview

1.1 The topic

This paper considers how governments should report certain types of involvement in private infrastructure projects in their financial statements. It first considers how they should report guarantees that give rise to possible but not inevitable expenditure and contingent benefit-sharing arrangements that give rise to possible but not inevitable revenue. It then considers how governments should report long-term purchase contracts, such as take-or-pay contracts for wholesale electricity or water and similar contracts in public–private partnerships for services related to such assets as roads and prisons and school and hospital buildings.

1.2 The problem

Both guarantees and take-or-pay contracts create accounting difficulties. Both create obligations that affect the government’s financial performance (roughly, its budget deficit or surplus) and financial position (its assets less its debts). Both therefore create obligations that need to be incorporated in any comprehensive analysis of the government’s fiscal position. Yet common accounting does not pick them up. Under the simple cash accounting that many governments use, in which expenditure is recorded only when cash is disbursed, the government records no expenditure when it provides guarantees. Under cash accounting, a government records its debts, but discloses nothing when it enters into a take-or-pay contract. And even when governments adopt more-sophisticated “accrual accounting”—that is, accounting of the sort that private companies employ—their guarantees and take-or-pay contracts don’t necessarily show up in their reported deficit or debt.

Accounting problems create policy problems. Governments sometimes substitute the issuance of guarantees for forms of expenditure that require immediate disbursements of cash—even if the cost of the guarantee is higher than the cost of the cash expenditure. Similarly, they may procure infrastructure services from private providers mainly to ensure that they do not have to record an increase in their debt—even if a traditional publicly financed project would be more efficient. Good accounting reduces the risk of privatization that serves mainly to disguise expenditure or debt, without discouraging privatization that improves efficiency.

Bad accounting can also contribute to macroeconomic problems by delaying the point at which the government and those who monitor its performance—lenders, research analysts, journalists, think tanks, and voters—recognize that fiscal problems may be looming. Good accounting offers early warnings of possible fiscal problems.

1.3 Adopting existing standards as part of the solution

This paper proceeds from the assumption that all governments should adopt some form of modern accounting such as used by private firms and now many governments of richer countries—and which many developing governments are also moving towards. The paper aims to be helpful mainly to those governments that have started to adopt such accounting.

Although a government can attempt to improve its accounting by designing its own standards from scratch, a better and more common approach is to adopt an existing set of standards, modifying them as necessary. One option is for the government to start with the national accounting standards applying to businesses in its own jurisdiction. For many governments, however, the most promising approach may now be to adopt International Public Sector Accounting Standards or the International Financial Reporting Standards on which the former are based. After many years of relative obscurity, International Financial Reporting Standards have now come to the forefront of accounting debates, because several countries have decided to adopt those standards as their own and—perhaps most important—the European Union has decided that all companies listed on European stock exchanges will soon have to prepare their financial reports according to these standards. It thus seems likely that there will soon be at most two major sets of accounting standards in the world: International Financial Reporting Standards and generally accepted accounting principles in the United States. Moreover, these two sets of standards may themselves converge.

1.4 Implications of adopting such standards

Much of this paper therefore considers how guarantees, take-or-pay contracts, and related instruments are reported according to International Financial Reporting Standards and International Public Sector Accounting Standards. In addition, the paper considers how guarantees are reported under generally accepted accounting principles in the United States, both because of the importance of US accounting rules and because the issues relating to guarantee accounting have been debated intensively in the United States. For similar reasons, the paper considers how take-or-pay and similar contracts are reported under generally accepted accounting practice in the United Kingdom. Accounting standards in the United Kingdom are similar to International Financial Reporting Standards (in part because they have influenced the latter), and they are particularly interesting for our purposes because they address in detail the appropriate treatment of contracts under the British
government’s Private Finance Initiative—a program under which the government has contracted for the private provision of many services provided by such assets as roads, prisons, and school and hospital buildings.

The paper concludes that the major accounting standards currently require appropriate treatment of some but not all of the guarantees governments frequently give infrastructure firms in public–private partnerships. These standards are in flux, however, and appear to be moving in the right direction. In particular, if the International Accounting Standards Board carries out its current plans, it appears that its standards will appropriately capture all the major guarantees and benefit-sharing instruments used in public–private infrastructure projects.

The treatment of long-term purchase contracts by the major financial reporting standards has similar advantages and disadvantages. At least some long-term purchase contracts would seem to be appropriately captured by International Financial Reporting Standards and—more clearly—generally accepted accounting practice in the United Kingdom. Under these standards, fair-value accounting applies so long as the rights and obligations under the contract are recognized. But some long-term purchase contracts would escape recognition despite their economic substance. Again, however, there are signs that standards may be improving.

The paper concludes by offering some suggestions for interpreting and in some cases revising accounting standards to ensure that the financial reports of governments prepared pursuant to them reflect the economic effects of guarantees, take-or-pay contracts, and similar instruments. Those suggestions are based on a view about financial reporting that is set out in the next section.
2 A framework for further progress

2.1 A true and fair view

Financial reporting standards have long had the aim of generating an accurate picture of reporting entities' financial performance, financial position, and cashflows. In countries such as the United Kingdom, for example, the standards have for many years required financial reports to give a “true and fair” view of the reporting entity’s financial position and financial performance. And when the entity judges that the application of specific financial reporting standards does not lead to a true and fair view, the standards require the reporting entity to adopt an alternative accounting treatment that does provide a fair view. That is, the requirement to give a true and fair view overrides specific standards.

The European Union has also adopted this approach in its accounting directives (Wilson and others 2001: 12), while the International Accounting Standards Boards takes a similar view, without using the same expression. The first International Accounting Standard (IAS 1, “Presentation of financial statements”) requires financial statements to “present fairly” the financial position, financial performance, and cashflows of the reporting entity. It states that financial reports that comply with International Financial Reporting Standards will provide such a presentation except in “extremely rare circumstances”, but in those rare circumstances companies must depart from specific standards, while disclosing the nature and effect of the departure and the reasons for it (IASB 2003a: 1-10). Generally accepted accounting principles in the United States have a similar requirement (FASB 2001: v).

Nonetheless, if the market is taken as the arbiter of value, many financial reports do not seem to provide a true and fair view: the market value of a listed company’s equity often diverges significantly from the accounting value of its equity. The problem is that not all economic assets and liabilities are included in the balance sheet and those included are sometimes valued at historic cost, which often bears little resemblance to current market value.

Around the world, accounting standards are, however, moving in the direction of presenting a more accurate picture of reporting entities’ financial position and performance.

2.2 From historic cost to fair value

First, there is a trend away from valuing assets and liabilities at their (depreciated or amortized) historic cost and toward valuing them at their current market value—which accountants often describe as fair value. This change implies a need to revalue assets and liabilities periodically according to changes in market values, rather than simply adjusting their values for mechanically calculated depreciation or
amortization. One natural consequence of this approach is that the reported financial performance of an entity during a period should reflect not only operating profits earned during the year, but also changes in the fair value of its assets and liabilities.

### 2.3 From a binary to a continuous view of assets and liabilities

Another, related trend is also visible, though it is less prominent. It is a move away from what one might call a “binary” classification of rights and obligations, toward what one might call a “continuous” view. The difference is best clarified by examples.

Under the binary view, analysis of a contingent obligation focuses on whether the obligation surpasses a threshold test for recognition—such as whether the probability of payment is more than 0.5. If the obligation surpasses the threshold test, it is a liability; otherwise, not. Under the alternative, continuous view, all significant contingent obligations are recognized as liabilities, and the focus of analysis turns to estimating the fair value of the obligation, taking account of the probability of payment.

Under the binary view, analysis of a lease focuses on which party is the owner of the entire leased asset. For example, the test may be whether the present value of the unavoidable lease payments is more than 90 per cent of the fair value of the asset. If the present value exceeds 90 percent, the asset belongs to the lessee; otherwise, it may not. Under the continuous view, both parties may share economic ownership of the asset, the important thing not being to decide who has the greater ownership interest but to ensure that each party recognizes significant rights and obligations as assets and liabilities to the extent of those rights and obligations. If the present value of the lease payments represents 60 per cent of the value of the leased asset for example, the lessee and lessor might respectively recognize assets equal in value to 60 and 40 per cent of the value of the asset.

A problem with the binary view is that small changes in the world can lead to large changes in reported financial positions. An increase the probability of loss from 0.49 to 0.51 can cause a reporting entity to recognizing the entire loss as a liability, when before it recognized no liability at all. Similarly, a small increase in the length of a lease may alter the balance of economic ownership and cause an asset to be removed, in its entirety, from one entity’s balance sheet and placed, in its entirety, on another’s. The continuous view avoids this problem.

Table 1 summarizes these (putative) trends in financial reporting.
Table 1: Putative trends in financial reporting standards

<table>
<thead>
<tr>
<th>Approach</th>
<th>Recognition of assets and liabilities</th>
<th>Measurement of the value of assets and liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional accounting</td>
<td>Binary: many rights and obligations not recognized</td>
<td>Amortized or depreciated historic cost</td>
</tr>
<tr>
<td>Putative future accounting</td>
<td>Continuous: all significant rights and obligations recognized</td>
<td>Fair value</td>
</tr>
</tbody>
</table>

2.4 Information costs

The costs of adopting the fair-value and continuous approaches are, broadly speaking, the costs of preparing, auditing, and understanding additional information. Estimating fair value can be difficult, as for example in the case of many guarantees, and entities preparing financial statements may have an interest in concealing their true position by using biased estimates. Likewise, implementing the continuous view increases the costs of preparing and auditing financial statements by requiring the recognition and measurement of more assets and liabilities. Perhaps as a result, the move toward fair values and the continuous view has been gradual rather than rapid.

Where it can be implemented, however, the fair-value continuous view provides the users of financial statements with much more useful information on the financial position and performance of the reporting entity. Judgments have to be made in particular circumstances, but we proceed from the assumption that—in the standard formula—it is usually better to be approximately correct than precisely wrong.
3 Guarantees and contingent benefit sharing

3.1 The issue

When a government issues a guarantee (such as listed in Table 2), it creates a contingent obligation that reduces its net worth. Yet typical financial reporting by governments does not reveal the change. Likewise, when a government enters into a revenue- or profit-sharing agreement, it creates a contingent benefit that increases its net worth. Again, however, typical financial reporting does not reveal the change. (Such contingent obligations and benefits are often called “contingent liabilities” and “contingent assets”, respectively; see the Glossary.)

