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Contingent Liabilities: Issues and Practice

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Abstract

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Contingent liabilities have gained prominence in the analysis of public finance. Indeed, history is full of episodes in which the financial position of the public sector is substantially altered—or its true nature uncovered—as a result of government bailouts of financial or nonfinancial entities, in both the private and the public sector. The paper discusses theoretical and practical issues raised by contingent liabilities, including the rationale for taking them on, how to safeguard against the fiscal risks associated with them, how to account and budget for them, and how to disclose them. Country experiences are used to illustrate ways these issues are addressed in practice and challenges faced. The paper also points to good practices related to the mitigation, management and disclosure of risks from contingent liabilities.

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I. INTRODUCTION

Contingent liabilities have gained prominence in the analysis of public finance and the assessment of the true financial position of the public sector. The focus on contingent liabilities reflects the increased awareness of their ability to impair fiscal sustainability. History is full of examples when governments were faced with budgetary “surprises.” While most of these surprises are not material, some can be large enough to put the public debt on an unsustainable path—particularly the implicit contingent liabilities governments take on during periods of economic and financial distress by bailing out banks, subnational governments, and public or even private enterprises.² The focus on contingent liabilities also reflects public concern that contingent liabilities are attractive to politicians who, in the face of hardened budget constraints, find them to be a “cheap” instrument for achieving their objectives. Faced with short horizons, politicians are subject to perverse incentives to switch from direct budgetary support (grants, subsidies, direct lending)—which is explicitly recorded in the budget and hence easily scrutinized and debated—to *stealth* support through contingent liabilities, which under the cash budgeting system have no costs, and bypass the scrutiny built into the budget process. Finally, contingent liabilities often lead to moral hazard, which—if not explicitly mitigated—could significantly increase the cost of the policy to the government. In the case of loan guarantees, for example, where credit risk is transferred from the private sector to the government, the private sector’s incentives to scrutinize the creditworthiness of the borrower or the viability of the project would be diminished, increasing the likelihood that the guarantee would be called.

Because of the risks they pose to the fiscal outlook, credit rating agencies are increasingly focusing on contingent liabilities in their assessment of sovereign creditworthiness, prompted in part by the lessons from the Asian crisis. Both Standard & Poor’s and Moody’s incorporate contingent liabilities in their assessment of sovereign credit risk, with particular focus on implicit liabilities from public enterprises and potential financial system bailouts, which have proven the most costly.³ In part because such liabilities are already taken into account in their credit risk assessment, both Standard & Poor’s and Moody’s indicated in the wake of the September 2008 government takeover of Fannie Mae and Freddie Mac, two of the U.S.’s government-sponsored enterprises, that the bailout did not affect the United States’ triple-A sovereign credit ratings.⁴

² The assumption of implicit contingent liabilities has accounted for the bulk of the so-called “hidden deficits” —increases in public debt that are not explained by headline fiscal balances (Kharas and Mishra, 2001). The hidden deficits come about because many contingent liabilities, even when they are recognized as such in financial statements, are often recorded below the line because of their one-off nature, leading to increases in debt that are not mirrored in the headline fiscal deficits.

³ For a discussion see Standard and Poor’s “Sovereign Credit Ratings: A Primer”, RatingsDirect, October 19, 2006, and Moody’s “Sovereign Bond Ratings”, Rating Methodology, September 2008.

⁴ See Standard & Poor’s report “Credit FAQ: What Could Change Our 'AAA' Credit Rating on the U.S. Government?”, September 2, 2008; Moody’s Credit Opinion “United States of America, Government of,”

(continued)

To avoid costly fiscal surprises, constrain politicians from unduly relying on contingent liabilities, and avoid moral hazard, several countries have put in place policies aimed at safeguarding against these risks. These policies have often responded to pressure from national parliaments, NGOs and the general public, and have also been recommended by international organizations, such as the accounting standard setting bodies, the International Organization of Supreme Audit Institutions (Intosai), the Institute of Internal Auditors, the IMF, and others. In practice, the tension between the political bias toward stealth support and the pressure for more transparency is increasingly resolved in favor of the latter. An increasing number of countries are indeed disclosing information on contingent liabilities to parliament and public, other countries have found ways to integrate the decisions to take on contingent liabilities directly into the budget process, or have put in place a comprehensive framework to safeguard against the risks contingent liabilities may engender, while others have relied on targeted measures. In form, they all seek to strengthen accountability and discipline, either through increased parliamentary involvement and scrutiny of decisions related to contingent liabilities, or through rules that place limits on the amount of contingent liabilities that can be issued. In substance, the safeguards include objective criteria guiding countries on when to take on contingent liabilities and accept the associated risks; how to allocate, transfer or share contingent liability risks with the private sector in order to mitigate moral hazard; when there is merit in making an implicit contingent liability explicit; how to efficiently manage risks remaining with the government; and what the best practices are in disclosing contingent liabilities.

The literature on contingent liabilities is sizeable. Important contributions include Polackova Bixi and Schick (2002), which outlines issues and country experiences; the OECD work on best practices in fiscal transparency and a 2005 report on best practices in managing guarantees prepared by a group of senior debt managers for the Working Party on Debt Management (OECD, 2001 and 2005a); Irwin (2003, 2007); as well as the IMF's Fiscal Transparency Manual and a number of other IMF publications, including on PPPs, guarantees and fiscal risks more broadly (Hemming et al., 2006; Cebotari et al., 2008).

This paper aims at bringing together the issues related to the nature, management, and disclosure of contingent liabilities, and identifying through the survey of recent country practices emerging consensus and good practices to help guide policy makers in this area.⁵ The paper begins with a discussion of the definition of contingent liabilities, their taxonomy and accounting treatment (Section II). It then addresses issues and country practices in managing contingent liabilities, focusing on approaches to mitigating risks associated with them (Section III), management of residual risks left with the government (Section IV), and

September 9, 2008; and Moody's Special Comment, July 2008, "Government Assistance to Fannie and Freddie is no Threat to US Government's Aaa Rating."

⁵ The paper branches out from Cebotari et al. (2008).

disclosure of contingent liabilities (Section V). Finally, the paper touches on the topic of institutional arrangements for managing these liabilities (Section VI). Section VII concludes.

II. BACKGROUND

In this paper, the term contingent liability will be used in a general sense to refer to obligations whose timing and magnitude depend on the occurrence of some uncertain future event outside the control of the government. This definition highlights uncertainty with regard to timing and magnitude of the payment, and includes the possibility of the payment not coming due at all. Many alternative definitions of contingent liabilities exist, but are not germane to an economic analysis of fiscal risks. For instance, in the accounting domain, contingent liabilities are only those obligations that remain off-balance sheet; contingencies that are recognized on-balance sheet as “provisions” are not contingent liabilities under the accounting definition. In the field of statistics, the IMF’s 2001 Government Finance Statistics Manual (GFSM) defines contingent liabilities as including, in addition to guarantees, the net present value of the accrued obligations of social security schemes. In this paper, social security benefits—such as those provided to government employees or old age pension benefits provided by the government to all citizens—are not treated as contingent liabilities, as they are not contingent on future events outside government control and as a group they are certain to occur. The paper thus treats future social benefits as implicit, but not contingent, government liabilities.

There are also different views on whether contingent liabilities are actually liabilities when they are entered into or become so only when the contingent event occurs. For example, *current accounting standards* (accrual) recognize contingent liabilities at the moment they are incurred only if the contingency is deemed more likely than not to occur and if the payments that would need to be made can be reasonably measured, in which case the expected value of the payments is recognized as a liability on the balance sheet and expense in the income statement.⁶ *Current statistical standards*, on the other hand, recognize contingent liabilities only if and when the contingency actually materializes and the payment has to be made; this is largely prompted by the need to ensure a consistent set of national accounts, with no overlap between liabilities recorded in the public and private sector balance sheets.⁷ Most insight, however, can probably be gained from the *proposals to reform these standards*, which lean towards their immediate recognition as liabilities. The standard-setters came to the conclusion that the contractual obligation to enter into contingent liabilities is in itself not conditional and therefore is a liability in full right. What they found conditional is

⁶ *International Financial Reporting Standards* (IFRS) for private sector companies and *International Public Sector Accounting Standards* (IPSAS) for the public sector, developed on the basis of IFRS (see Annex I).

⁷ The *Government Finance Statistics Manual*, GFSM 2001. The cash accounting standards treat contingent liabilities similarly to the statistical standards: the expense associated with contingent liabilities is only recognize when the contingent event occurs and a payment is made (assets and liabilities are not recognized).

the amount that is required to settle the obligation, because it depends on the occurrence or nonoccurrence of uncertain future events; this uncertainty about future events can therefore be reflected in the measurement of the liability recognized, rather than in the fact of whether it is recognized or not. Under these proposals, in fact, the accounting term of “contingent liability” would disappear altogether (see Annex I for a detailed discussion of the accounting and statistical treatment of contingent liabilities).

Contingent liabilities can be explicit or implicit. Explicit contingent liabilities are obligations based on contracts, laws, or clear policy commitments. These are, with few exceptions, liabilities that the government deliberately chooses to take on. They include:

- *Loan guarantees*: state guarantees to repay a third party borrowing in case it defaults;
- *Export guarantees*: guarantee against the importer reneging on the contract, the government taking actions that preclude fulfillment of the contract, or sovereign default;
- *Other financial guarantees*: exchange rate guarantees; minimum pension guarantees under private pension schemes; income, profit, and rate of return guarantees, such as under PPP arrangements; deposit guarantees; guarantees of pension savings;
- *Government insurance programs*:⁸ crop or flood insurance, war-risk insurance;
- *Natural disaster spending*, in the case of infrastructure directly under government responsibility, such as buildings, roads, ports, hospitals, and universities;
- *Legal claims against the government* related, for example, to privatization, liquidation of agencies, and personnel management;
- *Indemnities*: commitments to accept the risk of loss or damage another party might suffer;
- *Uncalled capital*: obligation to provide additional capital on demand to an entity of which it is a shareholder, e.g. official international financial institutions;

Implicit contingent liabilities, on the other hand, are political or moral obligations and sometime arise from expectations that government would intervene in the event of a crisis or a disaster, or when the opportunity cost of not intervening is considered to be unacceptable. Implicit contingent liabilities include:

- *Bailouts* of public enterprises, financial institutions, subnational governments, and private firms that are either strategically important or “too big to fail”;
- *Natural disaster relief*, in the case of uninsured damage from natural disasters;
- *Environmental cleanup spending*.

⁸ The main difference between an insurance program and a guarantee is that with the latter there is no onus on the insured to prove the cause of the loss (NERA, 2000).

The relative importance of various types of contingent liabilities is country-specific, but implicit liabilities have generally been the most costly. In terms of incidence, by far the most widespread form of contingent liability is guarantees, particularly loan guarantees, which exist in virtually all countries. In terms of the overall impact, however, implicit liabilities are the most serious. The fiscal bill of financial system bailouts, for example, averaged about 13 percent of GDP in some 40 crisis episodes, but was as high as 55 percent (Laeven and Valencia, 2008).⁹ Standard & Poor's estimates that the average fiscal exposure to risk from the financial sector, during a reasonable worst case banking crisis, was about 27 percent of GDP across some 75 countries rated in mid-2008.¹⁰ For the U.S., this exposure was estimated by the Standard & Poor's at 24½ percent of GDP—in line with the median for the triple-A rated countries—a large portion of which has already been taken on explicitly by end-September 2008 after a string of financial sector bailouts, including that of Fannie Mae and Freddie Mac. Natural disasters and terrorist related events have also been very costly, with economic losses sometimes reaching 200 percent of GDP (e.g., Hurricane Ivan in Grenada in 2004).

III. MITIGATING RISKS ASSOCIATED WITH CONTINGENT LIABILITIES

Avoiding taking on contingent liabilities is altogether not a realistic or even feasible option for most governments. Every country—knowingly or unknowingly—has engaged in, and is exposed to, contingent liabilities and associated risks. The key question is therefore not whether to take on any contingent liabilities, but which contingent liabilities to take on and why. Emerging good practices point to the importance of dealing with risks from contingent liabilities before taking them on, particularly through an appropriate framework to guide such decisions, transferring risks or costs related to contingent liabilities to the private sector, and other safeguards, such as early parliamentary involvement and proper budgeting for the risks.

A. Frameworks for Dealing with Risks from Contingent Liabilities

Decisions to enter into contingent liabilities should follow a well-established process, ideally incorporated within a broader framework that guides their justification and puts in place safeguards against associated risks. The objective is to ensure that decision-makers understand the nature of the risks associated with the contingent liabilities, provide guidance on when contingent liabilities are an acceptable or preferable form of support, and

⁹ For example, the fiscal cost of the banking crisis was about 21 percent of GDP in the Dominican Republic (2003), 31 percent of GDP in Turkey (2001), 23–52 percent during the East Asian crisis of 1997–98 (Korea, Thailand, Indonesia), and 55 percent in Argentina (1980). Note that these are estimates of the net fiscal costs that reflect recoveries.

¹⁰ Standard & Poor's, "Sovereign Risk Indicators," July 18, 2008. Implicit liabilities associated with the financial sector are estimated on the basis of a systematic assessment of the potential for a systemic crisis and the cost of a financial system bailout in case of such crises. For a detailed discussion see Standard & Poor's, "Sovereign Credit Ratings: A Primer," October 19, 2006 or "S&P's Banking Industry Country Risk Assessments: Global Annual Roundup," August 9, 2007.

require a proper record of all decisions to take on contingent liabilities for accountability purposes.

Some countries have put in place frameworks to ensure early and comprehensive attention to risks associated with contingent liabilities. *Australia*, for example, developed guidelines on when the government should enter into arrangements involving the issuance of guarantees and other contingent liabilities.¹¹ The guidelines require, in particular, that the government not enter into these arrangements unless there is an explicitly identified risk; the expected benefits objectively outweigh the level and cost of the risks; there is a demonstrable need for the government to accept such risks; alternative options for managing these risks have been fully explored (including the provision of commercial insurance); agencies have assessed the specific risks to be covered; potential losses have been rigorously investigated and identified; the state is adequately protected; the price of the risk being borne by the government has been factored into the value-for-money consideration of the proposal; and appropriate risk management arrangements are in place. *Canada* has also introduced a set of principles to regulate the risks incurred by the government when it issues loans or loan guarantees. These principles require that: the sponsoring department demonstrate that the project cannot be financed on reasonable terms and conditions without a government loan or guarantee; the cash flow be adequate to cover repayment of debt, interest and operating cost, as well as yield a satisfactory rate of return; and where the government is requested to bear significant downside risks, considerations be given on the upside should the project prove to be successful (Schick, 2002; Currie, 2002). In the *European Union*, the European Commission has developed a framework for state aid (including guarantees) that only allows the provision of guarantees to a limited set of activities in order not to impair competition. The state aid rules determine where the money can be spent, how much can be given to an individual project, and exactly what the money can be spent on.

In case of PPPs, comprehensive frameworks to ensure proper risk taking and allocation are more common (e.g., Australia, Colombia, Greece, Ireland, Portugal, South Africa, U.K.). Given the potential costs associated with PPPs and the fact that risk transfer also determines whether or not an investment asset is considered on the government's balance sheet, risk allocation under PPP schemes is often reflected in national PPP or international legislation (e.g., EU) (OECD/ITF, 2008).¹² A common requirement of such frameworks is

¹¹ Financial Management Guidance No. 6, "Guidelines for Issuing and Managing Indemnities, Guarantees, Warranties and Letters of Comfort," September 2003.