Table 2: Types of guarantee and benefit-sharing instruments

<table>
<thead>
<tr>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume guarantee (e.g. traffic guarantee)</td>
</tr>
<tr>
<td>Revenue guarantee</td>
</tr>
<tr>
<td>Interest-rate guarantee</td>
</tr>
<tr>
<td>Exchange-rate guarantee</td>
</tr>
<tr>
<td>Debt-repayment guarantee</td>
</tr>
<tr>
<td>Revenue-sharing agreement</td>
</tr>
<tr>
<td>Profit-sharing agreement</td>
</tr>
</tbody>
</table>

Some governments now report on a more sophisticated accrual basis, which means their financial reports show more than just cash expenditure and receipts and include a balance sheet showing more than just ordinary debts. The general principle underlying the accrual basis of accounting is that the effect of a transaction should be recognized when the transaction occurs, not when cash changes hands (IASB 2003a: G-1). The application of this principle seems to imply that the cost of a guarantee should be recognized when the guarantee is issued, not if and when the guarantee is called. Yet even accrual accounting, in its traditional form, does not usually reveal the effect of guarantees on a reporting entity’s financial performance and financial position. It does not generally require or permit a reporting entity to recognize a liability in its balance sheet or an expense in its income statement, unless loss is both probable and can be measured reasonably precisely. For many infrastructure guarantees, losses are not probable; for some, the amount of any loss may be quite difficult to measure.

3.2 Overview of traditional accounting treatment

The treatment of guarantees and other contingent obligations in traditional accrual accounting can be derived from a traditional definition of a liability, which one accounting textbook sets out as follows (Stickney and Weil, 1997: 517):
Accounting generally recognizes an entity’s obligation as a liability if the obligation has three essential characteristics:

1. The obligation involves a probable future sacrifice of resources [and] the firm can measure, with reasonable precision, the cash equivalent value of resources needed to satisfy the obligation.

2. The firm has little or no discretion to avoid the transfer.

3. The transaction or event giving rise to the entity’s obligation has already occurred.

A contingent obligation is not a liability if the first criterion is not satisfied: if the probability of loss is less than 0.5, or the amount of loss is not measurable with reasonable precision. Thus guarantees are not necessarily considered liabilities and not necessarily recognized on a reporting entity’s balance sheet.

Acknowledging that contingent obligations may matter even when they are not recognized on the balance sheet, traditional accrual accounting generally requires their disclosure in notes to the accounts—unless the probability of loss is remote.

Likewise, such contingent benefits as the right to receive a share of profits or revenue if certain thresholds are exceeded are not generally assets in traditional accrual accounting. Indeed, in an application of the accounting concept of prudence, the rules that determine whether contingent benefits should be recognized as assets are stricter than those applying to contingent obligations: they prevent contingent benefits from being recognized as assets unless the likelihood of gain is virtually certain, and they prevent them from being disclosed unless the likelihood of gain is probable. Table 3 summarizes.
Table 3: Traditional accounting for contingent obligations and benefits

<table>
<thead>
<tr>
<th>Probability of loss or gain</th>
<th>In words</th>
<th>Mathematically</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent obligations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting description</td>
<td></td>
<td></td>
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<tr>
<td>(IFRS)</td>
<td></td>
<td></td>
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<tr>
<td>Accounting treatment</td>
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<tr>
<td></td>
<td>Ignore</td>
<td>Disclose</td>
</tr>
<tr>
<td></td>
<td>Recognize</td>
<td>Recognize</td>
</tr>
<tr>
<td>Contingent benefits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounting description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(IFRS)</td>
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<tr>
<td>Accounting treatment</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Ignore</td>
<td>Ignore</td>
</tr>
<tr>
<td></td>
<td>Disclose</td>
<td>Recognize</td>
</tr>
</tbody>
</table>

Note: \( \varepsilon \) is some small number, which might vary from accountant to accountant. If it were 0.05, “remote” would mean having a probability of less than 5 per cent and “virtually certain” would mean having a probability of at least 95 per cent.

The probability of the relevant event depends on how items are grouped. The probability of a product warranty on a single product leading’s to a loss might be considered only possible (as defined) and thus to require disclosure, but not recognition. But, if the entity sells many products with warranties, a loss of some amount may be probable and therefore require recognition.

(In some contexts, discussion of accounting for guarantees is linked to discussion of the use of a fund (or bank account) to make guarantee payments. This is potentially confusing, because the accounting treatment of contingent obligations and benefits is generally independent of how they are managed. Adding to the confusion, the terms “provision” and “reserve” are sometimes used to refer to both accounting concepts and to funds.)

As we use the term, a “provision” is a type of liability, namely one of uncertain amount or timing (see Glossary). Treating contingent obligations as provisions for the purposes of financial reporting does not entail the creation of a fund in to which cash or other assets are transferred when a provision is recognized and out of which cash is transferred when a loss is realized. Nor, if a fund were created, would the amount of any provision necessarily be the appropriate amount to put in the fund. The amount appropriately put in the fund would depend on the probability distribution of losses and the strength of the entity’s desire that the fund be sufficiently large to meet losses; accounting estimates do not provide such information.
The term “reserve” has sometimes been used to mean “provision” and is sometimes used to denote a subset of equity that cannot be distributed to shareholders as dividends. Accountants sometimes describe the process of setting aside a part of equity in this way as the “appropriation of retained earnings”. (In discussing the word “reserve”, Stickney and Weil (1997: G-77) assert, “appropriating retained earnings is itself a poor and vanishing practice, so the word should seldom appear in accounting.”)

In any case, the discussion of appropriate financial reporting here is not intended to provide any recommendations on appropriate financial management, including the possible use of funds.

### 3.3 Some important standards

We turn now to the specific accounting treatment required by three important sets of standards:

1. International Financial Reporting Standards, which are promulgated by the International Accounting Standards Boards (IASB) and include International Accounting Standards (IAS) as well as the IASB’s Interpretations,

2. International Public Sector Accounting Standards, which are promulgated by the Public Sector Committee of the International Federation of Accountants, and based on International Financial Reporting Standards, and

3. Generally accepted accounting principles in the United States, which derive primarily from the US Financial Accounting Standards Board.

#### 3.3.1 International Financial Reporting Standards

##### 3.3.1.1 Relevant standards

Two International Financial Reporting Standards are particularly relevant: IAS 37, “Provisions, contingent liabilities, and contingent assets” and IAS 39, “Financial instruments: recognition and measurement”. (In contrast to its US counterpart, the IASB accepts the use of “contingent liability” and “contingent asset” even though contingent liabilities and assets are—arguably—not liabilities and assets at all as the IASB defines “asset” and “liability”.) In addition, the IASB is developing a standard on appropriate accounting for insurance contracts that is also relevant (IASB 2003b).

##### 3.3.1.2 Which standard applies?

Whether IAS 37 or IAS 39 applies to the guarantee and benefit-sharing arrangements under discussion—and whether the proposed standard on insurance contracts will
apply—depends on the nature of the guarantee or arrangement. The rules are rather complex.

IAS 39 applies to all financial instruments, including derivatives, with certain exceptions including insurance policies. At present, it also excludes “financial guarantee contracts, including letters of credit, that provide for payments to be made if the debtor fails to make payment when due”. The latter exception applies only to debt guarantee contracts: IAS 39 does apply to financial guarantee contracts that “provide for payments to be made in response to changes in a specified interest rate, security price, commodity price, credit rating, foreign exchange rate, index of prices or rates or other variable (sometimes called the ‘underlying’)”. Moreover, a proposed revision of IAS 39 further limits the scope of the exclusion (IASB 2002: 127).

IAS 39 also states that it does not apply to contracts that require a payment based on climatic, geological, or other physical variables, on the grounds that such contracts are often insurance contracts (IASB 2003a: 39-12–13)—to the treatment of which we now turn.

The proposed standard on insurance would apply to any insurance contract, not just one issued by an ordinary insurance company. An insurance contract would be defined as

a contract under which one party (the insurer) accepts significant insurance risk by agreeing with another party (the policyholder) to compensate the policyholder or other beneficiary if a specified uncertain future event (the insured event) affects the policyholder or other beneficiary [IASB 2003c: 2].

In developing the insurance standard, the IASB has also tentatively agreed to change IAS 39’s treatment of contracts based on climatic, geological, and other physical variables. In future, those contracts would be treated as insurance if payment were contingent on an uncertain future event that adversely affected the insured party, and otherwise subject to IAS 39 (IASB 2003c: 2).

IAS 37, on the other hand, applies to all “provisions, contingent liabilities and contingent assets” with certain exceptions including those resulting from insurance policies and financial instruments that are carried at fair value (the latter being covered by IAS 39). In so far as it deals with contingent obligations and benefits, IAS 37 is perhaps in the process of becoming a “residual” standard that applies to items not treated in more detail by other standards, such as IAS 39 and the proposed standard on insurance.

Although the application of these standards to the types of guarantee and benefit-sharing instruments set out in Table 2 above is not clear, it appears that IAS 39 would apply to guarantees written on such financial variables as interest rates and exchange rates—and, seemingly, to guarantees and benefit-sharing arrangements written on variables such as revenue and profit. Guarantees written on physical variables, such as traffic, would seem to fall under the proposed standard on insurance contracts.
Debt-repayment contracts would appear currently to be governed at present by IAS 37 alone, but this would change if IAS 39 were amended as proposed (Table 4).

Table 4: IFRS applying to guarantee and benefit-sharing instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Which IFRS applies or would apply if proposed changes occurred (*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume guarantee (e.g. traffic guarantee)</td>
<td>Insurance*</td>
</tr>
<tr>
<td>Revenue guarantee</td>
<td>IAS 39 (?)</td>
</tr>
<tr>
<td>Interest-rate guarantee</td>
<td>IAS 39 (?)</td>
</tr>
<tr>
<td>Exchange-rate guarantee</td>
<td>IAS 39</td>
</tr>
<tr>
<td>Debt-repayment guarantee</td>
<td>IAS 37 and IAS 39*</td>
</tr>
<tr>
<td>Revenue-sharing agreement</td>
<td>IAS 39 (?)</td>
</tr>
<tr>
<td>Profit-sharing agreement</td>
<td>IAS 39 (?)</td>
</tr>
</tbody>
</table>

Note: the asterisk (*) denotes which standard would apply if IAS 39 was amended and an insurance standard was promulgated as proposed.

We describe some of the relevant parts of IAS 39 and IAS 37 below and then discuss the proposed treatment of insurance contracts.

3.3.1.3 IAS 39

Guarantees that fall within the scope of IAS 39 would generally be recognized in the balance sheet at their fair value:

Under this Standard, all financial assets and financial liabilities should be recognized on the balance sheet, including all derivatives. They should initially be measured at cost, which is the fair value of the consideration given or received to acquire the financial asset or liability ...[IASB 2003a: 39-6].

After acquisition ... derivatives and liabilities that are held for trading should be remeasured to fair value [IASB 2003a: 39-6].

… derivative financial liabilities are always deemed held for trading unless they are designated and effective hedging instruments [IASB 2003a: 39-16].

(We assume that government guarantees that fall within the scope of IAS 39 would not be considered hedging instruments from the point of view of the government issuing them.)

IAS 39 requires reporting entities to recognize changes in the fair value of derivatives in net profit unless the derivatives serve to hedge a risk (IASB 2003a: 39-7).

According to the IASB’s proposed amendment of IAS 39, financial guarantee contracts would initially be recognized at fair value according to IAS 39. Afterwards,
their value would be measured according to the requirements of paragraphs 36 to 39 of IAS 37—which seemingly require measurement of fair value.

3.3.1.4 Proposed standard on insurance

According to the proposed standard on insurance, an insurer would recognize on its balance sheet the benefits and obligations resulting from insurance contracts as assets and liabilities, respectively. It would measure them at fair value.

3.3.1.5 IAS 37

According to IAS 37, “an enterprise should not recognize a contingent liability (IASB 2003a: 37-17). This follows from the IASB’s definition of “contingent liability” (see Glossary) and the principle that a liability (such as a provision) should be recognized only if

a) an enterprise has a present obligation (legal or constructive) as a result of a past event,

b) it is probable (i.e. more likely than not) than an outflow of resources embodying economic benefits will be required to settle the obligation, and

c) a reliable estimate can be made of the amount of the obligation.⁴

“Unless the possibility of an outflow of resources embodying economic benefits is remote (IASB 2003a: 37-17)”, reporting entities should disclose contingent liabilities. In particular, according to IAS 37,

an enterprise should disclose for each class of contingent liability at the balance sheet date a brief description of the nature of the contingent liability and, where practicable:

a) an estimate of its financial effect [measured at fair value: see below],

b) an indication of the uncertainties relating to the amount or timing of any outflow, and

c) The possibility of any reimbursement [IASB 2003a: 37-29].

According to IAS 37, contingent benefits should not be recognized, unless the realization of income is “virtually certain” (IASB 2003a: 37-18). Thus the treatment of contingent assets is more conservative than the treatment of contingent liabilities:

⁴ See also the IASB's standard relating to the way firms should report government assistance (IAS 20). The latter standard describes “the provision of guarantees” as an example of government assistance that “cannot reasonably have a value placed upon” it and which therefore doesn’t have to be recognized (IASB 2003: 20-10).
possible liabilities are recognized when loss is probable (and other conditions are met); possible benefits are recognized only when gain is virtually certain.

IAS 37 states that “the amount recognized as a provision [or disclosed as a “contingent liability”] should be the best estimated of the expenditure required to settle the present obligation at the balance sheet date (IASB 2003a: 37-19)”. In elaborating on this statement, the IASB makes the following points:

- It is only in extremely rare cases that a reliable estimate will not be possible [IASB 2003a: 37-2].
- Risks and uncertainties that inevitably surround many events and circumstances should be taken into account in reaching the best estimate of a provision [IASB 2003a: 37-20].
- Where the effect of the time value of money is material, the amount of a provision should be the present value of the expenditures expected to be required to settle the obligation [IASB 2003a: 37-21].
- The discount rate (or rates) should be a pre-tax rate (or rates) that reflect(s) current market assessments of the time value of money and the risks specific to the liability. The discount rate(s) should not reflect risks for which future cash flow estimates have been adjusted [IASB 2003a: 37-21].

In summary, the IASB requires that, whether contingent obligations are recognized or merely disclosed, they should be valued at fair value. The IASB defines fair value as “the amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm’s length transaction (IASB 2003a: G-13).” If there were an active market for the liability, fair value could reasonably be measured as market value. In the absence of such a market, fair value could reasonably be measured as the present value of future cashflows—for example, the certainty-equivalents of expected cashflows discounted at the riskfree rate of interest.

3.3.1.6 Possible implications for guarantees and contingent benefit sharing

Under current International Financial Reporting Standards, it would appear that some guarantees would require the recognition of a liability at its fair value, while others would not:

- Guarantees that fell within the scope of IAS 39 would create assets or liabilities that would be recognized on the government’s balance sheet. Such assets or liabilities would generally be measured at their fair value, and changes in fair value would show up in the measure of the government’s deficit.
- Other guarantees would be recognized as liabilities under IAS 37, except in the unusual case in which they could not be measured reasonably reliably, so long as either
the guarantee, considered by itself, would probably lead to a payment, or

- the guarantee formed part of a class of similar guarantees for which losses were probable.

- But some guarantees covered by IAS 37 might not be recognized, either because they were appropriately considered as in a class by themselves and loss from the guarantee was not probable or because, even for a class of like guarantees, loss was not probable.

- If such guarantees were recognized, they would be recorded at fair value—which could be estimated as the present value of expected cashflows. If the guarantees were merely disclosed, it would be their fair value that was disclosed.

- Profit- and revenue-sharing arrangements would be recognized as assets if they were considered derivative financial assets. Otherwise, they would be recognized as assets only if the probability of gain was virtually certain (considering them in classes if appropriate).

The treatment of guarantees under International Financial Reporting Standards will move further in the direction of full recognition at fair value, however, if the proposed insurance standard is promulgated and IAS 39 is amended as proposed. Then, assuming guarantees or benefit-sharing arrangements written on profits and revenue are treated as derivatives and reported according to IAS 39, all the instruments under discussion would lead to the recognition of assets and liabilities measured at fair values.

3.3.2 International Public Sector Accounting Standards

The Public Sector Committee of the International Federation of Accountants has promulgated a standard based on IAS 37—named IPSAS 19, “Provisions, contingent liabilities and contingent assets” (IFAC 2002). In so far as it applies to guarantees and contingent profit- or revenue-sharing arrangements, it is very similar to IAS 37.

As yet, however, the Committee has not issued a standard based on IAS 39.5

5 International Public Sector Accounting Standards establish a hierarchy of standards. If there is no IPSAS, prepares can turn to national standards and IFRS. See IPSAS!
3.3.3 Generally accepted accounting principles in the United States

3.3.3.1 Relevant standards

At least three sets of rules issued by the Financial Accounting Standards Board are relevant to financial reporting of guarantees and contingent profit sharing in the United States:

- **Statement of Financial Accounting Standard 5**, “Accounting for Contingencies” (SFAS 5), which is the main standard applying generally to contingent obligations and rights and which has been in force for many years (FASB 2001),

- **Interpretation No. 45**, “Guarantor’s accounting and disclosure requirements for guarantees, including indirect guarantees of indebtedness of others” which is primarily an interpretation of SFAS 5 and which was issued in 2002 (FASB 2002), and

- **Statement of Financial Accounting Standard 133**, “Accounting for derivative instruments and hedging activities”, which was introduced in the year 2000 and overhauled US accounting standards for derivatives—and which has subsequently been amended by Statement SFAS 138 (Delaney and others 2002).

3.3.3.2 Which standard applies?

How a guarantee needs to be reported will depend on whether it is considered a derivative for the purposes of SFAS 133, a guarantee for the purposes of Interpretation 45, or just a contingent obligation. (The FASB uses “loss contingency” where we use “contingent obligation” and “gain contingency” where we use “contingent benefit”.)

As amended by SFAS 138, SFAS 133 applies to “all derivative instruments (not just derivative financial instruments)” (Delaney and others 2002: 166), with the following exceptions among others:

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6 We don’t discuss accounting for insurance policies under Statement of Financial Accounting Standards 60, “Accounting and reporting by Insurance Enterprises”. Among other things, that Standard distinguishes between short-duration and long-duration contracts. A short-duration contract applies for, say, a year, after which the insurer can choose not to renew or to renew only at a higher premium. A long-duration contract, on the other hand, covers a longer period of time and is “generally not subject to unilateral changes in its provisions” (FASB 2001: 58012). For long-duration contracts, “the present values of estimated future benefits are accrued [that is, recognized as a liability on the balance sheet], net of the present values of future net premiums to be collected. Accrual of these benefit obligations generally involves actuarial determinations. Accountants may be dependent on the services of specialists in such cases ... [Delaney and others, 2002: 919]”. It may be worth assessing in more detail the implications of this Standard. For example, does SFAS 60 apply only to insurance companies defined in some way or to any entity issuing an insurance policy?
• certain traditional insurance contracts,
• certain financial debt-guarantee contracts, and
• certain contracts that are not exchange traded and whose underlying is
  o a climatic, geological, or other physical variable
  o a value or price involving a financial asset not readily converted to cash ..., or
  o a specified volume of revenue of one of the parties [Delaney and others 2002: 176].

In fact, however, the rules are still more complicated, and the FASB’s Emerging Issues Task Force has issued a “consensus view” that limits the scope of this exclusion (see Delaney and others 2002: 216). The rules are also apparently in flux, in part because they go much, but not all, of the way to full fair-value accounting (Delaney and others 2002: 155, Ryan 2002).

It appears, however, that SFAS 133 applies to exchange- and interest-rate guarantees, but not to debt-repayment, minimum-volume, or minimum-revenue guarantees. Nor would it apply to revenue-sharing agreements. Whether it would apply to profit-sharing agreements is unclear.

The excluded guarantees and benefit-sharing arrangements would be covered by SFAS 5. This standard applies generally to contingent benefits and obligations, except for those relating to employee-related costs and insurance policies, which are covered by other standards (FASB 2001: 8302).

Interpretation No. 45, which relates mainly to the interpretation of SFAS 5, applies to all guarantee contract that meet conditions including the following:

a) Contracts that contingently require the guarantor to make payments ... to the guaranteed party based on changes in an underlying that is related to an asset, a liability, or an equity security of the guaranteed party ... [where “an underlying” is defined as “a specified interest rate, security price, commodity price, foreign exchange rate, index of prices, or other variable”, including “the occurrence or nonoccurrence of a specified event”],

b) Contracts that contingently require the guarantor to make payments ... to the guaranteed party based on another entity’s failure to perform under an obligating agreement (performance guarantees)...,

c) Indemnification agreements (contracts) that contingently require the indemnifying party (guarantor) to make payments to the indemnified party (guaranteed party) based on changes in an underlying that is related to an asset, a liability, or an equity security of the indemnified party, such as an adverse judgment in a lawsuit or the imposition of additional taxes due to either a change in the tax law or an adverse interpretation of the tax law, and
d) Indirect guarantees of the indebtedness of others … [FASB 2002: 2].