¹² UNCITRAL (2001) recommends, on the other hand, not including risk allocation in the PPP legislation but leaving it to contracts, given that each project is different and may require a different allocation of risks.

approval of only those projects that pass the cost-benefit analysis, provide value for money,¹³ and include a rigorous assessment of risks.

Ad hoc mechanisms can also be created to ensure proper scrutiny of decisions to take on contingent liabilities. One example comes from the U.S., where Congress set up independent boards to consider loan guarantee applications under each of its four temporary loan guarantee programs introduced in the early 2000s (for the steel, oil and gas, airline, and rural television industries). The experience with these loan guarantee boards is reviewed in Gramlich (2003) and seems to be positive, in large part because of the overall strength of the U.S. institutions. The independence of the boards—which usually consisted of representatives of the Federal Reserve, the Treasury, and the relevant Department—reduced the influence of lobbying and allowed the guarantee approval process to remain at an analytical level. The main work of the boards consisted of trying to identify those guarantee applications that had positive net social benefits—that is, where the nonmarket benefits of keeping a firm alive outweighed the cost of the guarantee program to the taxpayers, including the credit subsidy cost, administrative cost and other.

B. When to take on Contingent Liabilities?

The accepted rationale for governments to take on contingent liabilities is based on arguments of the need to correct market failure.¹⁴ Market failures are generally understood in terms of the market’s inability to achieve an efficient, Pareto-optimal, allocation of resources, i.e., an allocation under which no individual can be made better off without making anyone worse off. Such failures are often triggered by: (i) imperfect information; (ii) information asymmetries (resulting in adverse selection or moral hazard); and (iii) externalities.¹⁵

- *Imperfect information.* If information is costly, agents may use inaccurate or incomplete information in their decision-making, which would result in inefficient allocations. In financial markets, this could mean that creditworthy borrowers may not have access to the credit markets or that valuable investment projects might go unfunded. Government intervention could help if the government can evaluate creditworthiness better and at a lower cost than private markets, or if it is able to collect payments more efficiently (Flannery, 1993). There is some empirical evidence to suggest that properly structured intervention (as in the case of Chile’s guarantee scheme, FOGAPE, discussed later)

¹³ The U.K. government, for example, defines value for money as “the optimum combination of whole-life cost and quality (or fitness for purpose) to meet the user’s requirement.” (see HM Treasury, 2003, “PFI: Meeting the Investment Challenge” at http://www.hm-treasury.gov.uk/media/F/7/PFI_604a.pdf)

¹⁴ For a discussion of the rationale for government risk-bearing, see, for example, FRBC (1993), Honohan (2008), and NERA (2000).

¹⁵ Other factors that force markets to move away from efficient outcomes, such as market power and the existence of public goods, are less relevant to the discussion of contingent liabilities and are not considered.

indeed improves access to credit for creditworthy borrowers that otherwise do not have sufficient collateral (Benavente et al., 2006). However, as noted by Flannery (2003), being a more efficient underwriter than private markets may provide a justification for direct lending to private parties and not necessarily for providing guarantees. Similarly, more efficient payment collection might warrant purchasing loans originated by private parties, rather than guaranteeing them, although the moral hazard problems involved need to be taken into account. If the government is not more efficient in underwriting risk or collecting on loans, it could use other tools at its disposal to deal with imperfect information, such as subsidizing private lenders' information gathering.

- *Asymmetric information.* This occurs when the parties to a contract have unequal information related to the contract (adverse selection) or when the post-contract behavior of the agent, which affects the performance of the contract, cannot be monitored (moral hazard). Insurance markets, in particular, are plagued with information asymmetry problems, which usually result in markets not providing, or individuals not purchasing, adequate insurance against certain risks (see Stiglitz, 1993). An example is the lack of affordable flood insurance in flood-prone areas or of crop insurance in areas dominated by farming, as in such areas those that purchase the insurance are those most vulnerable to loss and all those who purchase insurance are likely to suffer losses at the same time, impeding the ability of insurance companies to spread risk widely enough and over a sufficient length of time.

In extreme cases, imperfect or asymmetric information can lead to the problem of *missing risk markets*, i.e., risks are not underwritten at any price. One example of this is the unavailability of terrorism insurance coverage after September 11, 2001, prompting the United States government to adopt a program of sharing losses with the insurance industry in case of major attacks (Box 1). Such missing markets can also occur during severe economic downturns, when credit markets dry up due to perceptions of excessive counterparty and credit risk, requiring temporary government interventions to jumpstart markets and prevent further economic losses. One example of such intervention is the temporary airline loan guarantee program introduced in the U.S. immediately after September 11, 2001, to help alleviate credit disruptions for the airline industry. Another is the large-scale guarantee program for small and medium enterprise (SME) lending introduced in Japan during the 1997–98 economic and financial crisis that led to a standstill in bank lending.

- *The presence of externalities.* Externalities occur when an activity generates social costs and benefits that are not priced by the markets, and therefore occurs at inefficient levels. Government intervention can help by taxing (to discourage) or subsidizing (to encourage) such activity. This is a frequent justification for providing subsidized guarantees. EU state aid rules, for example, allow subsidization—including through guarantees—of activities that promote economic development, such as developing disadvantaged regions, promoting SMEs, research and development, the protection of the environment, training, employment and culture, where benefits are likely to outweigh any distortion of

competition. Another example are the negative externalities that are thought to occur in cases of bank failures, given the potential for a contagious run on other banks and macroeconomic disruptions. The social costs of such externalities have often justified government interventions, including through bailouts, introduction of deposit guarantees, but also through preventive measures that reduce bank insolvencies more generally.

Box 1. Market Failure and Terrorism Insurance¹

Prior to September 11, 2001, insurers provided terrorism coverage to their commercial customers essentially free of charge because the chance of property damage from terrorist acts was considered remote. After September 11, insurers began to reassess the risks and for a while terrorism insurance was scarce. Concerned about the limited availability of terrorism coverage in high-risk areas and its impact on the economy, Congress passed the Terrorism Risk Insurance Act (TRIA). The Act provides a temporary program that, in the event of a major terrorist attack, allows the insurance industry and federal government to share losses according to a specific formula. TRIA was signed into law on November 26, 2002 and renewed for another two years in December 2005. Passage of TRIA enabled a market for terrorism insurance to begin to develop because the federal backstop effectively limits insurers' losses, greatly simplifying the underwriting process.

According to the insurance industry, TRIA (recently extended to 2014) is the reason that terrorism coverage is now available. Both the U.S. Government Accountability Office and the President's Working Group on Financial Markets published reports on terrorism insurance in September 2006. The two reports essentially agree that risk from nuclear, biological, chemical, and radiological attacks is uninsurable, both because of the adverse selection involved and because of the uncertainty involved in predicting the frequency of terrorism attacks.

The United States is not the first country to establish a terrorism insurance program. Several other countries created programs to cover terrorism, either after September 11 or following earlier terrorist attacks on their own soil (Australia, Austria, Belgium, France, Germany, Netherlands, Spain, Switzerland, United Kingdom).

¹ The discussion draws on III, 2008.

Other arguments invoked to justify taking on risks through contingent liabilities

include income redistribution and international competitiveness. Because competitive markets would produce efficient, but not necessarily equitable, outcomes, governments can intervene to ensure a socially desirable income redistribution. In the context of contingent liabilities, government guarantees could keep some firms alive, and prevent increases in unemployment. In the context of deposit or export guarantees, it has been argued that a country's financial or export sectors would be disadvantaged in terms of international competitiveness if the country were to unilaterally withdraw its deposit guarantee or export guarantees when other countries offer them.

Even if a rationale exists for the government to enter into contingent liabilities, such a move is justified only if its benefits outweigh the costs and it is the most efficient means of achieving a goal. As should be the case with all decisions that involve the use of public funds, decisions to take on fiscal risks through contingent liabilities should be made on the basis of a cost-benefit analysis. This involves the determination that assuming the liability

has net (social and/or monetary) benefits and that these benefits are larger than those of alternative proposals. For example, the decision on whether to provide state flood insurance should weigh the cost of offering this insurance against the benefits of not having to provide extensive disaster relief. In cases when a monetary value cannot be assigned to all costs and benefits, alternative assessment techniques should be used, such as cost effectiveness analysis, which compares only the costs of alternative ways of achieving the same goal and chooses the one with the minimum cost. As suggested earlier and as discussed in Box 2, there are in principle relatively few situations when contingent liabilities might be preferable to other forms of budgetary support, such as direct loans or subsidies. Given the numerous and difficult considerations involved in a cost-benefit or cost effectiveness analysis, including the quantification of costs and benefits, it is good practice to put in place guidelines for the entire public sector on how to conduct such an analysis, especially if the decision-making on fiscal risks is not centralized in one institution. An example of such guidelines is the “Cost Benefit Analysis Primer” issued by the New Zealand Treasury.¹⁶

Box 2. When Are Guarantees Preferable to Other Forms of Support?¹

Alternatives to guarantees as a way of providing support to an activity or a firm include direct loans, regular budget subsidies or transfers. A clear difference between these different types of support is how they are treated in the fiscal accounts: subsidies increase the deficit and net/gross debt immediately, direct lending does not affect the deficit or net debt but increases gross debt (if the government borrows to onlend), and guarantees generally do not affect either. This may lead to a bias in favor of guarantees over direct lending or subsidies.

Guarantees could be a more efficient form of intervention than providing direct subsidies or onlending when there are numerous beneficiaries (e.g., housing or student loan guarantees, export guarantees). In such cases, issuing guarantees, only a portion of which would be called, could be less costly than providing across-the-board subsidies to all potential beneficiaries. Moreover, the administrative costs of distributing a certain amount of subsidies or loans across them could be high and it may be more efficient for the government to involve lenders (banks) with established networks to reach the potential borrowers, and guarantee their borrowing (OECD, 2005).

In many other cases, however, guarantees may not be as cost-effective, since: (i) for a given amount of credit risk, it is cheaper for the government to borrow funds and onlend them directly to the private beneficiary than it is to guarantee debt incurred by the beneficiary, if only because the private debt would carry a premium for illiquidity compared to government debt; (ii) the moral hazard created by the guarantee could create additional cost, as a beneficiary whose debt is guaranteed by the government has little incentive to minimize the risks that it takes; and (iii) guarantees could also entail additional risk because they generally bypass the scrutiny of the budget process and are a “cheap” form of support for the government, creating a bias towards supporting more risky activities that otherwise may not have passed the competition with other government resources.

¹The discussion draws on OECD, 2005a.

An important element of the cost-benefit analysis is whether the public sector is better placed to bear the risks associated with contingent liabilities than the private sector. This requires a comparative institutional analysis aimed at determining whether market

¹⁶ See at <http://www.treasury.govt.nz/publications/guidance/costbenefitanalysis>.

institutions exist and are more effective at risk-bearing than the government.¹⁷ These deliberations should take into account the possibility of “inefficient” government interventions due to political pressures and constraints, and “government failure” (see Stiglitz, 1993).

One general principle for risk-taking decisions in the context of the institutional analysis above is that risks should be borne by those better able to control their source and for whom the protection against risk is least costly. The rationale for this lies in the need to reduce moral hazard behavior, by giving incentives to those who can mitigate risk to do so. This principle has been used, for example, to support the argument for the U.S. government’s need to intervene as insurer of last resort against terrorism risk, given that the government’s actions and the objectives it pursues could influence the likelihood and intensity of terrorist threats (III, 2004). In the case of private-public partnership projects, where risk transfer is fundamental, this principle has generally translated into the transfer to the private sector of project-specific risks (such as construction, operating, and design/technical risks) that it is best placed to manage and the assumption by governments of economy-wide risks (such as force majeure, regulatory and political risks), although risk distribution has been rightly approached on a case by case basis given the different nature of projects (Figure 1 illustrates a rule-of-thumb approach on how risks could be shared in PPP arrangements).¹⁸ In cases where neither the public or private partner has an obvious advantage in managing particular risks (such as demand, financing, and project default risk), countries have followed different approaches in allocating them. In some cases, demand risk was fully transferred to the private partner (toll and shadow toll road concessions common in Europe), often resulting in subsequent costly renegotiations (Hungarian and Mexican motorway PPPs; OECD/ITF 2008), while in others demand risk was retained by the government, with sometimes costly outcomes for the government (Colombia).¹⁹ Increasingly, therefore, PPP arrangements involve sharing demand risk between the private and the public sector (Chile, Colombia, Korea).²⁰

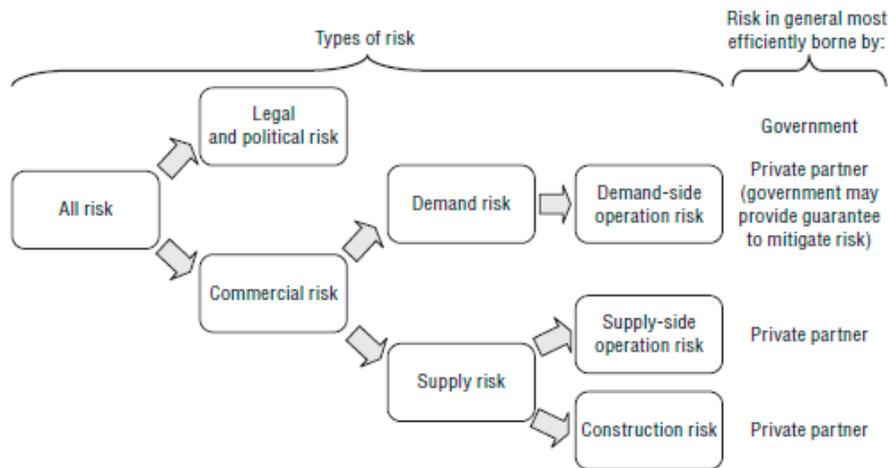
¹⁷ Good examples of such an analysis include the study by the United States’ Congressional Budget Office “Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac” (May 1996) or U.K.’s NERA report “The Economic Rationale for the Public Provision of Export Credit Insurance by ECGD” (April 2000).

¹⁸ For a discussion of the principles underlying risk-sharing arrangements in PPPs see Hemming et al. (2006), Irwin (2007), OECD/ITF (2008) and OECD (2008).

¹⁹ During the 1990s, Colombia’s PPP guarantees involved a significant number of demand guarantees, several of which were triggered partly as a result of the recession of the late 1990s, resulting in cumulative payments of 2 percent of GDP by 2004 (Cebotari et al., 2008).

²⁰ Chile, Colombia, and Korea guarantee concessionaire traffic or revenues, but the guarantees are partial and include features that ensure sharing of both downside and upside risks (OECD/ITF 2008).

Figure 1. Typical Infrastructure PPP Project Risks and Hypothetical Allocation.



Source: OECD, 2008.

C. Strategies to Transfer Risk or Costs Related to Contingent Liabilities

Risk sharing with the private sector

Once the government decides to take on risk by issuing contingent debt, it should structure these debts in ways that minimize moral hazard behavior of the beneficiary and hence the government's exposure. Banks whose lending is fully insured by the government would have few incentives to do due diligence with regard to borrowers' creditworthiness and to reduce credit risk, which would increase costs for the government. Similarly, depositors whose deposits are fully insured, will also have little incentive to do due diligence with regard to bank performance.