The Interpretation does not apply to contingent obligations that are excluded from the scope of SFAS 5, such as those arising under insurance policies (FASB 2002: 3). Nor does it apply to weather derivatives, because the underlying does not relate to an asset or liability of the guaranteed party (FASB 2002: 20–21).

Debt-repayment guarantees fall within the scope of SFAS 5, as interpreted by Interpretation 45. Whether minimum-traffic and minimum-revenue guarantees are also captured is less clear (see Table 5).

Table 5: US GAAP applying to guarantee and benefit-sharing instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Which rules apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume guarantee (e.g. traffic guarantee)</td>
<td>SFAS 5 (and Interpretation 45?)</td>
</tr>
<tr>
<td>Revenue guarantee</td>
<td>SFAS 5 (and Interpretation 45?)</td>
</tr>
<tr>
<td>Interest-rate guarantee</td>
<td>SFAS 133</td>
</tr>
<tr>
<td>Exchange-rate guarantee</td>
<td>SFAS 133</td>
</tr>
<tr>
<td>Debt-repayment guarantee</td>
<td>SFAS 5 and Interpretation 45</td>
</tr>
<tr>
<td>Revenue-sharing agreement</td>
<td>SFAS 5</td>
</tr>
<tr>
<td>Profit-sharing agreement</td>
<td>SFAS 133 or SFAS 5 (unclear)</td>
</tr>
</tbody>
</table>

3.3.3.3 SFAS 133

SFAS 133 requires reporting entities to recognize derivatives that fall within its scope as assets or liabilities in the balance sheet at fair values. If the derivatives satisfy various conditions, they can be treated as hedges. Their values still need to be recognized in the balance sheet, but unrealized changes in their value need not be reported in net income; they are reported only in a statement of comprehensive income. On the assumption that none of the guarantee or benefit-sharing instruments under discussion hedge the issuing government’s risks, SFAS 133 would require the instruments to which it applies to be recognized at fair value in the balance sheet and changes in fair value to be shown in the measure of the government’s deficit.

3.3.3.4 Interpretation 45

For some time, disclosure requirements for guarantees have been stricter than for other contingent obligations. According to Interpretation 34, “Disclosure of indirect guarantees of indebtedness of others”, debt guarantees had to be disclosed even if the possibility of loss was remote (Delaney and others, 2002: 521).

The main implication of the more recent Interpretation 45 is that guarantors must recognize a liability when they issue guarantees, even if the probability of making a
payment under the guarantee is less than 0.5. The amount of the liability should generally be the fair value of the guarantee.

The Interpretation also requires fuller disclosures, including disclosure of the maximum possible loss as well as the guarantee’s fair value. Box 1 shows an excerpt from a disclosure by Microsoft for an accounting period covered by the Interpretation, while Box 2 discusses the US government’s fair-value accounting for pension guarantees.

**Box 1: Microsoft’s disclosure of guarantees**

Microsoft financial statements for the quarter ending 31 March 2003 include the following disclosure of guarantees.

In November 2002, the FASB issued Interpretation 45, *Guarantor’s Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others* (FIN 45). FIN 45 elaborates on previously existing disclosure requirements for most guarantees, including loan guarantees such as standby letters of credit. It also clarifies that at the time a company issues a guarantee, the company must recognize an initial liability for the fair value, or market value, of the obligations it assumes under the guarantee and must disclose that information in its interim and annual financial statements. The provisions related to recognizing a liability at inception of the guarantee for the fair value of the guarantor’s obligations does not apply to product warranties or to guarantees accounted for as derivatives. The initial recognition and initial measurement provisions apply on a prospective basis to guarantees issued or modified after December 31, 2002.

The Company has unconditionally guaranteed the repayment of certain Japanese yen denominated bank loans and related interest and fees of Jupiter Telecommunication, Ltd (Jupiter). These guarantees arose on February 1, 2003 in conjunction with the expiration of prior financing arrangements, including previous guarantees by the Company. The financing arrangements were entered into by Jupiter as part of financing its operations. As part of Jupiter’s new financing agreement, the Company agreed to guarantee repayment of the loans by Jupiter of approximately $52 million of financing. The estimated fair value and current carrying value of the guarantees was $10.5 million and did not result in a charge to operations. The guarantees are in effect until the earlier of repayment of the loans, including accrued interest and fees, or February 1, 2009. The maximum amount of the guarantees is limited to the sum of the total due and unpaid principal amounts, accrued and unpaid interest and any other related expenses. Additionally, the maximum amount of the guarantees, denominated in Japanese yen, will vary based on fluctuations in foreign exchange rates. If the Company was required to make payments under the guarantees, the Company may recover all or a portion of its maximum liability upon liquidation of the investee’s assets. The proceeds from such liquidation cannot be accurately estimated due to the multitude of factors that would affect the valuation and realization of such proceeds of liquidation.

In connection with various operating leases, the Company issued residual value guarantees, which provide that if the Company does not purchase the leased property from the lessor at the end of the lease term, then the Company is liable to the lessor for an amount equal to the shortage (if any) between the proceeds from the sale of the property and an agreed value. As of March 31, 2003, the maximum amount of the residual value guarantees was approximately $271 million. The Company’s management believes that proceeds from the sale of properties under operating leases would exceed the payment obligation and therefore no liability to the Company currently exists.

From time to time, the Company provides indemnifications of varying scope to customers against claims of intellectual property infringement made by third parties arising from the use of Microsoft products. To date, the Company has not encountered material costs as a result of such obligations and has not accrued any liabilities related to such indemnifications in its financial statements.


The FASB states that it issued the Interpretation because it had observed that many entities were not recognizing a liability when they issued a guarantee because they believed that FSAS 5 prevented recognition unless payments were probable (FASB 2002). Among other things, the Board also notes that guarantees must be recognized...
even when the guarantee was issued “to an unrelated party for no consideration on a stand alone basis”, in which case “the offsetting entry would be to expense” (FASB 2002: 7).

Box 2: The US government's reporting of pension guarantees

The Pension Benefit Guaranty Corporation (the PBGC) is a US federal agency that guarantees pension obligations of US companies.

PBGC states that it prepares its financial statements “in accordance with generally accepted principles in the United States.” It further states, “Consistent with [those] principles … outlined in Statements of Financial Accounting Standards [dealing with financial reporting by pension plans and insurers and financial reporting of derivatives and pension plans] PBGC reports its assets and liabilities and fair value.”

PBGC estimated that, as of 30 September 2002, it had a liability of $29 billion for the “present value of future benefits” to be paid to retirees whose company had become bankrupt and whose pension plan had failed. The estimate of $29 billion takes into account expected payments given a number of underlying assumptions and is discounted for the time value of money [but risk per se appears not to be priced]. PBGC uses a stochastic model to arrive at the estimates. In a narrative section of its annual report, it shows a probabilistic estimate of its financial position in the year 2012—showing a frequency distribution of various possible outcomes according to a simulation. (The news, incidentally, is not good: the model estimates that PBGC has a 70 percent chance of having a financial deficit by 2012 and a 5 percent chance of negative equity of at least $58 billion.)

In addition, the PBGC discloses in a note to its financial statements on “contingencies” an estimate of what it calls “reasonably possible exposure”, following Statement of Financial Accounting Standards No. 5, “Accounting for contingencies”. The estimate is $35 billion.

The US government includes [presumably—it is not separately disclosed] the estimated liability of $29 billion as a liability in its financial statements for the year ended 30 September 2002. It shows PBGC’s estimate of “reasonably possible exposure” of $35 billion in its note on “Commitments and contingencies”, where it is by far the largest item. (Note, however, that the US government’s financial statements did not receive a clean bill of health from the government’s auditor.)


3.3.3.5 SFAS 5

As they relate to the guarantee and benefit-sharing instruments under discussion, the requirements of SFAS 5 are essentially the same as those of IAS 37. See FASB 2001 for details.

3.3.3.6 Implications for guarantees and contingent benefit sharing

Accounting standards relevant to contingent benefits and obligations in the United States are complex, and their application to the types of instruments used by governments in private infrastructure contracts is not always clear:

- Guarantees related to financial underlying variables, such as an exchange rate or an interest rate, would be accounted for as derivatives under SFAS 133. They would have to be recognized as liabilities in the balance sheet, and changes in fair value from year to year would have to be reported in the measure of the deficit.
• Debt guarantees would be accounted for in the same way, according to the requirements of Interpretation 45.

• The treatment of guarantees and profit or revenue-sharing arrangements written on underlying variables such as traffic or revenue is unclear—depending on whether or

• might escape recognition, but would have to be disclosed in notes, according to (at least) SFAS 5.

• would probably not be recognized, but if gain were probable, they would be disclosed, according to the provisions of SFAS 5.

Table 6 summarizes.

Table 6: US GAAP treatment of guarantee and benefit-sharing instruments

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume guarantee (e.g. traffic guarantee)</td>
<td>Unclear (recognition at fair value only if Interpretation 45 applies)</td>
</tr>
<tr>
<td>Revenue guarantee</td>
<td>Unclear (recognition at fair value only if Interpretation 45 applies)</td>
</tr>
<tr>
<td>Interest-rate guarantee</td>
<td>Recognition at fair value</td>
</tr>
<tr>
<td>Exchange-rate guarantee</td>
<td>Recognition at fair value</td>
</tr>
<tr>
<td>Debt-repayment guarantee</td>
<td>Recognition at fair value</td>
</tr>
<tr>
<td>Revenue-sharing agreement</td>
<td>No recognition unless gain virtually certain; disclosure if probable</td>
</tr>
<tr>
<td>Profit-sharing agreement</td>
<td>Unclear (recognition at fair value only if Interpretation 45 applies)</td>
</tr>
</tbody>
</table>

3.4 Conclusions

Reporting guarantees and profit- or revenue-sharing arrangements according to any of the standards set out here would lead to considerable improvements for most governments. Many guarantees, for example, would be recognized at their fair value, while the fair value of others would at least be disclosed.

Nevertheless, modern accounting rules for contingent benefits and obligations are complicated and distinctions in the treatment of different types of instrument seem somewhat arbitrary. The problem is that some instruments are recognized on a fair-value continuous basis, whereas others are still governed by the old historic-cost binary view. (Accountants sometimes describe this mixed treatment as based on a “mixed-attribute model”—Ryan 2002.)

While current standards appear partly arbitrary, there are signs that the major standard-setters are moving toward a regime that would apply the fair-value continuous view to all the instruments under discussion. Such International
Financial Reporting Standards are already being developed. And, in the United States, standards seem to be heading in the same direction (Ryan 2002).

In the meantime, governments could make further progress by adopting a policy of recognizing all of the guarantees of the type discussed here at an estimate of their fair value.
4 Long-term purchase contracts

4.1 The issue

Many governments enter into long-term lease or purchase obligations that can have economic consequences similar to the government’s constructing a new asset, yet often have quite different consequences for their financial reporting.

For example, a state-owned electricity utility may enter into an agreement with a privately owned independent power provider (an IPP) according to which the IPP finances the construction of a power plant and agrees to provide electric capacity to the government for, say, 20 years. In return, the government agrees to make capacity payments to the IPP for 20 years, whether or not the government chooses to take power from the IPP. These capacity payments are enough to ensure that the IPP can repay debt incurred to finance the construction of the power plant and provide a reasonable return to its shareholders. In addition, the government agrees to pay a variable charge for any electricity it actually consumes. The variable charge covers the cost of fuel and other expenses incurred only if the power plant runs. The state-owned utility may be the only purchaser of power from the IPP, and the agreement may cover the expected economic life of the plant. The government itself might guarantee the obligations of its utility—so that the government would be responsible for making any required payments the state-owned utility failed to make. Under “traditional” government financial reporting, the utility might keep the power plant and the associated debt off its balance sheet. So, probably, would the government itself, even if it consolidated the utility in its accounts.

The economic effects of the utility’s actions are, however, quite similar to the effects of the government’s using traditional public finance to construct a power plant. Under the traditional approach, the state-owned utility (and thus, ultimately, the government) would finance the plant using a combination of debt and equity. It would probably get the power plant constructed under a turnkey contract, under which a construction company would agree to deliver the completed plant in return for a fixed payment. Then the utility would operate the plant. The utility’s balance sheet would show the debt as a liability and the power plant as an asset—as would the government’s if it consolidated the utility in its financial reports.7

The economic consequences are not necessarily identical, because in the case of the privately financed IPP the government will not have to pay anything unless the IPP operates and maintains the plant sufficiently well to ensure that it has the capacity to produce electricity. Thus the IPP bears some risk that the government bears under

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7 Few governments that prepare financial statements largely in accordance with standards fully consolidate the assets and liabilities of even wholly state-owned enterprises; that is, they do not add the assets and liabilities of the state-owned enterprise line by line to those of the government proper, but rather show an estimate of the value of their equity interest in the enterprise as one of their assets.
traditional private financing, and payment by the government is not certain. In
addition, the privately owned IPP may have stronger incentives to minimize costs
and may therefore operate the plant more efficiently. Nevertheless, the difference in
accounting treatment seems greater than the difference in economic substance. The
privately owned IPP is not likely to have trouble maintaining and operating the
power plant and, if the government keeps paying, the IPP will very likely keep
providing capacity. Moreover, the difference could be made smaller still if we
assumed, in the case of the publicly financed power plant, that after taking delivery
of the power plant under the turnkey contract, the government entered into an
operating contract with a private company under which the company would operate
the plant in return for payments from the government so long as the plant could
produce power.

Similar issues also arise when government utilities enter into long-term purchase
agreements for the supply of bulk water. And, in recent years, they have arisen for a
whole range of public services. In the United Kingdom, under the Private Finance
Initiative, government departments are encouraged to get investment projects
privately financed and to purchase the outputs of the project instead of paying
directly for the inputs. Under the Initiative, the government has procured services
related to schools, hospitals, prisons, roads, and other assets. The contracts are not
simple construction contracts; rather, they require the private operator to operate
and maintain the property, ensuring that certain standards are met. For example, the
operator may be required to maintain and operate the school so as to ensure that the
temperature during school hours remained in a specified range. Many other
governments have followed the lead of the UK government, including those of the
Czech Republic, Ireland, South Africa, and the State of Victoria in Australia.

As with the IPP project discussed above, these projects may improve performance by
improving the allocation of risks. Yet, despite their statements to the contrary,
governments are often suspected of wanting to reduce apparent borrowing. As with
guarantees, good policy is more likely if accounting reflects the economic substance
of transactions and project design is therefore driven by concerns about economic

4.2 Overview of traditional accounting treatment

At some point in the history of accounting—in the 1970s perhaps—leases and long-
term purchase agreements such as those described above did not have any impact on
the balance sheet of the lessee or purchaser. Accounting considered the asset to be
owned by its legal owner: the lessor.

Over time, however, the treatment of leases became more sophisticated. Instead of
considering only the legal form of the lease, the accounting began to look at its
economic substance. Typical accounting now draws a distinction between operating
leases and finance leases. Under an operating lease, the lessor is, as before,
considered to own the asset and to have the corresponding liability on its balance sheet. The lessee shows no asset or liability, and counts its lease payments as ordinary operating expenditure. Under a finance lease, however, the lessee is considered to own the asset for accounting purposes and to have used the lease to finance the asset. Thus the lessee recognizes an asset and a liability on its balance sheet, in amounts generally equal to the present value (at some interest rate) of the remaining lease payments. The expense of the lease is then described as a combination of interest payments and depreciation.

Whether a lease is an operating lease or a finance lease can be hard to tell in practice, but accounting rules generally require consideration of who bears more of the risks to which an owner of the asset would typically be exposed.

Accounting also distinguishes leases from long-term contracts for the delivery of services: contracting to use an asset is different from contracting to purchase a service provided by means of the asset. Even firm take-or-pay contracts for the purchase of services typically do not lead to the purchaser’s recognizing a liability equal to the present value of the required payments and an asset equal to the present value of the contracted services. Accountants describe these contracts as “executory” meaning that they represent an exchange of promises that have yet to be fulfilled.

To see more clearly how take-or-pay contracts such as those described above would be treated, we need to review the details of particular standards for financial reporting.

4.3 Some important standards

We start by looking again at International Financial Reporting Standards and the International Public Sector Accounting Standards that they have spawned. We then review generally accepted accounting practice in the United Kingdom, where much attention has been paid to the issue, because of the prominence of the Private Finance Initiative.8

4.3.1 International Financial Reporting Standards

4.3.1.1 Leases versus contracts for services

International Financial Reporting Standards maintain the distinction between leases and other contracts that create assets and liabilities, on the one hand, and those that are merely executory, on the other. But they give prominence to the definition of a liability and allow for the possibility that an executory contract create an asset and a

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8 It would also be worth looking at SFAS 47 “Commitments: long-term obligations” (FASB 2001: 6985).
liability. According to the IASB’s framework for the preparation and presentation of financial statements (IASB 2003a: F-29),

A liability is recognized in the balance sheet when it is probable that an outflow of resources embodying economic benefits will result from the settlement of a present obligation and the amount at which the settlement will take place can be measured reliably. In practice, obligations under contracts that are equally proportionately unperformed … are generally not recognized as liabilities in the financial statements. However, such obligations may meet the definition of liabilities and … may qualify for recognition.

Perhaps the most important International Financial Reporting Standard on the treatment of take-or-pay and similar contracts is International Accounting Standard IAS 17, Leases (IASB 2003a).9 IAS 17 states that it doesn’t apply to at least typical contracts for services.

This Standard applies to agreements that transfer the right to use assets even though substantial services by the lessor may be called for in connection with the operation or maintenance of such assets. On the other hand, this Standard does not apply to agreements that are contracts for services that do not transfer the right to use assets from one contracting party to the other (IASB 2003a: 17-7).

4.3.1.2 Classification of leases

The treatment of leases under International Financial Reporting Standards depends on whether the lease is a finance lease or an operating lease. The IASB states that leases should be classified as finance or operating according to the “substance of the transaction rather than the form of the contract” (IASB 2003a: 17-11). Some of the IASB’s rules for determining the substance are set out below:

The classification of leases adopted in this Standard is based on the extent to which risks and rewards incident to ownership of a lease asset lie with the lessor or the lessee. Risks include the possibilities of losses from idle capacity, technological obsolescence and of variations in return due to changing economic conditions. Rewards may be represented by the expectation of profitable operation over the asset’s economic life and of gain from appreciation in value or realization of a residual value.

A lease is classified as a finance lease if it transfers substantially all the risk and rewards incident to ownership. A lease is classified as an operating lease if it does not transfer substantially all of the risks and rewards incident to ownership.…

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9 See also IAS 39, paragraph 14, which discusses commitments to buy assets, for which settlement is normally effected by taking delivery of the asset, rather than by exchanging cash. The paragraph notes that such commitments are normally to be accounted for as executory contracts, rather than derivatives (IASB 2003: 39-20).
Whether a lease is a finance lease or an operating lease depends on the substance of the transaction rather than the form of the contract. Examples of situations which would normally lead to a lease being classified as a finance lease are:

a) the lease transfers ownership of the asset to the lessee by the end of the lease term;

b) the lessee has the option to purchase the asset a price which is expected to be sufficiently lower than the fair value at the date the option becomes exercisable such that, at the inception of the lease, it is reasonably certain that the option will be exercised;

c) the lease term is for the major part of the economic life of the asset even if title is not transferred;

d) at the inception of the lease the present value of the minimum lease payments amounts to at least substantially all of the fair value of the leased asset; and

e) The leased assets are of a specialized nature such that only the lessee can use them without major modifications being made.

Indicators of situations which individually or in combination could also lead to a lease being classified as a financed lease are:

a) if the lessee can cancel the lease, the lessor’s losses associated with the cancellation are borne by the lessee;

b) gains or losses from the fluctuation in the fair value of the residual fall to the lessee (for example in the form of a rent rebate equaling most of the sales proceeds at the end of the lease); and

c) the lessee has the ability to continue the lease for a secondary period at a rent which is substantially lower than market rent [IASB 2003a: 17-11–17-12].

4.3.1.3 Recognition and disclosure

According to IAS 17 (IASB 2003a: 17-13–14),

Lessees should recognize finance leases as assets and liabilities in their balance sheets at amounts equal at the inception of the lease to the fair value of the leased property or, if lower, at the present value of the minimum lease payments.

Lease payments should be apportioned between the finance charge and the reduction in the liability.