One of the key instruments for minimizing moral hazard is to leave some risk to be borne by the guaranteed party. This is generally achieved by limiting the government guarantee to a share of the potential losses or by setting maximum limits on financial claims that can be made under the contingent liability instrument. In the case of *loan guarantees*, for example, most guarantee schemes limit the share of the loan guaranteed by the government to 70–85 percent (Honohan, 2008). For instance, EU state aid rules prohibit the government from guaranteeing more than 80 percent of any loan, in Canada the government limits its guarantees to at most 85 percent, while the United States' Small Business Administration also guarantees up to 85 percent of the loans to SMEs. In Chile, where credit guarantees to SMEs are provided by auctioning guarantee rights to commercial banks, the auctions have in fact resulted in government guaranteeing on average 70–80 percent of the loans (Bennett et al., 2005). In the case of *deposit insurance*, depositors are usually required to bear some risk on their deposits, with only very few countries offering full coverage at some point in time (Garcia, 2000). In the case of *pension insurance*, the Pension Benefit Guaranty Corporation

in the U.S., which ensures employee pensions in case of default of the private pension fund, also stipulates a maximum level of the insured pension.

Several other instruments for sharing risks have been used. These include: (i) setting a time limit on the operation of the contingent liability instruments (Australia); (ii) including termination clauses that allow the government the option to terminate the arrangement when it is determined there is no longer a need for the instrument (Australia); (iii) requiring beneficiaries to post collateral; (iv) requiring an ownership stake, for example through stock warrants (U.S.); and (v) sharing the upside potential, in addition to the downside risks, as is done in the case of minimum revenue guarantees under PPP arrangements in Chile, Colombia, Korea (see OECD/ITF, 2008)²¹ or as provided in the contingent liability framework for Canada (Currie, 2002).

Charging for Guarantees

When the government takes on a contingent obligation in order to correct a market failure rather than to subsidize, it is good practice to shift the cost of this obligation to the beneficiary. This can be done by charging the recipient of the guarantee a fee reflecting the market cost of the guarantee, forcing him to compensate the government for the committed resources and bear the cost of the guarantee. The rationale for charging for guarantees is that, like a traditional insurance policy, the guarantee has value to the insured and imposes a cost on the insurer, hence a firm would normally be expected to pay for the guarantee an amount at least equal to its actuarial cost. If the government charges the recipient only on an *expected cost* basis, its guarantee operations would break even in the long term. However, this fee would be lower than what private market participants would normally charge, because they would also demand a risk premium to compensate them for the risk that the cost of a guarantee may be higher than expected. Therefore, the *market cost* of the guarantee would equal the *expected cost* plus a *risk premium*.²² Studies of the corporate bond market, for instance, suggest that the risk premium included in the corporate bond yield may be large and may significantly exceed the value of the expected loss.²³ In

²¹ For example, under Chile's minimum income guarantees, all bidders are guaranteed income equal to 70 percent of the investment costs plus total maintenance and operations costs, and accept an obligation to share part of the revenues obtained if traffic is higher than expected. In this way, traffic risk is shared and high losses and windfall gains are avoided. This mechanism has generally performed well; from 1995–2003, the government had to pay out only US\$ 5 million to cover revenue shortfalls from investments worth close to US\$ 5 billion (OECD/ITF, 2008).

²² The expected cost measure reflects the cost the government could be expected to bear on average over the lifetime of the guarantee, calculated as the expected annual cash payments times the probabilities of having to make them.

²³ Elton, Gruber, Agrawal, and Mann (2001), for example, show that the spread between the rates for a ten-year A-rated corporate bond and a ten-year treasury bond in the U.S. is accounted for largely by the risk premium (40 percent), less so by the differential tax treatment of the bonds (36 percent), and only to a small extent by the expected default loss (17.8 percent). Similar results were obtained in Weber (2007). There are several reasons for

(continued)

sum, it is important to avoid implicit subsidization, by charging a fee equivalent to the market cost of the guarantee. Nevertheless, if it is difficult to gauge the market cost, charging fees on the basis of expected cost or other value is clearly still preferable to not charging anything.

Most countries that charge for guarantees use market value and expected cost measures to price the guarantees. EU state aid rules, which determine the extent to which member states are allowed to provide financial assistance to firms, consider a guarantee to be aid when it gives the borrower an advantage either by enabling it to obtain funds it would not have been able to obtain otherwise or by lowering its financing costs below what it would have had to pay on the market.²⁴ Therefore, when state support is not permitted under EU rules, a *market-based fee* has to be charged to the recipient of the guarantee. When state support is permitted under EU rules, Sweden charges the guarantee fee on the basis of the expected cost unless the parliament explicitly decides otherwise.²⁵ In Norway, parliament decided that state guarantee schemes should be self-financing, and guarantee fees are charged on the basis of expected costs (Intosai, 2005). Outside of the EU, Canada also charges fees that cover the estimated cost of future losses and administrative costs (Schick, 2002), Chile started charging a fee for its minimum revenue guarantees in recent contracts,²⁶ and Colombia charges subnational governments and state-owned enterprises (SOEs) a fee for the national guarantee of their external debts (Cardona Bermeo et al., 2002). International financial institutions and most export guarantee agencies that offer guarantees against political or country risk, charge market rates for these guarantees (see Box 3 and Annex II for a discussion of how guarantees are valued).

Some countries charge flat fees proportional to the face value of the guarantee, although with some adjustment for risk. The main benefit of charging flat fees is that they allow governments to charge for the guarantees without involved calculations of expected costs. The main drawback of not charging a risk-adjusted fee could be dealt with, for instance, by risk-adjusting the charge within the flat limits or adjusting the fee with time to reflect average costs once these are known. In Turkey, for example, the legislation regulating

a large risk premium despite low probabilities of default: (i) risk-averse investors require compensation for *unexpected* default losses; (ii) with corporate bonds less liquid than government bonds, an illiquidity premium compensates investors for the risk that they might not always be able to sell the bond immediately without a discount; (iii) corporate bond returns have been found to move systematically with other assets in the market, requiring a premium for the fact that corporate bond risk is non-diversifiable; and (iv) the high correlation of corporate bankruptcies during bad times implies a higher probability of losses despite low average bankruptcy losses.

²⁴ Under the EU Treaties, government financial assistance to firms is deemed incompatible with the common market because such aid distorts competition. However, there have been allowable exceptions to the general rule, where aid to firms is deemed to serve desirable objectives.

²⁵ The Act on State Budget mentions that the fee should correspond to the state risk, while an ordinance issued by the government (a form of secondary legislation) provides more detailed instructions to the debt office on setting the fee and specifies that the fee should reflect the expected cost of the guarantee (Hörngren, 2003).

²⁶ Government of Chile, “Informe de Pasivos Contingentes,” November 2007, p. 64.

the issuance of guarantees requires that the Treasury charge a one-time guarantee fee of up to 1 percent to the beneficiaries of loan or investment guarantees.²⁷ Within these bounds, the Treasury determines the size of the guarantee fee on the basis of expected loss estimates that take into account the past performance and some of the financial ratios of the beneficiaries.

Box 3. Estimating the Expected Cost and Market Value of Guarantees

The methods for estimating expected costs or market value range from educated guesses, to market or historical data, to quantitative models, such as option pricing and simulations (these are discussed in more detail in Annex II).

The choice of method depends generally on the availability of data and the cost of the method. Valuations based on market data are used when the borrower issues debt quoted in the market or when it is relatively easy to find comparable companies that do so. If these are difficult to find, simulation methods are frequently used instead, but these may be time consuming and expensive to develop, and hence may be cost effective only if the guaranteed amounts are large. Otherwise, if the guarantees are relatively small, an option pricing model may be a good substitute (Hagelin, 2003). In cases where data are so limited that neither method is feasible, a simple classification of guarantees into high, medium, low, or very low default risks (with associated probabilities of default)—based on available information or educated guesses—could be employed to assess expected losses. Any reasonable approach will produce better estimates of the cost of loan guarantees than the cash-based approach that will always assume zero cost in the budget year.

Countries that price guarantees, therefore, generally use all of the above methods. Sweden, for example, uses market data, option pricing and simulations for pricing guarantees. Chile, Colombia, and Peru use simulations to estimate contingent liabilities associated with minimum revenue guarantees under PPP arrangements. Chile also used option pricing methods to value exchange rate guarantees under PPP arrangements, when these were provided. The Federal Deposit Insurance Corporation in the U.S. uses expected loss estimates derived from historical and institution specific loss data, and Korea uses investment rating agencies to assess the likelihood of payments on explicit contingent debts.

A flat fee is also used in the case of guarantee programs involving many borrowers, but these generally aim to reflect the average cost for the program as a whole. For example, guarantee programs for SMEs in a wide range of emerging economies charge commercial banks benefiting from the guarantee a fee ranging from 0.25–6 percent of its face value (see Bennett et al., 2005, for details on such programs). As the guarantee programs expand and gain experience, the rates are often adjusted to bring the fee closer to the actual cost of the guarantees.²⁸ Similar principles underlie the fee structures for many deposit guarantees and guarantees against default of private pension funds. The deposit insurance systems in about 60 countries surveyed in Garcia (2000) levied premiums that ranged from 0–2 percent

²⁷ Law No. 4749 “Regulating Public Finance and Debt Management,” 2002.

²⁸ In June 2004, the Chilean FOGAPE scheme increased its annual charge from the previous rate of 1 percent to a rate of between 1–2 per cent of the loan amount depending on the guarantee default performance of participating banks (hence the risks involved), with the fees currently covering the average default rate of 1.05 percent on credits receiving the guarantee (Honohan, 2006; Benavente et al. 2006).

of deposits, but an increasing number of countries risk-adjust their premiums to match the risk profile of the financial institution.

The objectives of charging for guarantees could sometimes be undermined by underpricing the guarantees or underwriting too many fee-based guarantees. To make this less likely, the decision to issue guarantees should be kept separate from that on pricing the guarantees and adequate information on all guarantees should be disclosed.

- *Underpricing the guarantees.* In cases when ministries sponsoring the guarantee are responsible for assessing the cost of the guarantee, they may be tempted to underestimate these costs so as to facilitate the projects they are promoting. As a general principle it is therefore important to separate the decision on what guarantees to issue (which should be taken by the authorities that take decisions on spending) from that on what fees to charge for the guarantees, so as to ensure an unbiased assessment of costs and risks. In several countries, responsibility for assessing the cost of the guarantee is delegated to the public debt office (e.g., Colombia, Sweden). In the U.S., on the other hand, the departments themselves price the guarantees, i.e., assess the appropriations that will be charged against their budgets, although the Office of Management and Budget has overall responsibility for the estimates. Because appropriations for increased cost of guarantees due to factors outside government control are automatic (i.e., do not need new appropriations), the sponsoring departments may have an incentive to underestimate the cost of the guarantees. Studies by the Congressional Budget Office and the General Accounting Office, however, have not found evidence of systematic bias, possibly due to the checks and balances built into the United States budgetary institutions (Kraan, 2004; Honohan, 2008). Incentives to underprice the risk associated with guarantees could also be mitigated by issuing clear guidelines on the methodology for pricing contingent liabilities.
- *Excessively underwriting guarantees.* If guarantee fees are recorded as revenues in the budget but the expected cost of the guarantee is not appropriated as an expenditure, the issuance of a fee-based guarantee would appear to improve the fiscal position. This could also happen if the guarantee fee system is administered through off-budget guarantee funds and the net lending of the institution administering it is part of the overall fiscal balance.²⁹ To counteract such incentives, it is important to ensure that information on the value of outstanding guarantees and the expected cost of the guarantee commitments are adequately reported to the parliament and public, as is done in Sweden, for example.³⁰

²⁹ The payment of the guarantee into the fund would reduce net lending and improve the fiscal position, and a payment under the guarantee would increase net lending and deteriorate the fiscal position.

³⁰ In Sweden, when the guarantee is subsidized and the budget of the sponsoring line ministry is charged the guarantee fee, the subsidy cost of the guarantee is recorded as expenditure in the budget. On the other hand, when the guarantee is not subsidized and the fee is received from the private sector, it goes directly to the off-budget guarantee fund and is not recorded as budget revenue (nor is the payment on the guarantees).

Other mechanisms to mitigate these incentives, as discussed below, include budgeting for the full subsidy cost of the guarantee and/or placing an overall ceiling on the stock or flow of guarantees.

D. Other Safeguards against Risks Related to Contingent Liabilities

Parliamentary Approval of Contingent Liabilities

A further way of limiting exposure to contingent liabilities is to ensure parliamentary involvement in the decision to take on contingent liabilities. This could range from receiving information about the contingent liabilities that are taken on and how they can be expected to affect the fiscal position in the future to direct approval of contingent liabilities. The rationale for the latter rests on the similarities between conventional and contingent debts. Explicit contingent debts, just like conventional government debt instruments, are based on contracts or laws, involve a commitment of resources that cannot be freely used for other purposes, and affect deficits and debt in similar ways (OECD, 2005a). Therefore, contingent expenditures should be treated in ways similar to conventional expenditures and decisions about them should be taken by the parliament in the context of the traditional budget process.

Parliamentary approval of contingent debts is required in many countries. About half of the OECD countries require parliamentary approval of loan guarantees (including Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Italy, Poland, Spain, Sweden, U.K., U.S.) and about a third require parliamentary approval of PPPs (including Denmark, Iceland, Italy, Mexico, Norway, Poland, Sweden, Turkey, U.K.) (Lienert and Jung, 2004; OECD, 2007). Other countries where parliamentary approval of various contingent liabilities is required include Brazil, Chile, Colombia, Mexico, Peru, Russia. Generally, the requirement for parliamentary approval of loan guarantees is included in ordinary laws (budget system laws or specific debt or borrowing laws), although in Finland and Germany this requirement is written in the constitution (Lienert and Jung, 2004). In Sweden, the State Budget Act allows the government to issue guarantees for purposes and amounts that are approved by parliament. In some countries, the authority to approve contingent debts rests with the ministry of finance (South Africa, although the public entities that issue guarantees are required to report to parliament on the circumstances related to any payment on the guarantees).³¹

However, the net lending of the Swedish National Debt Office, which administers the fund, is included as part of the overall fiscal balance.

³¹ In South Africa, a guarantee certification committee, made up of officials from the National Treasury, reviews all requests for issuing of guarantees to state-owned entities, including the associated financial and other risk exposures, and makes a recommendation to the Minister of Finance. The committee's mandate also includes the management of all other contingent liabilities that may affect the budget.

Parliamentary approval can apply to individual guarantees, guarantee programs or the overall guarantee budget, or a combination of these. In some countries, guarantees are approved on an individual basis, although this normally applies to large guarantees. In the Czech Republic, for example, the proliferation of state guarantees during the transition to a market economy led to a significant tightening of the guarantee policy in 2001, when guarantees were made subject to parliamentary approval on an individual basis. As a result, few guarantees were issued during 2001–03 and the government moved gradually to overall annual limits on guarantees.³² Approval of guarantees by program is more common, especially where guarantees are authorized through individual legislation. In Chile, for example, guarantees of SOE borrowing are approved by parliament through individual laws. The practice of capping the overall budget for government guarantees is also widespread. Countries that have imposed overall ceilings on government guarantees, some as combined debt and guarantee ceilings, include Bulgaria, Canada, Czech Republic, Hungary, India, Israel, Japan, Kazakhstan, Latvia, the Netherlands, Pakistan, Portugal, Russia, Sri Lanka, South Africa, Tunisia, and Tanzania (Hemming et al., 2006, and country legislation). One of the benefits of an overall ceiling on guarantees is that it forces trade-offs between guarantees and hence prompts increased scrutiny. Ceilings are also a direct and efficient tool for stemming the growth of guarantees.