A finance lease gives rise to a depreciation expense for depreciable assets as well as a finance expense for each accounting period. The depreciation policy for depreciable leased assets should be consistent with that for depreciable assets which are owned.
An operating lease is not recognized as an asset and a liability, but IAS-17 requires lessees to disclose “the total of future minimum lease payments under noncancelable operating leases” for various periods (in the next year, between one and five years, and later than five years).

4.3.1.4 Implications and comments

How International Financial Reporting Standards apply to take-or-pay contracts, including IPP power-purchase agreements and contracts under the Private Finance Initiative, is not clear. At least on the face of it, such contracts are contracts for the purchase of services, rather than leases, suggesting that the standards may not require the purchaser to recognize an asset and liability. Yet, especially when the services require the construction of a dedicated asset (such as new power plant or road), the contracts are similar to leases and perhaps the rules regarding leases would apply. If so, the rules might require recognition of assets and liabilities on the government’s balance sheet. Box 3, which discusses the accounting treatment of private–public projects in Victoria, Australia, provides some support for this view (Australian accounting standards are similar to International Financial Reporting Standards). Box 4 also provides some support. It discusses how the Philippine state-owned utility Napocor reports long-term take-or-pay contracts with IPPs (Napocor does not state exactly which standards it follows).
Box 3: Accounting and disclosure for Partnerships Victoria projects

The Victorian government has set out the following advice on accounting for public–private projects undertaken under its “Partnerships Victoria” program.

Issues associated with the accounting treatment of contracts of the nature contemplated by Partnerships Victoria are often an area of concern. Government needs to carefully manage the liability side of its balance sheet, which is closely monitored by a large number of parties, including rating agencies.

However, the Department of Treasury and Finance does not promote the view that the balance sheet treatment of contracts should drive the structure of Partnerships Victoria projects. Just because a high quality, high value for money project may be difficult to structure as off balance sheet, this does not mean that it should not be taken forward. However, the Department of Treasury and Finance must be kept informed as to the likely balance sheet status of Partnerships Victoria projects.

Accounting treatment

Partnerships Victoria contracts may in some circumstances be classified as leases. These may need to be recognized or disclosed on government’s balance sheet. So, while the accounting treatment of a particular contract should not drive the commercial framework, the impacts of the proposed structure may be significant in an accounting sense.

The provisions of the Australian Accounting Standard AAS17 are the most relevant in classifying Partnerships Victoria arrangements for accounting purposes. This standard sets out the tests to determine whether contracts are classified as operating or finance leases. If a Partnerships Victoria contract is deemed to be a finance lease, both the lease asset and the lease liability must be recognized in the State’s balance sheet and amortized over the term of the lease. The key tests AAS17 requires are:

- Present value of lease payments. Where the present value of the payments (associated with the assets, not service provision) made by the State are equal to or exceed 90 per cent of the fair value of the leased property, prima facie the contract would be classified as a finance lease. The operation of this provision is not definitive. The extent to which it applies depends on the risks assumed by the private party;
- Lease term. Where the arrangements with government cover a period greater than 75 per cent of the useful life of the asset, prima facie the contract would be classified as a finance lease;
- Bargain basement provisions. Where the contractual arrangements include an option for government to acquire the asset at the end of the term for a value which is so far below the likely fair value that it would be highly unlikely that it would not be exercised, the arrangements would prima facie be deemed to be a finance lease.

These tests are all designed to determine whether the risks and benefits associated with the property have been allocated to the private party in a Partnerships Victoria contract. Where the capital investment associated with the asset is substantially amortized by payments due from government over the term of the contract, it is likely that the contract would be deemed to be a finance lease. The specific characteristics of each project will have to be reviewed in the context of AAS17 to determine the appropriate accounting treatment.

Box 4: Treatment of IPP contracts in Napocor's financial statements

Napocor, a large Philippine electricity transmission and generation company that, at the time of writing, is owned by the government has many contracts with IPPs. In its statement of accounting policies in its annual report for 2001, it notes that it accounts for IPP contracts, which it refers to as build-own-transfer or BOT projects, as follows: “Total capacity fees for the duration of the cooperation period are recognized outright in the books by a debit to Electric Plant under Capital Lease account and a corresponding credit to Lease Obligation under the Long-Term Debts. Hopewell Pagbilao and Sual Coal Fired Thermal Power Plant are amortized over 29 and 25 years, respectively while the rest of the BOT assets are amortized over 20 years.” On the asset side, the balance sheet shows electricity plant owned under capital leases of 367 billion pesos. On the liability side, it shows BOT lease obligations of 535 billion pesos (including the portion classified as a current liability). [Why are the amounts different? Possibly, it is the effect of changes in the exchange rate]. By comparison, the total value of assets is about 1 trillion pesos, and equity is about 94 billion pesos. Excluding the IPP contracts would lead to a very different picture of Napocor's financial position.


4.3.2 International Public Sector Accounting Standards

The International Public Sector Accounting Standard based on IAS 17 is called IPSAS 13. For the most part, it repeats IAS 17, but it does add the following paragraphs of direct relevance to many private (or public-private) infrastructure projects.

First, it adds another criterion indicative of a finance lease to the list quoted in Section 4.3.1.2):

f) the leased assets cannot easily be replaced by another asset [IFAC 2003: 353].

Second, it adds the following commentary,

A contract may consist solely of an agreement to lease an asset. However, a lease may also be one element in a broader set of agreements with private sector entities to construct, own, operate and/or transfer assets. Public sector entities often enter into such agreements, particularly in relation to long-lived physical assets and infrastructure assets.

Where an arrangement contains an identifiable operating lease or finance lease as defined in this Standard, the provisions of this Standard should be applied in accounting for the lease component of the arrangement.

Public sector entities may also enter a variety of agreements for the provision of goods and/or services, which necessarily involve the use of dedicated assets. In some of these agreements, it may not be clear whether or not a lease, as defined by this Standard, has arisen. In these cases, professional judgment is exercised, and if a lease has arisen this Standard is applied; and if a lease has not arisen entities account for those agreements by applying the provisions of other relevant International Public Sector Accounting Standards, or in the absence thereof, other relevant international and/or national accounting standards (IFAC 2002: 354-355).
4.3.3 Generally accepted accounting practice in the United Kingdom

4.3.3.1 Significance of UK standards

The accounting standards of the United Kingdom are particularly interesting in this case because the development of the Private Finance Initiative has led both the standard-setting body—the Accounting Standards Board—and the UK Treasury to issue guidelines on accounting for projects financed under the initiative. Accounting standards in this area are as a result more developed in the United Kingdom than elsewhere.

Like International Financial Reporting Standards, generally accepted accounting practice in the United Kingdom distinguishes between operating and finance leases and requires in the case of the latter that the lessee recognize as a result of the lease an asset and a liability on its balance sheet. (See Statement of Standard Accounting Practice 21, Accounting for leases and hire purchase contracts, ICAEW 2003).

Standards for financial reporting in the United Kingdom are distinctive, however, in that they include a standard devoted to “Reporting the substance of transactions”—Financial Reporting Standard 5 (ICAEW: 2003). The standard deals specifically with certain arrangements whose economic substance differs from that which might be expected from their legal form. Moreover, the standard includes an “Application Note” that considers the appropriate treatment of contracts under the Private Finance Initiative.

4.3.3.2 Overview of change in accounting treatment of PFI projects

Before the Accounting Standards Board issued the Application Note, the government’s financial reporting of PFI projects typically assumed that the contract did not create any assets or liabilities that were to be recognized on the government agency’s balance sheet. Indeed, it is often argued, one of the government’s reasons for encouraging its agencies to enter into PFI contracts was to allow the creation of assets without increasing the government’s borrowing. (See Box 5 for a recent discussion of the budgeting effect of the accounting treatment of PFI projects.) Note that the government does not agree with this assessment of its motives: rather, it argues that it encourages such projects only to the extent they increase “value for money” by allocating to private companies risks that they can manage better than the government can (UK Treasury 1999).
Box 5: Accounting’s influence on PFI decisionmaking

A UK Ministry of Defence website discusses the significance of accounting treatment for the affordability of PFI projects as follows (with some editing for clarity). “The primary objective of a PFI project is to obtain value for money, not an off-balance sheet assessment. However, an on-balance sheet assessment can often lead to severe affordability problems. A sum equal to the capital value of the asset being procured will be deducted from the organization’s Capital Departmental Expenditure Limit in the first year of service delivery or in line with any phased delivery. Over the life of the contract the Treasury will feed back to the Current (Resource) Departmental Expenditure Limit funds equivalent to the capital element of the service charge less the difference between the public and private sector borrowing rates. Thus, for an on-balance sheet PFI project, the organization must have sufficient funding within the Short Term Plan to meet the full capital cost of the project and the service payments.”

Source: <http://www.ams.mod.uk/ams/content/docs/sse/industry_innovation/pfipro.htm>.

4.3.3.3 Relevance of standards to government

The Accounting Standards Board’s standards do not automatically apply to government agencies, but the UK government tends to follow private-sector standards, so the Standards Board’s pronouncements are influential. Indeed, the Application Note appears to focus on the way government agencies should account for PFI projects. Further, the Accounting Standards Board’s guidance does apply to the private operators that provide services to the government under PFI projects, and the treatment of a PFI contract by the operator may create an expectation about its treatment by the government agency. The effect of the Application Note was to cause the operators of some projects to substitute a financial for a physical asset on their balance sheets. Before the Application Note, for example, the operator’s financial statements might have shown that the operator owned a school building, while afterwards they might have shown that it owned a financial asset of the same value representing the right to receive payments from the government over the term of the contract (see Box 6). If the operator does not report the asset on its balance sheet, the government may struggle to argue that it should not report the asset on its own balance sheet, along with a corresponding liability equal.

Box 6: A private company’s accounting for PFI projects

Carillon plc’s financial statements for the year 2000 include the following disclosure for PFI projects. The effect of FRS 5—Application Note F—Private Finance Initiative and Similar Contracts on the accounting for several of our Private Finance Initiative projects should be noted. The application of this note has resulted in several of our Private Finance projects companies recognizing their projects as debtors, rather than fixed assets within their own accounts. Under this treatment, during the operational phase, the debtor is treated as a finance debtor with the revenue arising in respect of the project being allocated between repayments of the finance debtor, interest receivable in respect of the finance debtor and payments in respect of the remaining services provided. The overall effect, compared to the treatment if the project was treated as a fixed asset in the accounts of the joint venture company, is a reduction in operating profit with interest receivable benefiting by a similar amount. Over the project life there is no effect on profit before tax as a result of this accounting policy.