The ceiling on contingent liabilities can be set either on the *stock* of guarantees or on the *flow* of new guarantees to be issued during the year. Limiting the *stock* of the guarantees could be difficult in countries that do not have comprehensive information on all guarantees issued in the past, due to frequent revisions of stocks. Such limits have worked, however, in South Africa, where the National Treasury’s risk management guidelines limit the sum of net debt and contingent liabilities (measured at face value) to 50 percent of GDP. Most countries with limits on guarantees set them on the *flow* of new guarantees that can be issued during the next budget year or over a number of years (e.g., Chile, India, Netherlands, Norway, Pakistan, Portugal, and Russia).

PPP-related liabilities could also be limited under guarantee, debt, or separate PPP ceilings. Since commitments under PPP arrangements are largely in the form of guarantees and since PPPs can be interpreted as a form of financial lease, countries whose debt limits include guarantees or financial leases could include PPP liabilities under the debt or guarantee ceilings. Alternatively, separate ceilings can be set on the overall size of the PPP program (stocks) and/or on the annual PPP-related payments (flows), which would help limit the government’s overall exposure to risks from PPPs. While such ceilings are usually defined in terms of the net present value or flows of noncontingent commitments, such as availability payments or subsidies (Brazil), they can be extended to include the present value

³² IMF, “Czech Republic: Report on the Observance of Standards and Codes—Fiscal Transparency Module—Update,” August 2004.

of contingent liabilities under PPPs as methods and capacity for quantifying guarantees improve.³³

Limits or strict control over issuance of contingent debt by subnational governments are also imposed in several countries, largely because of an implicit understanding that the central government stands behind subnational government obligations, even if there is no explicit guarantee. In South Africa, the Municipal Finance Act of 2003 stipulates that municipal debt guarantees can only be issued with national government approval and only if the municipality creates a cash-backed reserve or purchases insurance to cover the debt.

External Control Over Contingent Liabilities

Scrutiny of contingent debts by the national audit offices also helps instill discipline in taking on and managing contingent liabilities. The auditing of contingent debts by countries' supreme audit institutions (SAIs) is quite widespread, although its scope varies. In a 2004 survey by the international organization of Supreme Audit Institutions (Intosai), all fifteen respondent countries stated that the responsibilities of their SAI included oversight and/or audit of contingent debts, although in several cases this responsibility is limited to verifying the accuracy of contingent liabilities as disclosed in financial accounts or compliance with the legislative framework for issuing such liabilities (e.g., Canada).³⁴ Nevertheless, the majority of the surveyed SAIs had the possibility, if not the obligation, to audit the future consequences of today's budget or other economic decisions made by the government, implying that they could also examine the fiscal implications of contingent debts (e.g., Lithuania, Mexico, Portugal, Sweden) (Intosai, 2005). Indeed, about half of the countries reported having conducted performance audits relating to contingent debt, with a view to showing the existence of large fiscal exposures that could result in an outflow of state funds (Lithuania); assessing value for money on the management of guarantees (Sweden); or focusing on various aspects of government guarantee schemes (Norway). The SAI findings are generally reported to parliament, either as stand-alone reports or through annual reports on the work of the SAI.

While SAIs do not play a role in setting policies for the mitigation, management or disclosure of contingent liabilities, they have an important role to play in their improvement, by focusing policy-makers' attention on weaknesses and vulnerabilities in the existing practices. The public debt committee of Intosai recommended that: (i) countries should consider the merits of extending the mandate of the SAI to undertake financial and

³³ In Brazil, the PPP law limits the total financial commitments that can be undertaken in PPP contracts to a maximum of 1 percent of annual net revenue for all levels of government. When subnational governments exceed this limit, the federal government is authorized to withhold voluntary transfers.

³⁴ See Intosai, 2005. Countries surveyed include Argentina, Brazil, Bulgaria, Canada, Fiji, Finland, Lithuania, Mexico, Norway, Portugal, Russia, Republic of Korea, Sweden, United Kingdom and the United States.

performance audits on contingent debt; (ii) this audit work should reflect SAI's and parliament's assessment of the relative importance of this subject while making an appropriate contribution to parliamentary accountability; (iii) the SAI could add value through the examination of how the government identifies and classifies its liabilities, including contingent debts; (iv) when examining the expected cost of contingent debts, the SAI should consider whether all liabilities that can be quantified have been properly quantified, whether appropriate descriptive information is produced about nonquantifiable debts, and whether proper attention has been paid to implicit liabilities and their quantification; (v) when considering the adequacy of arrangements for reporting contingent debts to parliament, the SAI should assess them against the criteria of completeness, understandability, accuracy, regularity, and consistency; (vi) the SAI should also consider whether the amounts budgeted for contingent debts are adequate to cover the likely costs; and (vii) when examining the risk management processes around contingent debt, the SAI should consider whether the arrangements in place are appropriate for the country's specific circumstances and whether there are practical improvements that should be made.

Budgeting for the Subsidy Cost of Contingent Liabilities

Another way to correct the bias towards guarantees is to have them compete on an equal footing with other forms of government support, such as direct subsidies or transfers. This can be done by including the expected cost of the guarantee (i.e., its subsidy element) as an expenditure appropriation in the budget of the sponsoring department. This is done in countries that budget on an accrual basis, as well as in Canada, Colombia, Netherlands, Sweden, and the United States. Budgeting for the subsidy cost of the guarantees implies that guarantee programs require parliamentary authorization when new guarantees are made. Budgeting also ensures that the guarantee is acknowledged, its cost is internalized, and the incentives to rely on guarantees to disguise the true cost of the subsidy to the budget are eliminated. The latter two benefits would only come about if budgeting for the guarantee forces line ministries to forgo some other expenditure. In Sweden, for example, this crowding-out mechanism in the budget works almost automatically, since the budget contains strict annual expenditure ceilings determined by the parliament early in the budget process (Hörngren, 2003). Even if crowding out does not occur, the benefit of recording the expenditure in the budget remains.

The expected cost of the guarantee could be budgeted on either a net present value or an annual basis. In Canada, Netherlands, New Zealand, Norway and the United States, the net present value of expected guarantee costs are appropriated as expenditures in the year the guarantee is issued, effectively budgeting for them on an accrual basis (Schick, 2002; Kraan, 2004), whereas in Sweden and Colombia the annual expected losses under the guarantee are budgeted essentially on a cash basis. The United States adopted the Federal Credit Reform Act in 1990, which requires that the estimated long-term cost of a loan guarantee be calculated on a net present value basis and included in the budget of the government entity

issuing the guarantee. This cost is reestimated annually on the basis of the latest data and an automatic expenditure appropriation is provided when costs increase due to factors outside government control (Schick, 2002). In Canada, departments sponsoring the guarantees are required to provision for these guarantees upfront when these are issued, either from the guarantee fees they charge or from their annual appropriations. In Sweden, if parliament decides that the recipient of the guarantee does not have to pay the guarantee fee, budget expenditures—equivalent to the expected annual losses under the guarantee—are provided to cover the fee. Similarly, in Colombia, the annual expected losses under PPP-related guarantees are translated by the public debt office into an annual schedule for guarantee fees, which are paid by the public entities involved in PPPs into a guarantee fund, by way of ensuring the availability of payment when the contingency is called (Cardona Bermeo, et al., 2002).³⁵ More generally, the fiscal responsibility legislation requires the Colombian government to budget at least 15 percent of the liabilities that affect future budgets during the year in which their issuance is authorized (with few exceptions).³⁶

Countries that prepare their budgets on an accrual basis by definition appropriate the expected cost of those contingent obligations that meet the recognition criteria of a liability (Australia, Denmark, New Zealand, U.K.). In the U.K., for example, while the parliament approves an annual cash-based budget, it also scrutinizes the 3-year forward budgets presented by the government, which include both cash and non-cash expenditures. Under the latter, the government provisions for the expected cost of the guarantees it plans to issue during the coming three years as long these meet the recognition criteria under the accounting standards (see Annex II). The forward expenditure ceilings are binding, and departments that want to issue additional contingent liabilities would be expected to forego other expenditures to accommodate the cost of these liabilities. A few OECD countries have adopted accruals for specific transactions in the budget—most frequently the recording of interest on the public debt and employee pension costs, although as mentioned above, the U.S. has introduced also accrual budgeting for loan guarantees.³⁷

Budgeting for the subsidy cost of the guarantee is not easy in practice, even though it is recognized as an appropriate treatment of guarantees (Kraan, 2004; OECD, 2005a). The difficulties generally lie in the estimation of the expected costs (costly models, difficulties in choosing appropriate discount rates) and the need to periodically reestimate these costs and

³⁵ The fees are set for each type of risk under each project, and are tracked separately in the contingency fund. The fees are budgeted by public enterprises as debt payments, which are protected from expenditure cuts.

³⁶ This appropriation requirement does not apply, however, to PPPs and to exceptional cases of public works in infrastructure, energy, communication, aeronautics, defense, and security. As a safeguard, the Superior Council for Fiscal Policy (Confis), which authorizes the issuance of these liabilities, needs to report quarterly to parliamentary commissions on the authorized liabilities issued under these exceptions.

³⁷ See Blöndal, 2004, for a discussion of the use of accrual budgeting in OECD member countries.

secure additional appropriations.³⁸ There is also some resistance to budgeting only for selected items on an accrual basis.

Limiting Risk from Implicit Liabilities

Available evidence suggests that implicit contingent liabilities are by far the most costly. This is largely due to their open-ended nature, which imposes a cost on the state that is usually much higher than the cost of explicit liabilities. Indeed, Honohan and Klingebiel (2003) found that governments that provided, ex-post, open-ended liquidity support and blanket deposit guarantees incurred much higher costs in resolving financial crises than those that relied on explicit limited support. The inability of governments to credibly commit themselves to not bailing out uninsured depositors, interconnected and systemically-important financial institutions, or farmers affected by natural disasters—with such commitments frequently proven time inconsistent—creates significant moral hazard, leads to inadequate loss-prevention efforts on part of the potential beneficiaries, and increases the cost of the implicit liability. A 2006 survey by the Reserve Bank of Australia showed that expectations of government bailout were pervasive and powerful, making it politically difficult for a government to ignore them.³⁹ The survey revealed that the bulk of the population thinks their deposits are guaranteed or that the government would step in to make sure that their deposits were repaid in full or in part in the event of a financial institution's failure, even though the country had no deposit insurance and in fact had an explicit no-bailout policy for the financial sector. Since then, the Australian authorities have worked out more explicit arrangements for giving depositors in failed institutions early access to some of their funds, with a view to avoiding public expectations of massive bailout and hence control the risks.

The first line of defense against the risks posed by most implicit contingent liabilities is a strong regulatory framework. This applies equally to the implicit liabilities stemming from subnational governments, state-owned enterprises or the banking system. The two basic pillars of the framework for managing risk from these sources include: (i) *ex-ante regulation*, which involves ex-ante controls over the behavior of the institutions (such as limits on borrowing, deficits, risk-taking) and monitoring of their fiscal/financial positions by a central institution; and (ii) *ex-post insolvency mechanisms*, which would help enforce hard budget constraints and would create clear expectations about ex-post risk sharing, thereby mitigating moral hazard associated with the expectation of a possible bailout of these institutions. The specific tools used to mitigate risks would of course depend on the source and the nature of the risk. For example, in the case of subnational governments, as discussed in Liu (2007),

³⁸ Some countries provide additional appropriations automatically (New Zealand, the United States), although the experience in the United States has shown that the additional appropriations could be large (Kraan, 2004).

³⁹ See Reserve Bank of Australia, Financial Stability Review, March 2006.

ex-ante borrowing regulations frequently include: (a) rules that restrict borrowing only to long-term capital investments (Brazil, Colombia, India, Peru, Russia, South Africa); (b) limits on key fiscal variables, such as the overall or primary deficit, debt-service ratios, and/or ceilings on guarantees (Brazil, Colombia, India); and (c) procedural requirements that subnational governments establish a medium-term fiscal framework and a transparent budgetary process (Brazil, Colombia, Peru). Insolvency mechanisms, on the other hand, include clear insolvency triggers, fiscal adjustment by the debtor, and debtor-creditor negotiations to restructure the debt obligation. The effectiveness of the regulatory framework would depend, otherwise, on the overall structure of the intergovernmental relations and on ability to maintain macroeconomic stability.

In cases where there is strong prima facie evidence that the government would assume an implicit contingent liability, costs can be minimized by making the implicit liability explicit. To the extent that the implicit guarantees are politically binding and the government cannot avoid taking them on (i.e., moral hazard is already present), making an implicit open-ended guarantee into an explicit, but limited, guarantee would cap the amount of risk government is taking and minimize fiscal costs, especially if the government charges the beneficiaries for the cost of the explicit guarantee. Examples of making implicit guarantees explicit involve the introduction of deposit insurance, flood insurance, and mandatory social security.⁴⁰ A recent example is the intervention of the U.S. government-sponsored housing enterprises (Fannie Mae and Freddie Mac) in 2008, which rendered the government's longstanding implicit guarantee of their liabilities explicit. The disadvantages of taking on an explicit liability can be dealt with through the design of the framework that replaces the implicit liability. Elements of such a framework would include: (i) compulsory membership in the insurance program, which only the government has the advantage of enforcing—this would overcome traditional pitfalls of private insurance markets such as adverse selection; (ii) tools to blunt moral hazard, such as capping the insured risk, requiring information disclosure, requiring loss-mitigation efforts, and using information available through the government's tax system to enforce loan repayment—in most of these cases using an advantage that only the government has (Stiglitz, 1993); (iii) charging a premium that reflects risks; and (iv) putting in place clear frameworks for dealing with residual risks not guaranteed by the government. An example of the latter would be comprehensive frameworks for dealing with bank failures and for strengthening prudential supervision, which would both minimize risks faced by the government and create clear expectations of what happens after the government guarantee is exhausted.⁴¹

⁴⁰ As Stiglitz pointed out: “One of the arguments for compulsory Social Security is that, should an individual fail to save for retirement, the government will find it impossible to look the other way and let that person suffer the consequences” (FRBC, 1991, p. 113).

⁴¹ In the case of deposit guarantees, the introduction of a limited explicit guarantee should be undertaken during quiet times.

Other Safeguards

In the case of PPP-related liabilities, strong involvement of the ministry of finance at the decision-making stage of PPP projects is another safeguard to ensure that government takes only necessary risks. This has typically involved requirements for minister of finance approval prior to the final decision on a PPP project, if this decision is taken by another institution, or the introduction of a “gateway” process, under which the ministry of finance reviews fiscal affordability and value-for-money at different stages of PPP project preparation, with authority to stop or suspend PPPs at various points in the project cycle (e.g., inception, tender, contract (re)negotiation, and contract signature), as in South Africa. This not only ensures that key project steps and decisions are systematically communicated to the ministry of finance, but also enables the ministry to stop or request modifications for a project proposal that is deemed too costly or risky.

IV. MANAGING RETAINED RISK FROM CONTINGENT LIABILITIES

As not all risk can be eliminated or transferred, the risks that remain with the state need to be efficiently managed. Exposure to these risks needs to be monitored systematically and mechanisms need to be put in place to deal with the consequences of realized risks, i.e., securing funding to cover losses that have occurred. In the case of high probability/low impact events, these mechanisms include setting up contingency or calamity funds or securing a flexible fiscal response through budgetary reserves to meet calls on contingent liabilities. In the case of low probability/high impact events, these include insurance, contingency credits (contracted ex ante), and emergency or reconstruction loans.

A. Instruments for Managing Low Impact Liabilities

Budget Flexibility

One way to secure financing in case of calls on contingent liabilities is to ensure budgetary flexibility to meet unbudgeted expenditures.

- This can be done by including a *contingency reserve* in the budget that could be used to meet calls on contingent liabilities. Most countries include such reserves in the budget, although it is usually small (below 3 percent of total spending). In some cases, the use of the reserve is restricted to items other than calls on contingent liabilities. In these cases, and in situations where calls on contingent liabilities are not insignificant, the anticipated payments on these should be appropriated separately in the budget (see Cebotari et al., 2008, for more details on country practices with contingency reserves).
- Another way is to rely on provisions that allow government *spending in excess of the budget*, within clear restrictions. In OECD countries, such provisions are included in the budget system laws of most countries and in a few instances even in the constitution (Austria, Finland, Germany and Japan). These provisions allow the executive to spend in

excess of the approved budget in case of clearly specified contingencies, though require parliamentary approval ex post (Lienert and Jung, 2004). In some continental European and Nordic countries, certain appropriations are labeled as “estimated”—as in the case of expenditures that are legally or contractually binding (e.g. debt service) or are difficult to estimate—and these appropriations can be exceeded without parliamentary approval, although ex-post reporting is required (Finland, France, Norway).

- Other examples of securing flexibility in dealing with realized contingent liabilities include supplementary budgets, budget reallocations, and contractual provisions that allow for a time lag between calls on guarantees and government payments (as done, for instance, under concession contracts in Chile; Hemming et al., 2006).

Contingency Reserve Funds

Contingency reserve funds have also been used secure financing when contingent liabilities are called. These funds serve as self-insurance against calls on various contingent liabilities, including guarantees, natural disasters, unemployment, and commodity price swings (Table 1 provides selected examples of such funds).

- Contingency funds for loan guarantees are usually financed by guarantee fees paid either by the beneficiaries of the guarantees or by the public entities sponsoring the guarantees, through their budgets (Chile, Colombia, Sweden, U.S.).
- Contingency funds for various insurance schemes provided by the state are usually set as insurance corporations and are funded by premia paid by the participants. For example, pension guarantee funds have been created in a number of countries in order to protect workers from their employers’ failure to honor pension obligations. In the United States, concern about the exposure of workers with underfunded defined-benefit pensions led to the creation of a government-run and supported guarantee fund in 1974 managed by the Pension Benefit Guaranty Corporation (PBGC). Such pension guarantee funds also exist in the Canadian province of Ontario (created in 1980), as well as in Sweden (1960), Finland (1962, partly privatized in 1994), Germany (1974), Chile (1981), Switzerland (1985) and Japan (1989) (Cooper and Ross, 2003).
- In cases where contingency funds aim to provide self-insurance against natural disaster, unemployment, or commodity price movements, these are often financed by transfers from the budget or earmarked taxes.
- Contingency funds are also set up to meet general budget contingencies, including potentially contingent liabilities. Several countries transfer budget contingency reserves (discussed above) into general contingency funds, to be used for expenditures that do not have approval of the legislature, in anticipation of such approval becoming available. The creation of such funds is often authorized in the constitution (Brunei Darussalam, India, Japan, Kenya) or in legislation (U.K. Contingency Fund Act 1974). The purposes and procedures for which contingency funds may be used are usually spelt out in the law. The

funds are generally managed by the ministries of finance (Japan) or by the President (India). Advances from the funds are made on request from line ministries, which need to provide a justification for their request, and need to be approved by the Cabinet. After using the general contingency fund, ministries generally need to report to the ministry of finance on how the money was used, and the government in turn needs to prepare a comprehensive report on their use for parliament, which gives an ex post authorization for the expenditures. Whereas in some countries (Japan) the amount in the contingency fund is not specified in the law and the executive determines its size (with approval of the legislature), in other countries the size of contingency funds or reserves is specified. For example, the U.K. Contingency Fund Act of 1974, which authorizes the making of urgent expenditures not yet voted by Parliament, caps such spending at 2 percent of the previous year's expenditures (Lienert and Jung, 2004). In the United States, where all but five states set up "rainy day" funds to meet unexpected expenditures or revenue shortfalls, most states cap these funds at 2–10 percent of the state's budget, although a number of states have no limit at all.⁴²

In addition to securing financing, contingency funds can make the cost of the contingent liabilities more transparent. When payments on guarantees are charged against the fund, the accuracy of the guarantee valuations can be judged over time, as fees should be expected, on average, to cover actual costs. In the case of some pension guarantee funds (U.S., Ontario Fund, the collapse of the Finnish fund in the early 1990s), it became clear that the premia paid by the employers are not adequate to cover the cost of the guarantees (Cooper and Ross, 2003). Honohan (2008) discusses examples of guarantee schemes under which net fiscal losses of up to 15 percent of the outstanding guarantees per year were incurred due to the inadequacy of charges for the guarantees. Another benefit of guarantee funds, is that when they build up a sufficient scale of operations with guaranteed lending, they have the potential to offer services similar to those of credit bureaus, useful where credit bureaus do not exist or when the guaranteed borrowers do not have an established credit history (Bennett et al., 2005).

Contingency funds can be actual or notional. Actual contingency funds (like those in Chile and Colombia discussed in Table 1) invest resources in financial assets (usually government bonds or AAA securities) and manage these assets. Notional reserve funds, on the other

⁴² The rainy day funds in the U.S. are typically funded through line-item budget appropriations or by designating portions of budget surpluses, although some states earmark a portion of the resource revenues to fund them. The use of the funds generally requires a simple parliamentary majority, with some states requiring a supermajority of 60 percent or more. Some states impose further limits on the use of the funds, including ceilings on the annual amount that can be withdrawn and requirements to pay back the used funds within a certain time limit. For more details, see "A Primer on State Rainy Day Funds," the Institute of Taxation and Economic Policy, Policy Brief No. 25, 2005, and "State and Local Tax Policy: What are rainy day funds and how do they work?," K. Rueben and C. Rosenberg, Tax Policy Center, Urban Institute and Brookings Institution, April 2008.

hand, are government finance accounts to which resources are paid and tracked, but which are pooled into the treasury single account and are therefore not invested separately (U.S., the Swedish guarantee fund).⁴³ Because the resources from the actual funds cannot be used for general financing purposes, government's borrowing requirements and hence gross debt are higher relative to notional funds. Net debt, however, would be similar under both types of funds, since the deposits held by the actual funds would offset the higher gross debt. The choice between actual and notional funds will depend on the country's financial management practices and other considerations. These include, for example, whether governance structures are adequate for properly managing the assets and the associated risks, and whether setting actual resources aside for the payment of guarantees would be helpful in restricting their use elsewhere (see OECD, 2005a).

The fees paid into the contingency funds can be earmarked for specific guarantees or not. Guarantee funds are frequently set up for different guarantee programs (export guarantees, housing, student loans), often for practical reasons when these programs are managed by different institutions. Some countries earmark the fees to payments on the specific guarantees that gave rise to them. In Colombia, for example, public entities maintain a separate account with the Contingency Fund for State Entities for each project and for each type of risk within a project (Cardona Bermeo, et al., 2002). While this allows an assessment of the adequacy of pricing individual guarantees, it can hamper flexibility in managing the resources of the fund and in pooling risks from different guarantees. A case, nevertheless, could be made for earmarking guarantee funds for each PPP project by way of guaranteeing the government's financial obligations as set out in the contract.

B. Instruments for Managing High Impact Liabilities

Insurance and Hedging

Market insurance or hedging could help secure the resources needed to deal with the consequences of large negative outcomes. The most common types of insurance include insurance against catastrophic risk and environmental liabilities, which may increase significantly in the coming years if climate change adds to countries' financing needs.⁴⁴

- Despite large exposures to natural disasters in many countries, reliance on catastrophe insurance to transfer risk to the financial markets remains limited.⁴⁵ Cardona (2004)

⁴³ If an actual fund invests money in government bonds, it is easy to manage but is also not much different from a notional fund (see OECD, 2005a).

⁴⁴ Given that most contingent liabilities involve credit risk or catastrophic risk, hedging techniques have not generally been used to mitigate such risks.

⁴⁵ According to the UNDP (2004), about 75 percent of the world's population lives in areas that have been affected at least once by earthquake, tropical cyclone, flood, or drought between 1980 and 2000. 160 countries

Table 1. Contingency Funds to Meet Calls on Contingent Liabilities: Selected Examples

<i>Country</i>	Contingency Fund	Description
<i>Chile</i>	Pension Reserve Fund	The fund helps pay for the pension guarantees. It is financed by annual transfers from the budget of at least 0.2–0.5 percent of GDP, until the fund accumulates UF900 million, which is the estimated cost of the pension guarantees over the next 25 years.
	Guarantee fund for small industrialists (FOGAPE)	Fogape is a state fund aimed to partially guarantee credits issued mainly by commercial banks to small and microfirms. Fogape is funded by fees paid by the 16 participating commercial banks that are between 1–2 percent of the guarantee used, with the fee depending on previous performance. The commercial banks are in charge of evaluating a borrower's creditworthiness and issuing the loan; they also partially assume the risk of default. The default rate on credits receiving the guarantee has been 1.05 percent, not much above that of the banking system as a whole, suggesting that banks do screen firms on their ability to repay loans when using Fogape. Fogape neither evaluates the borrowers, nor monitors the lending practices of banks (Benavente et al., 2006)
<i>Colombia</i>	Contingency Fund for State Entities (FCCEE)	The fund is financed by fees paid by public entities according to their levels of exposure, and administered by the ministry of finance (MoF). The Public Debt Office is in charge of assessing contributions, which are translated into a smoother payment schedule, but respecting the principle that the NPV of contingent liabilities should correspond to the NPV of contributions. The fund opens a subaccount for each contract that gives rise to contingent liabilities, and contributions are made for each contract. Disbursements from the Fund are made within 3 days of the public entity's declaration, through an administrative act, of the occurrence of the contingency and of the amount. The public entity can authorize the fund to use the amounts for one guarantee to cover the deficit under another guarantee, but has to replenish the amounts required for the first guarantee at the latest during the next fiscal year.
	National Calamity Fund (Fondo Nacional de Calamidades)	Created in 1984 and operating under the supervision of the MoF to subsidize both emergency preparation and risk mitigation measures.
<i>India</i>	Calamity Relief Funds and National Calamity Contingency Fund (NCCF)	The Calamity Relief Funds are set up in each state, and are financed from the budget of the state (25 percent) and the government of India (75 percent) for a total annual amount determined by the government's Finance Commission on the basis of historical relief spending. In cases of large disasters, when resources in its Calamity Relief Funds are not sufficient, states can seek assistance from the NCCF, also financed through annual budget transfers. In either case, the Funds only finance immediate relief needs; expenditures on restoration of damaged infrastructure are to be met from regular budget appropriations.
<i>Mexico</i>	Natural Disaster Fund (Fonden)	Created in 1996 with the primary goal to attend to noninsurable federal and local infrastructure damaged by natural disasters. To safeguard the resources of the fund, the government has transferred some of the largest risks (earthquake) to the financial markets through reinsurance and issuance of catastrophe bonds.
<i>Philippines</i>	Local and national calamity funds	Local governments set aside 5 percent of their estimated revenues as local calamity fund. This fund is complemented by the National Calamity Fund, which provides relief funds in cases of both man-made and natural calamities.
<i>Sweden</i>	Guarantee fund	Guarantee fees are paid by the beneficiaries of the guarantees or by the line ministries into a government account in the banking system (managed by the Swedish National Debt Office). This is a notional account, in that the resources are then pooled into the government's treasury single account and used for general financing purposes, thereby reducing government borrowing needs. Payments under a guarantee (as well as administrative costs) are charged against this account. The account can be overdrawn without limit, ensuring that the state cannot end up in technical default due to a lack of earmarked funds. The transactions of this fund do not appear in the budget when fees are paid by the private sector (fees are not recorded as budget revenues, and the expected cost is not recorded as expenditure), but its net operations are included in net lending, which is part of the overall fiscal balance. Detailed information on the outstanding stock of the guarantees and their expected costs is reported to parliament.
<i>U.S.</i>	Federal Pension Benefit Guaranty Corporation (PBGC)	It pays off pensions up to a specified amount if a private pension fund goes bankrupt. It is funded by premiums paid by companies, which, however, may not be properly scaled to offset the agency for the risk it takes (White, Lawrence, 1993, <i>GM's Bookkeeping Game</i> , <i>New York Times</i> , December 18).
	Environmental Contingency Fund	Set up in 1985 by the legislature for the purpose of controlling, investigating, and remediating the release of hazardous materials. The Fund is financed through the hazardous waste generator tax and managed by the Agency of Natural Resources. Expenditures out of the Fund, largely to cover the obligations of the Superfund (the trust fund set up in 1980 to pay for the cleanup of hazardous waste sites), require legislative authorization if exceeding \$100,000.
	Loan guarantee fund	The guarantee fees paid by the beneficiaries or by the sponsoring departments (from their program account) are paid into an off-budget government financing account associated with the program. This is a notional account, in that the funds never leave the Treasury and no cash reserve is created. The transactions of the financing accounts do not appear in the government budget, although the transactions of the financing and program accounts are presented in budget documents for information and analytical purposes.

have more than a fourth of their total population in areas at relatively high mortality risk from one or more hazards. About a third of the world's land area (and 82 percent of the population) is exposed to flooding.

estimates, for example, that in some Latin American countries government exposure to extreme disasters (for infrastructure under its own responsibility) is up to 5.7 times the resources available to deal with these risks. Although the catastrophe insurance market is actively used by corporations, the Mexican government was the first to securitize natural catastrophe risk (earthquake) by issuing \$160 million *catastrophe bonds* in 2006.⁴⁶ Catastrophe bonds forgive interest and principal in the event of specified catastrophes, allowing the money to be redirected towards disaster relief and with investors compensated for such provisions by higher interest rates before the disaster strikes.⁴⁷ More recently, following the devastation caused by Hurricane Ivan in the Caribbean, the Caribbean Community countries established in 2007, with assistance from the World Bank, the first regional disaster insurance facility in the world—the *Caribbean Catastrophe Risk Insurance Facility* (CCRIF). This facility will provide participating governments with immediate liquidity if hit by a hurricane or earthquake and, by allowing Caribbean countries to pool their risk, it would significantly reduce their individual insurance premium. CCRIF will serve as a pilot program for possible extension to or replication in other regions with small states (such as the Pacific basin).⁴⁸ Otherwise, countries have generally relied on self-insurance through the creation of contingency calamity funds.

- Countries can also seek commercial insurance coverage for overruns in environmental cleanup costs of properties under their control. Public environmental liabilities—which consist of cleanup costs of contamination at nuclear test sites and from waste disposal, leaks, and other risky activities at defense activity sites—could be significant. The stock of these liabilities was estimated in the U.S. at around 2.3 percent of GDP at end-2006 and in Canada at about 0.4 percent of GDP at end-March 2007.⁴⁹ Nevertheless, governments face significant risks of higher-than-estimated cleanup costs due to discovery of new contaminated sites or of higher-than-expected contamination, against which they could obtain insurance. Environmental insurance has evolved rapidly over the past decade, particularly in the private sector.