4.3.3.4 The approach

UK accounting standards, like their international counterpart, treat leases differently from contracts for services and distinguish between operating and finance leases. Determining the appropriate accounting treatment of a PFI project under generally accepted accounting practice in the United Kingdom thus requires consideration of whether it amounts only to a contract for services or whether it is really a lease—or really contains, from a conceptual perspective, both a contract for services and a lease. For example, a PFI contract for “school building services” in which the operator provides a building and agrees to clean the building might be analyzed as containing a lease and contract for cleaning services.

If the PFI contract is considered to contain a lease as well as a contract for services, and the payment streams for the two services can be separated, the lease must be reported according to the provisions of the Statement of Standard Accounting Practice 21, “Accounting for leases and hire purchase contracts”. If the lease is a finance lease according to that Standard, the government purchasing agency should recognize an asset and a liability as a result of the PFI contract; otherwise not. The contract for services, on the other hand, is not (generally) considered to imply the government must recognize any asset or liability: the contract for service is considered executory and expenses are recognized in the income statement only as services are provided.

If the PFI contract is considered to contain both lease-like and service contracts that cannot be separated for analytic purposes, the contract must be reported according to provisions of Financial Reporting Standard 5 (including the Application Note on the PFI). According to FRS 5, Contracts containing inextricable property and service elements are analyzed according to the extent to which the government agency and the operator bear risks typically relating to the ownership of property. The party that bears those risks is considered “to have an asset of the property”.

The underlying test might be—the Board does not put it this way—to imagine that the property was owned by an imaginary third-party that let that property in a spot market and then to consider the risks to which that owner would be exposed. Whether the purchaser or the operator is considered the owner of the asset is then determined by considering which party’s exposure to property-related risks most closely resembles the imaginary third party’s.

The Board lists many, sometimes interrelated specific tests, which are paraphrased below:

- When demand risk is significant, the party bearing demand risk is probably the owner.
The operator’s earning revenues from third parties is evidence that it owns the asset and, conversely, its not earning such revenues is evidence that the purchaser owns the asset.

The party that determines the nature of the property (its design) is more likely, other things equal, to be the owner.

If the operator bears significant penalties for non-availability of the property, and such nonavailability is a significant prospect, this is evidence that the operator owns the property—and conversely.

The party that bears the risk of changes in the cost of providing the property (not services)—when such changes are significant—is, other things equal, more likely to be the owner.

The party that bears the risk that technology becomes obsolescent is, other things equal, more likely to be the owner.

The party that bears the risk of changes in the (residual) value of the property at the end of the contract is, other things equal, more likely to be the owner.

In addition, the Board notes that the nature of the operator’s financing arrangements may be significant: for example, if the operator’s leverage seems possible only on the assumption that the purchaser “stands behind” the operator, the purchaser is likely to be the owner.

The Accounting Standards Board puts the issue as follows (ICAEW 2003: 524):

Present practice is not to capitalize contracts for services. However, where a property is needed to fulfill a contract for services, present practice may require the property to be recognized as the purchaser’s asset. (For example, this is the case for some take-or-pay contracts where the operator builds a specialist property with little alternative use.) The purpose of the analysis [in the Application Note] is to determine:

a) whether the purchaser in a PFI contract has an asset of the property used to provide the contracted services together with a corresponding liability to pay the operator for it or, alternatively, has a contract only for services; and

b) whether the operator has an asset of the property used to the contracted services or, alternatively, a financial asset being a debt due from the purchaser.

Under the general principles of the FRS, a party will have an asset of the property where that party has access to the benefits of the property and exposure to the risks inherent in those benefits. If that party is the purchaser, it will have a corresponding liability to pay the operator for the property where the commercial effect of the PFI contract is to require the purchaser to pay amounts to the operator that cover the cost of the property….
Once any separable service elements have been excluded, PFI contracts can be classed into:

a) those where the only remaining elements are payments for property. These will be akin to a lease and SSAP 21 “Accounting for leases and hire purchase contracts” (interpreted in the light of the FRS) should be applied.

b) other contracts (i.e. where the remaining elements include some services). These contracts will fall directly within the FRS rather than SSAP 21.

For those contracts that fall directly within the FRS, the question of whether a party has an asset of the property should be determined by looking at the extent to which each part would bear any variations in property profits (or losses).

4.3.3.5 Treasury’s guidance note

In response to the Accounting Standards Board’s issuance of the Application Note on the Private Finance Initiative in 1998, the U. K. Treasury issued in June 1999 a note called “How to account for PFI transactions”. The Note aimed “to provide additional guidance for certain public sector bodies” on aspects of the application of the Accounting Standards Board’s Application Note. In contrast to the Application Note issued by the Accounting Standards Board, the Treasury’s standards apply to all central government purchasing agencies.

Wilson and others (2001: 1296) are skeptical about the Treasury’s motives for issuing the guidance:

PFI projects necessarily enjoy a high political profile and their accounting treatment can be highly sensitive as a result, since it affects the public perception of the economic substance of these transactions. This had led the Treasury to take a particular interest in the development of [the Accounting Standards Board’s] guidance, that has not always appeared to be benign. This culminated in June 1999 in the issue of the Treasury’s own guidance on how the public sector should interpret the Application Note, and although the ASB has not demurred, the two documents do not really seem to be in complete harmony ... we believe that Application Note F is the more reliable source of reference.

Whatever its motives, the Treasury’s note is interesting because it provides concrete numerical examples illustrating how an accountant might determine whether the operator or the purchaser was the economic owner of the property. (The Treasury notes that quantitative analysis is not always necessary and, when it is necessary, needs to be supplemented by judgments about factors that are not quantifiable.)

Table 7 sets out the assumptions of one of the examples. In the example, the purchaser (government) bears risks relating to demand and the residual value of the property, while the private operator bears the other property-related risks. The underlying random variables (demand, residual value, third-party revenues, and so on) are assumed to have normal or triangular distributions.
Table 7: UK Treasury’s illustrative PFI asset

<table>
<thead>
<tr>
<th>Underlying risk (random variable)</th>
<th>[Conditional?] probability distribution of the net present value of the project with respect to changes in the underlying risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks born by purchaser</td>
<td></td>
</tr>
<tr>
<td>Demand</td>
<td>Normal (−10, 5)</td>
</tr>
<tr>
<td>Residual value</td>
<td>Triangular (0, 10, 20)</td>
</tr>
<tr>
<td>Risks born by operator</td>
<td></td>
</tr>
<tr>
<td>Third-party revenues</td>
<td>Normal (20, 10)</td>
</tr>
<tr>
<td>Design risk</td>
<td>Triangular (−30, −25, −10)</td>
</tr>
<tr>
<td>Penalties for underperformance</td>
<td>Triangular (−30, −10, 0)</td>
</tr>
<tr>
<td>Penalties for nonavailability</td>
<td>Triangular (−60, −40, 0)</td>
</tr>
<tr>
<td>Relevant costs</td>
<td>Normal (−20, 5)</td>
</tr>
<tr>
<td>Obsolescence</td>
<td>Triangular (−30, −25, −20)</td>
</tr>
</tbody>
</table>

Note: Normal \((\mu, \sigma)\) means normally distributed with a mean of \(\mu\) and a standard deviation of \(\sigma\). Triangular \((\xi,\eta,\zeta)\) means triangularly distributed with a minimum of \(\xi\), a mode of \(\eta\), and a maximum of \(\zeta\). Source: UK Treasury (1999).

Given these distributions, and an assumption that the risks are independent of each other, the Treasury uses Monte Carlo simulation to estimate probability distributions of the value of the project to the purchaser and the operator. Figure 1 shows the results of a simulation based on 10,000 trials.
Considering only property-related risks, the range of likely outcomes is better for the purchaser than for the operator. What matters according to the Treasury guidelines, however, is not this, but the extent of dispersion of the possible outcomes and, in particular, the difference between the 5th and 95th percentiles of the distribution. In this case, the difference is larger for the operator than for the purchaser (see Table 8). So the operator rather than the government is considered to own the asset and to have the corresponding liability.
Table 8: Determining economic ownership of the illustrative PFI asset

<table>
<thead>
<tr>
<th></th>
<th>Operator</th>
<th>Purchaser</th>
</tr>
</thead>
<tbody>
<tr>
<td>95th percentile</td>
<td>−63</td>
<td>10</td>
</tr>
<tr>
<td>5th percentile</td>
<td>−123</td>
<td>−11</td>
</tr>
<tr>
<td>Difference</td>
<td>61</td>
<td>21</td>
</tr>
</tbody>
</table>

4.4 Conclusions

International Financial Reporting Standards and generally accepted accounting practice in the United Kingdom have the advantage of putting at least some long-term purchase contracts on the balance sheet of the purchasing government. Practice in the United Kingdom is particularly interesting because it looks squarely at substance rather than form of transactions and offers sophisticated guidance on whether the purchaser or the operator is more nearly the owner of an asset from an economic view.\(^{10}\)

Yet both sets of standards create sharp distinctions in financial reporting that correspond to no such distinctions in substance. First, they assume that either the purchaser or the operator is the sole owner of the physical asset and that that party alone should recognize the asset on its balance sheet. Second, they draw a sharp distinction between leases and contracts for services, even though the economic difference may be small. We consider both issues in turn.

The concern to determine whether the purchaser or the operator owns the asset mirrors the concern in lease accounting to determine whether the lessor or the lessee owns the leased asset, a preoccupation that arises out of the misleading binary view of assets and liabilities. There are signs, however, that major standard-setting bodies may soon change their rules regarding lease accounting, and this in turn should lead to better accounting of take-or-pay contracts. In particular, a group comprising representatives of the standard-setting bodies of the Australia, Canada, New Zealand, the United Kingdom, and the United States plus the predecessor of the International Accounting Standards Board—and known as the G4+1\(^{11}\)—has issued two discussion papers that recommend that the distinction between operating and finance leases be dropped (the more recent is G4+1 1999).

The first report “concluded that the distinction between operating leases and finance leases that is required by present standards is arbitrary and unsatisfactory” and that “the main deficiency in these standards … is that they do not provide for the recognition in lessees’ balance sheets of material assets and liabilities arising from

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\(^{10}\) Note that there is no discussion of the difference between risk that should be priced and risk that is fully diversifiable and therefore need not be priced.