⁴⁶ The market for catastrophe insurance has grown rapidly between 1997 (the first year with multiple transactions) and 2007: 89 catastrophe bonds were issued by end-2006, with an outstanding principal of \$8.5 billion (MMC Securities, 2007).

⁴⁷ Only part of the bond issue represents risk transfer because only part of the bond's principal and interest is at risk.

⁴⁸ World Bank, 2007, "Caribbean Catastrophe Risk Insurance Facility: a solution to the short-term liquidity needs of small island states in the aftermath of natural disasters," Financing for Relief and Development, IAT03-13/3, and "The Caribbean Catastrophe Risk Insurance Facility: Brief for Journalists."

⁴⁹ These are environmental liabilities recognized in government financial accounts for the respective years. The public accounting standards in many countries (including Canada, New Zealand, and the United States) require the recognition and disclosure of environmental liabilities.

The decision on whether to insure government’s post-disaster liabilities should be made on the basis of a cost-benefit analysis. The outcomes of such an analysis would differ depending on the country, the type of risk faced, and the impact of the event. Obtaining insurance against natural catastrophe or other risks may be worthwhile in managing only very large disaster risk exposures. In the U.S., market participants often do not find it cost-effective to issue catastrophe bonds below a certain level (\$100–\$800 million), i.e., to cover risks that are considered the lowest probability and highest severity, such as those occurring once every 100–250 years (GAO, 2003). For moderate and small risks, self-insurance—through contingency funds or using flexibility within the budget—appears to be more cost-effective. Many countries have indeed set up natural disaster or calamity funds that are funded from the budget (Colombia, India, Mexico, Philippines). These outcomes appear consistent with the theoretical literature that finds that insurance through the financial markets is preferable to self-insurance in the case of losses that occur rarely, because the cost of market insurance falls with the probability of loss while that of self-insurance does not (see Ehrlich and Becker, 1972).

Contingency and Emergency Loans

Contingency loans have been used as an instrument to finance disaster and other risk.

The World Bank, for example, offers two contingency financing facilities that function similarly to a line of credit and are designed to provide an immediate source of financing in the event of unforeseen adverse economic events (*Deferred Drawdown Option for Development Policy Loans* facility, launched in 2001) or natural disasters (the *Catastrophe Risk Deferred Drawdown Option* facility, launched in 2008). The latter provides bridge financing of up to 0.25 percent of GDP or \$500 million, whichever is smaller, while other sources of funding are being mobilized.

Emergency loans are also available to finance the costs of realized risks. The Interamerican Development Bank, for example, has several instruments for post-disaster operations, covering both natural hazard events and physical damage caused by technological or human driven disasters (e.g., structural collapse and explosion). These instruments include the *Immediate Response Facility*, the *Emergency Technical Cooperation*, and the *Special Procurement Procedures for Emergency Situations*.⁵⁰ In the case of low-income countries, on the other hand, international aid is frequently available to finance post-disaster spending.

V. DISCLOSING CONTINGENT LIABILITIES

Risks associated with contingent liabilities can affect the sustainability of the current fiscal position. However, they are often either not reported to decision-makers or the information presented in financial statements or budgets is not readily visible or easily understood.

⁵⁰ IADB, *Preliminary Companion Paper to the Draft Disaster Risk Management Policy*, December 2005.

Appropriate disclosure of consolidated information about contingent liabilities would make fiscal policy decisions more informed and may even trigger action to scale down the growth in balance sheet or off-balance sheet, contingent, obligations. Country experiences with contingent liability disclosure and the international transparency initiatives, which are discussed below, suggest that:

- Institutionalizing the disclosure requirements in the country's legislation provides a safeguard that this practice would continue even with political change;
- Even when comprehensive disclosure requirements are in place, adopting internationally-accepted accounting standards for the public sector (IPSAS) could help strengthen the disclosure framework, as these standards require not only the identification, fair value measurement, and disclosure of the stocks of assets and liabilities, but also their systematic reconciliation with the respective flows, without which the accuracy of disclosed information is not assured;
- The disclosed information should be meaningful, in that it should provide relevant information to assess the potential fiscal impact of the contingent liabilities but not overwhelm with detail;
- The information helpful to assess the fiscal impact of the liabilities includes the face value of the contingent liability (i.e. their maximum cost), the expected cost where feasible, and some indication of the uncertainty associated with the contingency;
- Information should also be presented to explain government's policy vis-à-vis various types of contingent liabilities, such as the legislation that supports government's issuance of these liabilities, the rationale for such involvement, the beneficiaries, and the measures taken to mitigate associated risks;
- There are situations in which disclosure may not be desirable, but safeguards are needed to ensure these are not abused to justify nondisclosure, such as clear criteria under which items can be exempt from reporting and the presumption that at least information about the nature of the liability needs to be disclosed, even if the estimated fiscal impact cannot be;
- There should be clear and strict responsibility for the provision of accurate reporting on contingent liabilities; and
- The venues for disclosing contingent liabilities could vary, including websites of government agencies managing contingent liabilities, but these should include budget documentation and financial statements.

Disclosure Requirements

The disclosure of contingent liabilities based on contractual obligations is already required or recommended under internationally accepted accounting and statistical standards. In particular, under accrual accounting, the International Public Sector

Accounting Standards (IPSAS) require the disclosure of contractual contingent liabilities (such as guarantees and legal claims) in the notes to financial statements as long as the possibility of the payment is not remote (see Table 2 for when disclosure is required and Table 3 for what should be disclosed). Under cash accounting standards, no disclosure is currently required, but supplementary disclosure in line with that under accrual standards is recommended by the cash basis IPSAS. Under statistical reporting standards, such as GFSM 2001, the disclosure of aggregate data on all important contingent liabilities is required as a memorandum item to the balance sheet.

Table 2. IPSAS: When to Recognize and Disclose Contingent Liabilities¹

Likelihood and measurability of loss	Loss more likely than not (probability > 50%)	Loss less than likely but more than remote	Loss remote
Loss can be measured	Record in financial statements and disclose nature of contingency	Disclose nature of contingency and amount	No Disclosure
Loss cannot be reasonably measured	Disclose nature of contingency	Disclose nature of contingency	No Disclosure

¹ Contingent liabilities here correspond to their general definition used in the paper, not to their accounting definition.

None of these standards requires disclosure of risks that are not based on clear contractual obligations or disclosures in the context of budget documents. This vacuum has been filled by various fiscal transparency initiatives, including the IMF *Code of Good Practices on Fiscal Transparency* (2001, 2007) and the OECD *Best Practices for Budget Transparency* (2001), that require the disclosure of contingent liabilities and other major fiscal risks in budget documents, mid-year reports and annual financial statements (Table 3).

In summary, the requirements in the accounting standards and transparency initiatives suggest that the disclosure of contingent liabilities should include the following elements:

- A classification of the outstanding contingent liabilities by major category.
- For each category, an explanation of the rationale for taking on contingent liabilities, in cases where this is a deliberate decision (guarantees, insurance).
- For each category, the fiscal significance of the contingent liabilities. This should include, where feasible: (a) the total exposure under the liability (face value of the guarantee); (b) the expected fiscal cost (the net present value of expected payments and/or the annual cash flows); and (c) an indication of the risk associated with the guarantee, such as the unexpected loss at a given probability. In cases where quantification is difficult or may be undesirable on public policy grounds, the statement should provide a narrative description of the nature and scope of the liabilities.

**Table 3. Accounting/Statistical Standards and Transparency Initiatives:
What to Disclose^{1/}**

Accounting standards	<p>IPSAS 19 “Provisions, contingent liabilities and contingent assets” requires disclosure of the following information for each class of contingent obligations <i>recognized</i> as on-balance sheet liability at fair value:</p> <ul style="list-style-type: none"> • a brief description of the nature of the contingent liability and the expected timing of payments; • an indication of the uncertainties about the amount or timing of these payments, including the major assumptions made concerning future events; • the possibility of any reimbursement; and • amounts at the beginning and end of the period, and the breakdown of the changes during the period, by cause. <p>For contingent obligations <i>not recognized</i> on balance sheet—either because the contingency is not likely to materialize or because the payments cannot be estimated reasonably well—the same information should be disclosed, unless the probability of payments is remote. In addition, the government should present, where practicable, an estimate of the financial effect of each class of contingent liabilities (present value of expected payments). If it is not practicable, the fact needs to be stated.</p>
Statistical Standards (GFSM 2001)	<p>Contingent liabilities should be disclosed as a memorandum item to the balance sheet, including a description of the nature of the various contingencies and some indication of their possible value.</p>
OECD Best Practices	<p>All significant contingent liabilities should be disclosed in the budget, the mid-year report, and the annual financial statements. Where feasible, the total amount of contingent liabilities should be disclosed and liabilities classified by major category reflecting their nature; historical information on defaults for each category should be disclosed where available. In cases where contingent liabilities cannot be quantified, they should be listed and described.</p>
IMF Code and Manual	<p>Statements describing the nature and fiscal significance of central government contingent liabilities should be part of the budget documentation, together with an assessment of all other major fiscal risks (IMF Code). The Manual (Box 18) suggests that a common core of information to be disclosed annually for each guarantee or guarantee program should include^{2/}:</p> <ul style="list-style-type: none"> • A brief description of the nature, intended purpose, beneficiaries, and expected duration; • The government’s gross financial exposure; • The possibility of a reimbursement, recovery, or financial claim by the government on the guarantee recipient should the contingency occur; • Where feasible, an estimate of the most likely fiscal cost or impact, either as a point estimate or a range; • Any change in each item or category since the previous reporting period, including any payments made, any financial claims established against defaulters as a result of those payments, and any waivers of such claims; • Any guarantee fees or revenue received. <p>In addition, budget documents should provide:</p> <ul style="list-style-type: none"> • Details of payments made under individual guarantees or guarantee programs for each of the previous two years; • An indication of what allowance, if any, has been made in the budget (e.g., in contingency appropriation) for expected payments under guarantees; • A forecast and explanation of the total new guarantees issued in the budget year.

^{1/} Based on *International Public Sector Accounting Standards* (IPSAS), *Government Finance Statistics Manual 2001*, *OECD Best Practices for Budget Transparency* (2001) and *IMF Manual on Fiscal Transparency* (2007).

^{2/} The *Manual* also suggests that it is generally inappropriate to quantify and report implicit liabilities, as such disclosure could result in greater moral hazard if the private sector views this disclosure as a commitment or as an indication that the government is likely to provide future financial assistance.

- Information on major individual contingencies, above some minimum country-specific threshold, including a description of their nature, scope, and their quantification where possible. In the case of individual contingencies, quantification should focus on the total exposure under the liability, and could also include the expected cost if this is judged not to give rise to moral hazard. Contingencies below this threshold need not be separately disclosed, but should be included as part of the major categories discussed above.
- To the extent that they are material to the understanding of the disclosed risk, significant terms and conditions of the arrangement to take on risk (such as the disclosure of circumstances under which contingent liabilities would be called).
- Information on the past calls on the government to meet contingent liabilities.
- For each new contingent liability: its public policy purpose, duration, and the intended beneficiaries.
- Information about reserve assets set aside against specific contingencies (e.g., contingency funds that may have substantial dedicated assets available to be drawn down should guarantees be called upon). Details of these assets should be reported, together with the extent of the government's remaining loss exposure.

Aside from the disclosure requirements in the countries' accounting standards, many countries have institutionalized the requirements to report contingent liabilities in their fiscal responsibility legislation or in the legislation covering public financial management (Table 4). While in some countries these requirements are limited to contingent liabilities alone (Canada, Chile), in others the legislation requires more comprehensive disclosure of fiscal risks, including those from sensitivity of fiscal projections to macroeconomic assumptions and long-term risks from demographic changes.

The legislative requirements for disclosure in several countries follow the accounting principle of "materiality", under which a risk exposure is disclosed if it may have a material effect on the government's financial position (Australia, New Zealand, U.K., U.S.). Some countries have translated this principle into specific cut-off points for disclosing separately large liabilities, with liabilities below the threshold not requiring separate disclosure but included in an "other quantifiable contingent liabilities" total (Australia, New Zealand).⁵¹ The "materiality" principle certainly has potential for abuse and may be used as an excuse for not disclosing liabilities.⁵² The real test for whether a liability should be

⁵¹ Australia defines as material and requiring individual disclosure contingent liabilities and other fiscal risks with a possible impact on the forward estimates greater than \$20 million (about 0.01 percent of 2006–07 expenditures) in any one year, or \$40 million over the forward estimates period. New Zealand exempts from disclosure risks that are estimated to have an impact on the fiscal forecasts of less than \$10 million (0.01 percent of 2006–07 expenditures) in any one year.

⁵² See the speech by Arthur Levitt (chairman of Securities and Exchange Commission) "The Numbers Game," given at the New York Center for Law and Business, September 1998.

disclosed should not be the quantitative cutoff, but a judgement of whether the disclosed information would make a difference to the investor or the analyst using the information.

Some countries have also built on the disclosure exemptions allowed under international accounting standards. For instance, New Zealand's Public Finance Act exempts from disclosure information that is likely to: (i) prejudice substantial economic interests of the country; (ii) prejudice the security or defence of the country or the international relationships of its government; (iii) compromise the government in a material way in negotiation, litigation, or commercial activity, or (iv) result in material loss of value to the government. It also exempts from disclosure those obligations that do not meet the reasonable certainty criterion (i.e., their fiscal impact and timing cannot be estimated with reasonable certainty) and the active consideration criterion (i.e., risks associated with decisions that are not being actively considered by the government). It should be noted, however, that the large number of exemptions in the case of New Zealand should be understood in the context of its broad definition of fiscal risks (which includes policy risks), its strong public finance institutions and culture that prevent abuse of the exemptions, and the required provisioning for quantifiable contingent liabilities that are likely to materialize. In practice, therefore, the exclusions are primarily applied to policy risks, and infrequently to non-quantification of contingent liabilities (whose existence is disclosed nevertheless).

Responsibility for disclosing all material information should be an important part of the legislation. In New Zealand, for example, legislation requires that the minister of finance sign a Statement of Responsibility to the effect that he/she has communicated all policy decisions and circumstances with material fiscal implications to the treasury, and that the secretary of the treasury sign a statement that, on the basis of the economic and fiscal information available to it, the treasury has used its best professional judgment in putting the budget together.⁵³

Disclosure Practices

Contingent liabilities are disclosed in an increasing number of countries, either in budget documents or other fiscal reports sent to parliament. New Zealand and Australia were pioneers in disclosing contingent liabilities, a practice that was subsequently picked up in a few other OECD countries, and in several emerging markets (Brazil, Chile, Colombia, Indonesia, Peru, South Africa). A 2004 Intosai survey of fifteen developed and emerging

⁵³ Such requirements are similar to the requirements of the Sarbanes-Oxley Act introduced recently in the United States (2002), which aims at improving the accuracy and reliability of corporate disclosures, including by requiring the CEO and CFO of a corporation to certify many issues in each quarterly and annual report, such as (i) the fact that the report does not contain any untrue statements of a material fact or omits to state a material fact; and (ii) that he/she is responsible for establishing and maintaining disclosure controls and procedures and internal control over financial reporting for the company, and that these have been evaluated within the last 90 days. These requirements, and others, are designed to undercut the "I didn't know" defense for executives.

Table 4. Legislative Requirements to Disclose Fiscal Risks: Selected Country Examples		
Country	Legislation	Requirements
<i>Australia</i>	The Charter of Budget Honesty Act (1998)	Requires the budget economic and fiscal outlook report to include a statement of fiscal risks, quantified where feasible, that may have a material effect on the fiscal outlook, including contingent liabilities, publicly announced government commitments, and ongoing negotiations. It also requires an <i>intergenerational report</i> to assess the long term sustainability of current government policies over the next 40 years. Two intergenerational reports have been produced (2002 and 2007).
<i>Brazil</i>	Fiscal Responsibility Law (2000)	Requires the annual budget directives law to include an annex with estimates of fiscal risks and contingent liabilities.
<i>Canada</i>	The Financial Administration Act (1985)	Requires financial statements to show the contingent liabilities of Canada. Departments are required to keep accounts to show clearly the status of their assets as well as direct and contingent liabilities of the government (Art. 63).
<i>Chile</i>	Fiscal Responsibility Law (2006)	Requires the government to report annually on the amount and characteristics of government liabilities that arise from fiscal guarantees, including at least the maturity structure, type of guarantee and beneficiaries, but also estimated financial obligations under legal or contractual liabilities, such as minimum pension guarantee or guarantees to infrastructure.
<i>Colombia</i>	Fiscal Responsibility Law (2003); Law on Managing Contingent Liabilities 448 (1998)	The Financial Responsibility Law requires that the government present a medium-term fiscal framework every fiscal year (together with the draft budget), which should contain an assessment of the quasi-fiscal activities, tax expenditures, contingent liabilities, and fiscal costs of recent legislations.
<i>France</i>	The Budget System Law (Loi Organique Relative Aux Lois de Finances, 2001)	The new budgetary framework requires the publication of a balance sheet and an assessment of off-balance sheet commitments.
<i>New Zealand</i>	The Public Finance Act, PFA (1989)	Requires disclosure of all government decisions and other circumstances that may put pressure on the forecast spending amounts, and/or have a material effect on the fiscal and economic outlook. In particular, the economic and fiscal updates (presented with the budget, mid-year, and pre-election) are required to include a statement of commitments, a statement of contingent liabilities, and a statement of sensitivity of fiscal aggregates to changes in economic conditions. The PFA was amended in 2004 to require the treasury to publish at least every four years a <i>Statement on the long-term fiscal position</i> looking out at least 40 years (the first Statement was presented to parliament in June 2006).
<i>Nigeria</i>	Fiscal Responsibility Law (2007)	The law requires the budget to be accompanied by a Fiscal Risk Appendix, evaluating fiscal and other risks to the annual budget and specifying measures to be taken to offset them.
<i>Pakistan</i>	Fiscal Responsibility and Debt Limitation Act	The government is required to present an annual debt policy statement to the national assembly, which, among other things, should include information on guarantees and budgetary outturns of guarantees.
<i>Peru</i>	Law on Transparency and Access to Public Information (2002)	Requires the publication, in the context of the medium-term framework of fiscal risks associated with sensitivity to the main macro assumptions. An earlier law on Prudent and Transparent Fiscal Policy (1999) requires medium-term debt projections to include public guarantees and to disclose long-term debt service projections.
<i>U.K.</i>	Code for Fiscal Stability (1998)	Requires the government to include in economic and fiscal projections “an analysis of the risks surrounding the economic and fiscal outlook, including government decisions and other circumstances that have still to be quantified with certainty, other material contingent liabilities, and an indication of past forecast errors for aggregates...”.

economies revealed that all surveyed countries with one exception reported to parliament information on contingent debts (Intosai, 2005). The most common channel of reporting contingent liability are financial statements, especially in countries that follow accounting standards that require such disclosure (Australia, Canada, New Zealand, U.S.). Many countries also disclose contingent liabilities in the context of budget documentation. A recent OECD survey showed that 60 percent of the OECD countries include information about contingent liabilities in the notes to the budget documents (OECD, 2007). Countries also include information on guarantees in the context of their medium-term fiscal framework (Colombia, Peru) and in debt management reports (Japan, Czech Republic, Turkey) that are usually sent to parliament. A few countries report on contingent liabilities as part of a more comprehensive statement of fiscal risks, which cover also the sensitivity of the fiscal outlook to the main macroeconomic variables (Australia, Brazil, Chile, Colombia, Indonesia, New Zealand). Chile, for example, has reported information on various fiscal risks in the context of a chapter in the *Report on Government Finances* since 2003, but since November 2007—following the requirement of its 2006 fiscal responsibility legislation—it has also issued a stand-alone *Report on Contingent Liabilities* that discusses the policies that gave rise to contingent liabilities and quantifies them.

The type of contingent liabilities disclosed varies across countries, in part reflecting their relative significance. Information on explicit loan guarantees (whether to public enterprises, financial institutions, private companies, or students) is reported by virtually all countries disclosing contingent liabilities. Disclosure of guarantees related to PPP-type arrangements, such as minimum revenue guarantees or exchange rate guarantees, is generally more limited (Chile, Colombia, Indonesia, Peru, U.K.). Other types of contingent liabilities are also reported, including those from pension guarantees (Chile, U.S.); deposit guarantees (Chile, U.S.); litigation (Australia, Brazil, Colombia, Indonesia, New Zealand, U.S.); liabilities of the central bank (Australia, Chile); and natural disasters (Indonesia) (see Table 5).

When contingent liabilities can be quantified, their fiscal significance is reported through a variety of measures. These include: (i) the face value or the maximum loss under guarantees; (ii) the expected cost of the guarantees; or (iii) the “unexpected” costs of the guarantee, i.e. the most government can lose at, for example, a 95–99 percent confidence level (the so-called “cash flow at risk”). The latter two measures are reported either as expected annual payments over a certain time span or as the net present value (NPV) of the these payments (see Table 5 for selected country examples).

- *The face value* is by far most commonly reported by countries. It is generally known at the time the guarantee is issued, reflects the maximum loss under the guarantee, and does not require quantification of probabilities that the guarantee would be called. It is also a convenient measure in cases when individual guarantees or lawsuits are disclosed, given that disclosing government’s expected loss in these cases could either give rise to moral hazard (if the beneficiary of the guarantee infers that the government is prepared to sustain a loss on the guarantee) or could damage the government case in courts or in

negotiations. Hence, many countries report the face value in the case of guarantees or insurance programs (Australia, New Zealand, U.S., and Chile, which reports the maximum amount of the guarantees for road concessions, such as in no-traffic scenarios) or of lawsuits (Chile, Colombia, U.S.).

- *The expected or “unexpected” loss* measures are more involved in that they require, in addition to the amount, an assessment of the probability that the guarantees would be called (see Annex II for a discussion of the methods used to assess these). Nevertheless, many countries disclose the expected losses under various guarantees (Chile, Colombia, Peru) and some disclose also “unexpected” losses (Chile at a 95 percent confidence level, Colombia at a 99 percent level).⁵⁴
- Another way to deal with the difficulty of quantifying probabilities for a variety of possible outcomes, is to provide a *range of estimated losses*, as done by the U.S. in the case of some lawsuits, for example.

In those cases when quantification of contingent liabilities is difficult, only a few countries provide information on the nature and scope of such unquantifiable risks (Australia, Canada, New Zealand). These risks include various indemnities (e.g., against prosecution for public officials or unauthorized disclosure of confidential information), land claims, costs of decontaminating defense sites, potential future litigation, legal challenges against legislation, insurance against terrorist acts, and others.

Some countries also provide explanatory information about the contingent liabilities incurred and efforts to mitigate them (Australia, Chile, Colombia, Peru, New Zealand, U.S.). This includes background information on the legislation or other source that gave rise to the contingent liability, the beneficiaries of guarantees, information on realized risks, such as past calls on government guarantees, assets available to meet potential calls on contingent liabilities, such as contingency or earmarked funds, and generally efforts to manage risks associated with contingent liabilities, including steps taken to challenge lawsuits against the state.

Most countries do not disclose implicit contingent liabilities. As discussed in the IMF Manual on Fiscal Transparency, it would generally be inappropriate to quantify and report implicit obligations as explicit contingent liabilities, since this would reinforce moral hazard if the private sector interprets this disclosure as a commitment or as an indication that the government is likely to provide future financial assistance. When such considerations are not at play or when the country has a clear history of taking on implicit liabilities, these are sometimes discussed in the context of contingent liability reports. For example, Chile reports as implicit liabilities potential measures to stabilize domestic fuel prices if these increase

⁵⁴ Note that Australia and New Zealand do not disclose expected or unexpected losses, since in those cases when these can be estimated they are recognized as “provisions” on balance sheet, and hence disclosed.

excessively; this is done by reporting annual contributions to, withdrawals from, and balances in the Fuel Price Stabilization Funds.⁵⁵ It also mentions in its *Report on Contingent Liabilities* the potential costs of a banking crisis of the magnitude experienced in the 1980s. Other countries discuss the performance of SOEs and stress the need to monitor these implicit liabilities (Indonesia). In the United States, where there was clear prima facie evidence of an implicit guarantee to the government-sponsored housing enterprises, such as Fannie Mae and Freddie Mac, in-depth studies of the costs and benefits of these guarantees have been made by both congress and the treasury.⁵⁶

Some countries have improved disclosed information on contingent liabilities gradually.

The valuation of contingent liabilities is costly and the institutional capacity of public sector entities to report or value contingent liability varies. Colombia, for example, gradually expanded the institutional coverage of contingent liability estimates from the central government to decentralized entities to subnational entities. In Chile, on the other hand, the government phased in the types of contingent liabilities disclosed, first reporting on minimum revenue guarantees under PPPs and minimum pension guarantees (in 2003), later including also loan guarantees to public enterprises (in 2005), and finally adding information on student loan guarantees and lawsuits (in 2006).

VI. INSTITUTIONAL ARRANGEMENTS FOR MANAGING CONTINGENT LIABILITY RISKS

A well-designed framework for managing and disclosing contingent liabilities, which puts in place proper safeguards against risks associated with contingent liabilities, is critical in limiting the government's risk exposure. The specific institutional setup under which these safeguards operate is of secondary importance, but could have a bearing on the smooth functioning of the framework. This setup includes the location of responsibility for monitoring and managing contingent liabilities, and the degree of its centralization.

⁵⁵ While there is no official guarantee of stable fuel prices, the state has intervened in the past with capital injections in its fuel price stabilization funds.

⁵⁶ Congressional Budget Office, "Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac" (May 1996) and "Federal Subsidies and the Housing GSEs" (May 2001); a United States Department of the Treasury Report, "Government Sponsorship the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation" (July 1996).

Table 5. Disclosing the Magnitude of Contingent Liabilities: Selected Country Examples—Part I

	Loan Guarantees, Guarantee and Insurance Programs (student loans, SMEs, export)	Infrastructure Guarantees	Pension Guarantees	Lawsuits
<i>Australia (budget)</i>	Face value of individual guarantees/indemnities greater than \$20 million in one year or \$40 million over the forward estimates period (not already recognized on balance sheet) with summary background information, by ministry			The face value of individual lawsuits greater than \$20 million in one year or \$40 million over the forward estimates period, with summary background information, by ministry
<i>Canada</i>	<p>Guarantees for SOE borrowing: face value of the guarantee</p> <p>For each guarantee/insurance program and for each law authorizing guarantees: the maximum limit authorized by parliament, where applicable, and the face value of amount actually guaranteed</p> <p>For the aggregate of guarantees: (i) total gross guarantees; (ii) allowance for losses; and (iii) net exposure under guarantees</p> <p>For the three public corporations that run insurance programs on a self-sustaining basis (deposit insurance, mortgage, export development): (i) insurance in force; (ii) opening balance; (iii) revenues for the period; (iv) expenses for the period; (v) net income for the period; (vi) closing balance; and (vii) 5-year average of net claims paid</p>			<p>Face value of contingent claims and pending and threatened litigation</p> <p>Assessed taxes under objection/appeal</p>
<i>Chile</i>	<p>For each law authorizing guarantees: the maximum amount authorized by the law and the amount actually guaranteed, by guaranteed loan and enterprise, with an indication of the timing when the guarantee was issued</p> <p>For each outstanding guaranteed loan: the details of the loans (amount issued, currency, interest, maturity, current stock at par value)</p> <p>Face value of guaranteed debt by authorizing law (authorized amount; currency; stock of guaranteed debt outstanding in local currency, US\$ and percent of GDP) . Another breakdown by SOE, with an indication of what type of debt is guaranteed and share in total.</p> <p>Student loans: face value of guaranteed debt in local currency and percent of GDP. Recent guarantee, no calls yet.</p> <p>Deposit guarantee: maximum amount of deposits subject to guarantee</p> <p>SME loan guarantees, annual data for the past 9 years: NPLs as a percent of total SME loans from the bank; call on guarantees as a percent of the average loan portfolio over the year</p>	<p>For each project: maximum loss (under minimum revenue guarantees) in case of no traffic: amount, NPV of amount, NPV as share in GDP</p> <p>Expected gross annual payments for the entire PPP system over the next 20 years</p> <p>Risks associated with these expected payments is summarized as cash flows under 5, 50, and 95 percentiles of the probability distribution of the cash payments, for the entire PPP system</p> <p>For each project: NPV of expected payments net of collections from concessionaires (local currency; percent of GDP; and share of project in total expected net guarantee payments)</p> <p>Evolution of NPV of expected loss over past 5 years</p>	<p>Annual expected payments over the next 12 years</p> <p>NPV of these payments</p> <p>Calls on past guarantees against pension fund bankruptcies</p>	<p>Maximum amounts claimed in courts (local currency, and percent of GDP for total), by activity area</p> <p>Past success rates at winning demands</p>

<i>Colombia</i>	Expected annual loss over the next 10 years Unexpected annual loss (cash flow at risk) over the next 10 years (99 percent probability) NPV of expected losses NPV of unexpected losses (99 percent)	Expected annual payments over the next 10 years Unexpected annual payments over the next 10 years (99 percent probability) NPV of expected costs NPV of unexpected costs (99 percent)		Expected losses over the next 10 years, on the basis of past frequency and success rates NPV of expected costs NPV of unexpected costs (99 percent probability)
<i>New Zealand (financial statement)</i>	Face value of total guarantees and indemnities, with material guarantees disclosed separately each in Note 21 with some description and quantification			The amount claimed and thus the maximum potential cost. It does not represent either an admission that the claim is valid or an estimation of the amount of any award against the Crown.
<i>New Zealand (budget)</i>	Table with the same information as in financial statements (no descriptions), with an indication whether the value of the contingent liability is "unchanged" or "changed" relative to the last financial statement			Table on amounts claimed (no descriptions), with an indication whether the value of the contingent liability is "unchanged" or "changed" relative to the last financial statement
<i>South Africa</i>	Face value of total guarantees, broken down into domestic and foreign, over the past 3 years. Details of these guarantees (type of guarantee or institutions) shown in Table 9 of Annexure B for the same period Face value of liabilities of Export Credit Insurance corporation reported for last three year		Actuarial value for the past three years for post retirement medical assistance to government employees, government pension funds, the Road Accident Fund and Unemployment Insurance Fund	
<i>United States (financial statements)</i>	Maximum exposure to insurance claims and guarantee programs (Notes 18, 15) with material effect on balance sheet, with a description of the nature of the contingency		Maximum guaranteed amounts (Note 18, 15), with background information	Expected loss for "probable" contingencies (recorded on balance sheet), and range of expected losses for "reasonably possible" contingencies, with largest cases described and quantified individually (claimed value)

Source: Australia: "Statement 11: Statement of Risks," 2007/08 Budget Paper; Canada: Financial Statements, *Public Accounts of Canada 2006–2007*, Section 11 & Note 15; Chile: Report on Contingent Liabilities, November 2007; Colombia: *Medium-Term Budget Framework 2005, 2006, 2007*; New Zealand: *Half Year Economic and Fiscal Update, 2007* and "Statement of Quantifiable contingent liabilities and contingent assets" in the Financial Statements for the year ended 30 June 2007; Peru: *Marco Macroeconomico Multianual 2008–2010*, May 2007; South Africa: *2007 Budget Review*, Chapter 5, Asset and Liability Management; United States: *Financial Report of the United States Government, 2006*.