\(^{11}\) The “4+1” is confusing as there are 5 national standard-setting bodies plus one international body. Does it reflect an application of the accounting concept of materiality?
operating leases” (G4+1 1999: 2153). Under the proposed approach, a reporting entity would report the present value of required payments under any lease as a liability in its balance sheet and also recognize a corresponding asset, reflecting the right to receive the leased services.

The application of this principle to all long-term purchase contracts would seem to solve the accounting problems discussed above. It would also obviate the need for the detailed analysis of the allocation and significance of risks set out in the UK Accounting Standards Board’s Application Note F and the accompanying UK Treasury guidance. All the government as purchaser would need to do would be to determine the present value of the minimum payments it had contracted to make.

The second G4+1 report (1999) is at pains, however, to argue that the logic of its proposal does not apply to long-term contracts for services. At least part of the Group’s motivation for excluding contracts for services from the scope of their proposals appears to be to avoid effects that would be even more wide-ranging, controversial, and inconvenient for reporting entities.

Whatever the motivation, the Group argues that lease contracts are unlike contracts for services because they cease to be executory at the point that the property is made available to the lessee—which is typically at the beginning of the lease. In the case of contracts for services, on the other hand, the Group argues, the contracts continue to be executory throughout their term, and liabilities only arise as services are delivered.

The Group argues that leases therefore create unconditional rights and obligations from the time the property is made available, in contrast to the case of a contract for services, in which rights and obligations are conditional:

While a contract is executory, the rights and obligations arising for a purchaser may reasonably be viewed not as the right to receive the goods in the future and an obligation to pay for them (i.e., they do not give rise to separately recognizable assets and liabilities). Rather, the purchaser has a conditional right (it has the right to receive the goods only if it pays for them) and a conditional obligation (it must pay for the good only if they are supplied).

The argument is not wholly convincing. For example, the Group admits in a preceding paragraph that the lessee’s rights under a lease are conditional on the lessee’s keeping the conditions of the lease—for example, paying the lease fee (G4+1 1999: 2166).

In any case, the proposed distinction between leases and contracts for services seems not to reflect any major economic difference between the financial positions of the lessor and purchaser. For example, the lessor and the both purchaser have obligations that reduce their future flexibility and thereby increase their financial vulnerability. In arguing against distinguishing operating and finance leases, the Group recognizes the importance of such considerations and cites in support of its
proposal evidence that investment analysts and others are in fact reworking the financial statements of the companies they analyze to include the capitalized value of operating leases as assets and liabilities (G4+1 1999: 2162). It is interesting to note, therefore, that in discussing how financial analysts should treat take-or-pay and other similar arrangements such as throughput contracts one set of accounting experts argue straightforwardly that analysts should ignore the accounting the distinctions:

As take-or-pay contracts and throughput agreements effectively keep some operating assets and liabilities off the balance sheet, the analyst should add the present value of minimum future commitments to both property and debt [White, Sondhi, and Fried (1998: 548)].

Moreover, in considering commitments under firm take-or-pay contracts, the Group prefers at one point not to confront the conceptual issue head on and to state that such contracts are beyond the scope of its paper:

For those contracts, it may be argued that the signing of the contract is the significant act of performance (rather than delivery or some other act of performance); therefore, the contract ceases to be executory at that time. Whilst the Group acknowledges that the accounting model proposed in this Paper may be appropriate for those contracts, those contracts are beyond the Paper’s intended scope [ICAEW, 2003: 2168].

In any case, the Group also suggests that the take-or-pay contracts seen in private infrastructure projects and public–private partnerships are likely to require recognitions of assets and liabilities. They give examples from electricity and water (as well as telecommunications):

There may also be contracts for the provision of services which in substance comprise a lease of the property used by the supplier to generate the services. For example, a contract to purchase electricity from a power station might appear to constitute a lease of the station ... for example, where the power station has been built to the specifications of the customers, who takes all or most of the output, and there is no real opportunity for the supplier to obtain alternative customers for that output ...

... where the purchaser receives services from a dedicated facility, such as a water treatment plant located next to a paper mill, the contract may well constitute a lease of the service provider’s asset and thus should be accounted for as a lease [2172].

While the costs of preparing and auditing financial reports need to be weighed against the benefits of better information, it would appear to be useful for

Note also that Wilson and others (2001: 1953) argue that not recognizing liabilities and assets arising from executory contracts has “little theoretical justification” in the context of UK accounting principles, but is rather “pragmatic”.

43 of 50  February 18, 2004
governments and accounting standard-setters to continue to move toward the continuous fair-value view.

In particular, it would appear sensible to drop the distinctions between operating and finance leases and between leases and contracts for services.
Glossary

Asset. A resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise (IASB 2003a: G-2).

Capital lease. See finance lease.

Commitment.

Contingent asset. Not used in this paper, except in quotations: see contingent obligation. Accountants in the United States counsel against use of the term “contingent asset” because contingent assets are not assets as the latter are defined; they use “loss contingency” instead (Stickney and Weil, 1997: G-21). According to IFRS, however, a contingent asset is a possible asset that arises from past events and whose existence will be confirmed only the occurrence or nonoccurrence of one or more uncertain future events not wholly within the control of the enterprise (IASB 2003a: 37-12).

Contingent benefit. A right that may generate a future inflow of resources. Roughly the same as “gain contingency” in US parlance.

Contingent liability. Not used in this paper, except in quotations. Accountants in the United States counsel against use of the term “contingent liability” because contingent liabilities are not liabilities as the latter are defined; they use “loss contingency” instead (Stickney and Weil, 1997: G-21). According to IFRS, however, a contingent liability is (a) a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or nonoccurrence of one or more uncertain future events not wholly within the control of the enterprise; or (b) a present obligation that arises from past events but is not recognized because: (i) it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or (ii) the amount of the obligation cannot be measured with sufficient reliability (IASB 2003a: 37-12–13).

Contingent obligation. An obligation that may require a future outlay of resources. Roughly the same as “loss contingency” in US parlance.

Contingency. Not used in this paper, except in quotations. But in the United States, a contingency is an existing condition, situation, or set of circumstances involving uncertainty as to possible gain (a gain contingency) or loss (a loss contingency) to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur (FASB 2001: 8317).

Derivative. According to IFRS, a financial instrument (a) whose value changes in response to the change in a specified interest rate, security price, commodity
price foreign exchange rate, index of prices or rates, a credit rating or credit index, or similar variable (sometimes called the “underlying”), (b) that requires no initial net investment or little net investment relative to other types of contracts that have a similar response to changes in market conditions, and (c) that is settled at a future date. (IASB 2003a: 39-16). According to US GAAP, a financial instrument or other contracts that have (1) one or more underlyings and one or more notional amounts (or payment provisions or both), (2) no initial net investment or a smaller net investment than required for contracts expected to have a similar response to market changes; and (3) terms that require or permit (a) net settlement, (b) net settlement by means outside the contract, or (c) delivery or an asset that results in a position substantially the same as net settlement (Delaney and others 2002: 173).

Disclose. Show in notes to the accounts without recording in the main financial statements themselves.

Executory contract. See S and W: G-39]

Fair value. The amount for which an asset could be exchanged or a liability settled, between knowledgeable, willing parties in an arm’s length transaction (IASB 2003a: G-13).

Finance lease. A lease that transfers substantially all the risks and rewards incident to ownership of an asset, whether or not title is transferred (IASB 2003a: 17-8). A capital lease in US parlance.

Financial instrument. According to IFRS, any contract that gives rise to both a financial asset of one enterprise and a financial liability or equity instrument of another enterprise. A financial asset is any asset that is (a) cash, (b) a contractual right to receive cash or another financial asset from another enterprise, (c) a contractual right to exchange financial instruments with another enterprise under conditions that are potentially favorable, or an equity instrument of another enterprise. A financial liability is any liability that is a contractual obligation (a) to deliver cash or another financial asset to another enterprise or (b) to exchange financial instruments with another enterprise under conditions that are potentially unfavorable (IASB 2003a: 39-15). According to US GAAP, cash, evidence of an ownership interest in an entity, or a contract that imposes on one entity a contractual obligation to deliver cash or another financial instrument to a second entity, or to exchange other financial instruments on potentially unfavorable terms with the second entity, and conveys to that second entity a contractual right to receive cash or another financial instrument from the firm entity or to exchange other financial instruments on potentially favorable terms with the first entity. For purpose of this definition, contractual obligations include those that are conditioned upon the occurrence or a specified event as well as those that are unconditional (Delaney and others 2002: 173).
Fund. An asset or group of assets [such as cash] set aside for a specific purpose (Stickney and Weil, 1997: G-44). A fund is not a reserve or a provision.

Gain contingency. Not used in this paper, except in quotations. See contingency, contingent benefit, and contingent asset.

Lease. An agreement in which one party conveys to another in return for a payment or series of payments the right to use an asset for an agreed period of time (IASB 2003a: 17-8).

Liability. According to IFRS, a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits (IASB 2003a: G-22). According to US GAAP, an obligation that will result in a sacrifice of resources with a probability greater than 0.5, where sacrifice of resources cannot be avoided, results from a transaction that has already occurred, and can be valued with reasonable precision (based on Stickney and Weil, 1997: G-56).

Loss contingency. Not used in this paper, except in quotations. See contingency, contingent obligation, and contingent liability.

Operating lease. A lease that is not a finance lease (IASB 2003a: 17-8).

Provision. According to IFRS, A liability of uncertain timing or amount (IASB 2003a: 37-11) (that is, an item in the balance sheet, not the income statement). In the United States, by contrast, the term is used to refer to an expense of an uncertain amount; for example, “provision for income taxes” means in the United States, “estimate of income tax expense” (that is, an item on the income statement, not the balance sheet).

Recognize. Record in the main financial statements (contributing to profit and net worth, for example).

Reserve. According to Stickney and Weil (1997: G-77), “reserve” was used in the past to refer to an estimated liability, such as for warranty costs—that is a provision in the IFRS sense defined above. It is still used, in the United States, to refer to an account that appropriates retained earnings and thereby restricts dividends—a practice that is, according to Stickney and Weil rare. Not defined in the IASB 2003a Glossary, but used in roughly this sense. A reserve is not a fund.

Traditional accrual accounting. A hypothetical putatively representative version of accrual accounting from some time in the past

Underlying. In US GAAP, any variable (financial or physical) with (1) observable changes or (2) objectively verifiable changes such as a credit rating, insurance index, climatic or geological condition (temperature, rainfall)—as well as, for
example, a stock price, interest rate, currency rate, commodity price, or related index (Delaney and others 2002: 175).
References


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