Table 5. Disclosing the Magnitude of Contingent Liabilities: Selected Country Examples—Part II

	Environmental and Disposal Liabilities	Quasi-fiscal deficit of CB	International Organizations (callable capital)	Unquantifiable liabilities	Implicit Liabilities
<i>Australia (budget)</i>		Liabilities of the Reserve Bank of Australia, guaranteed by the government		Summary background for individual unquantifiable liabilities (indemnities, native title costs, litigations), by ministry	
<i>Canada</i>	Estimated amount (recognized on balance sheet)		Face value of callable capital, by international institution, in national currency	Description of large unquantifiable legal claims (land claims, legal challenges to legislation)	
<i>Chile</i>		Annual quasi-fiscal deficit and capital position, with discussion of causes			Measures to stabilize domestic fuel prices (reported as implicit liabilities, as the state may want to intervene if these prices increase excessively) Annual contribution to, withdrawals from, and balances in the Fuel Price Stabilization Funds Mention of what would be the fiscal cost of a banking crisis of the magnitude of the last crisis in the 1980s
<i>New Zealand (financial statement)</i>	Known liabilities recognized on balance sheet; potential liabilities disclosed in Note 21 as unquantifiable liabilities		Face value of uncalled capital subscriptions, by international institution	Each unquantifiable liability described in Note 21 to financial statements (guarantees, litigations, environmental liabilities, other)	
<i>New Zealand (budget)</i>	Table with the same information as in financial statements (no descriptions), with an indication whether the value of the contingent liability is "unchanged" or "changed" relative to the last financial statement		Table on face value of uncalled capital (no descriptions), with an indication whether the value of the contingent liability is "unchanged" or "changed" relative to the last financial statement	Table with list of unquantifiable liability (no descriptions), with an indication whether the contingent liability is "unchanged" or "changed" relative to the last financial statement	
<i>United States (financial statements)</i>	Estimated costs and description of nature of contingency, with distinction between "probable" and "reasonably possible" contingencies				

Source: Australia: "Statement 11: Statement of Risks", 2007/08 Budget Paper; Canada: Financial Statements, *Public Accounts of Canada 2006–2007*, Section 11 & Note 15; Chile: Report on Contingent Liabilities, November 2007; Colombia: *Medium-Term Budget Framework 2005, 2006, 2007*; New Zealand: *Half Year Economic and Fiscal Update, 2007* and "Statement of quantifiable contingent liabilities and contingent assets" in the Financial Statements for the year ended 30 June 2007; Peru: *Marco Macroeconomic Multianual 2008–2010* Mayo 2007; South Africa: 2007 Budget Review, Chapter 5, Asset and Liability Management; United States: *Financial Report of the United States Government*, 2006.

The monitoring of all public contingent liabilities should be centralized in the fiscal policy-making institution. The rationale for this is that the central government often implicitly or explicitly underwrites the liabilities of public sector entities, as evidenced by numerous bailouts of subnational governments and of financial or nonfinancial public institutions. The macro-fiscal department of the ministry of finance, or a department with equivalent responsibilities, should be in charge of the overall monitoring of contingent liabilities and fiscal risks, even if specific liabilities are managed on a day-to-day basis by other entities in the ministry of finance (e.g., the public debt office).

There is also a case for centralizing the actual management of contingent liabilities. The main benefit of a centralized management is that it allows a systematic evaluation of the relationships among various risks affecting the government's balance sheet and allows adoption of net risk mitigation measures. For instance, if the risks faced in one part of the public sector offset risks in another part, this would provide a natural hedge that might obviate the need to engage in costly hedging transactions, something that may not be apparent if the various parts of the public sector managed their own risks. However, in the case of contingent liabilities alone, this is not immediately applicable, given that these liabilities usually entail credit risks or catastrophic risks for which there is generally no natural hedge and which need to be limited by other means (such as ceilings on exposure).

A similar rationale would argue for integrating the management of conventional and contingent liabilities, as well as of assets. This would imply centralizing contingent liability management in a public debt management office (DMO) or in the office managing government's assets and liabilities, depending on the setup.⁵⁷ Additional arguments for this arrangement include: (i) the similarities between the expertise needed to manage contingent debt with the expertise available in DMOs with the issuance of debts and their financial management (for example, risk quantification, coordination of the conventional and guaranteed debt issuance in the market by way of managing funding risk; obtaining contingency loans); and (ii) the need to manage the risks associated with the contingent liabilities by adjustments in conventional debt because of the rigidity of the guarantee portfolio, given their linkages to specific projects or borrowers and hence overall illiquidity (OECD, 2005a; Currie, 2002). Indeed, several countries have integrated the management of contingent liabilities into the DMO (Colombia, Morocco, New Zealand, Slovenia, Sweden) (IMF/WB, 2001). In countries that manage the government's debt portfolio within an asset and liability management framework (ALM), the ALM branch is in charge of contingent liability management (New Zealand, South Africa).⁵⁸ In several other countries, contingent liability management is located outside the DMO, usually in treasury or finance departments (Ireland, Poland, Portugal) (IMF/WB, 2001).

⁵⁷ As DMOs are not involved in decisions about conventional expenditures, so they should not be involved in decisions on which and how many contingent expenditures to incur, although they can play a role in their actual issuance, pricing and analysis (OECD, 2005).

⁵⁸ The AML framework extends the pure liability risks management frameworks by adding public assets, thereby providing a more integrated management of all balance sheet risks.

In practice, it is not always feasible to manage all contingent liabilities in one central unit. This is particularly the case when specialized expertise is required to assess project-specific, sector-specific, or credit risk, which may not be available or may not be practicable to develop in the DMO, as in the case of guarantees associated with PPPs or programs involving guarantee programs (export guarantees, student loans, guarantees to SMEs, deposit insurance). As a result, some countries have set up specialized PPP units to deal with the risks associated with the PPP projects (see Box 4) or units in charge of specific guarantee programs. In Sweden, for example, while the Swedish National Debt Office is in charge of managing guarantees in general, four government agencies are in charge of special guarantee programs related to export credit, housing, international aid and deposit insurance. Most countries that have deposits insurance schemes, export guarantees or guarantee programs for SMEs, manage these through specialized institutions. In cases when such specialized units exist, they should report to the entity in charge of the overall management of guarantees, contingent liabilities or fiscal risks, so that the costs and risks of all government guarantees could be taken into account by this entity without getting involved in their day-to-day management. The principles applied to the overall management of contingent liabilities should apply to these specific programs, i.e., they should have clearly stated objectives and a set of rules or a code of conduct for granting specific types of guarantees.

The degree to which management of contingent liabilities can be centralized also depends on the public financial management system and capacity. In countries with decentralized public financial management systems, where line ministries or public entities are allowed to issue contingent liabilities, these ministries or entities should be responsible for the management of their contingent liabilities as long as they have adequate financial management capacity to do so (which is usually the case in advanced countries). In such systems, internal audit units of the ministries or entities play an important role in controlling and overseeing the management risks associated with contingent liabilities, supplementing the roles played by their accounting officers, the ministries of finance (MoFs) and SAIs, although they take time to set up.⁵⁹ In countries with centralized public financial management systems or where capacity outside the MoF is weak (in middle-income and developing countries), there is a strong need for a centralized approach to collating, analyzing and disclosing fiscal risks. In such centralized systems, the MoF should have overall responsibility for managing all contingent liabilities, with the high-level inspectorates playing a role in overseeing their management.

⁵⁹ One of the recognized functions of internal audit is indeed to improve the effectiveness of risk management. The Institute of Internal Auditors defines internal audit as "...an independent, objective, assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and *improve effectiveness of risk management*, control, and governance processes."

Box 4. Institutional Arrangements for Managing PPP Risks

International experience suggests that it is useful to entrust a central unit with overall responsibility for formulating policy and providing practical guidance on PPPs (UNCITRAL, 2001).¹ Because of the complexity of the PPP arrangements, PPP contracting imposes much higher capacity requirements on the public sector than traditional procurement, and appropriate competencies and institutional structures need to be in place to efficiently and adequately manage the process (OECD/ITF, 2008). Concentrating PPP expertise in one area of government likely saves on costs and allows for a consistent, whole-of-government approach.

Almost all governments involved in PPP contracts have established some type of central PPP unit that reports to, or is part of, the Ministry of Finance. These include Czech Republic, Egypt, Greece, Ireland, Portugal, South Africa, State of Victoria (Australia), United Kingdom.² In some countries with large PPP programs, line ministries have also developed their own centers of expertise. A few countries do not have dedicated units, despite reliance on PPPs (e.g. Mozambique, Spain). Where establishment of a central unit might not be feasible, other measures may be considered to ensure an adequate level of coordination among the various public authorities involved (see UNCITRAL, 2001, for a discussion).

¹ Such a unit might advise the government on PPP policy; accumulate and disseminate knowledge and expertise on PPPs; assess specific proposals for PPP projects and programs; advise on the preparation of tender documents and on bid evaluation; compile and analyze data on PPP programs; and evaluate the results and risks of running PPP contracts.

² The United Kingdom has two main institutions dealing with PPPs. On the project side, it has established an innovative institutional structure, Partnerships U.K.—itself a PPP—to support and accelerate the use of PPPs, with an Advisory Council to HM Treasury overseeing its work. On the policy side, the Office of Government Commerce is in charge of policy advice on PPPs.

VII. CONCLUSION

The increased awareness that contingent liabilities can impose substantial fiscal costs, including impair fiscal sustainability, has prompted many countries to develop ways to safeguard the fiscal position against risks associated with contingent liabilities. These efforts have also been driven by calls for transparency from international institutions and by the attention increasingly paid by rating agencies to contingent liabilities in assessing sovereign creditworthiness.

The paper discussed theoretical and practical issues raised by contingent liabilities, including the rationale for taking them on, how to safeguard against the risks associated with them, how to account and budget for them, and how to disclose them. A review of country experiences in these areas points to the emergence of a body of good practices in mitigating, managing, and disclosing risks associated with contingent liabilities, as well the institutional arrangements for dealing with them.

Mitigating contingent liability risk requires that policymakers understand the nature of the risks involved and address them before entering into contingent liabilities. This is best achieved by putting in place a comprehensive framework that guides policy-makers in assessing the need to enter into contingent liabilities, the net social or financial benefits of doing so, and the players best positioned to bear the risks, requiring ultimately accountability for the decisions to take on such liabilities. The framework should also address the incentives

and costs involved in issuing contingent liabilities (such as guarantees), by requiring risk-sharing with the private sector to mitigate moral hazard; charging the beneficiary for the fiscal cost of the liability (unless it is issued as a subsidy); and treating the subsidy cost of the contingent liability as budgetary expenditure, where feasible. Finally, external scrutiny of the decisions to take on contingent liabilities is desirable and can be ensured through early parliamentary involvement in decisions to take on contingent liabilities and submission to the audit by national audit institutions.

Managing retained risks requires their systematic monitoring and putting in place funding mechanisms for dealing with them should these risks realize. Managing low-impact risk can be handled through budgetary flexibility—including contingency appropriations, supplementary budgets, or allowing, under strict conditions, spending in excess of budget—or by relying on contingency funds for self-insurance. On the other hand, for the low probability but high impact events, such as natural disasters, the most appropriate vehicle is often market insurance or hedging.

Disclosure of contingent liabilities should be guided by internationally-accepted standards in accounting and fiscal transparency. Disclosure venues could differ, but should include budget documentation and financial statements so as to allow an integrated assessment of the fiscal position. In providing information on contingent liabilities, the appropriate balance has to be struck in ensuring that the information is meaningful, while at the same time avoiding it from being overwhelming. While there may be circumstances when it may not be desirable to disclose the magnitude of some contingent liabilities, these should not be used as a pretext for avoiding disclosing them altogether. To ensure accountability, clear and strict responsibility for the provision of accurate reporting on contingent liabilities should be established.

Finally, in the area of institutional arrangements for managing contingent liability risks, the key issues are where to house responsibility for monitoring and managing these risks and the degree of centralization required. The monitoring of all risks from contingent liabilities should be centralized in the fiscal policy-making institution. While centralizing risk management may also be desirable, including through the integration of contingent liabilities management with that of conventional debt, in practice the appropriate setup depends critically on the public finance management system in the country and capacity.

Annex I. Accounting/Statistical Standards and Contingent Liabilities

Accounting standards are generally concerned only with those liabilities that are based on explicit obligations based on contracts or laws, limiting them to some contingent liabilities and social benefits. The standards include requirements and guidelines on when these liabilities should be: (i) “recognized,” meaning formally recorded in the financial statements of the government as a liability or expense, or (ii) “disclosed,” meaning reported in notes or narratives that are regarded as an integral part of the financial statement. This section discusses the requirements for recognition and disclosure of contingent liabilities under internationally recognized standards in accounting (IPSAS for the public sector and IFRS for the private sector; Box A1) and statistical reporting (the Government Finance Statistics Manual, GFSM 2001). It also discusses the issues related to the measurement of these liabilities under these standards.

Box A1. Accounting Standards and Standard Setters

There are two main internationally-recognized accounting standards: one for the private sector companies called *International Financial Reporting Standards* (IFRS) and one for the public sector, developed on the basis of the IFRS, called *International Public Sector Accounting Standards* (IPSAS).

- The IFRS, the set of international accounting standards and interpretations for the private sector, were developed by the *International Accounting Standards Board* (IASB) and has now replaced local standards in many countries, including those in the European Union. Many of the standards forming part of the IFRS are known by the older name of *International Accounting Standards* (IAS). The IASs were issued between 1973 and 2001 by the IAS Committee, which was reconstructed in early 2001 into the IASB. In April 2001 the IASB adopted all IASs and continued their development, calling the new standards IFRS.
- IPSAS is a set of accounting standards for the public sector based on IFRS that is issued by the International Federation of Accountants (IFAC), and more specifically by one of its standard-setting Boards (IPSAS Board).

The U.S. is perhaps the only major country that has not adopted the international standards (or standards mostly consistent with these) for either the private or the public sector. The U.S. generally accepted accounting principles (U.S. GAAP) are perhaps the most fully developed, comprehensive set of standards available, and they may do the best job of capturing the costs and risks of guarantees and other commitments, although they are not very dissimilar to IFRS.

In 2002, the IASB and the U.S. Financial Accounting Standards Board (FASB) agreed to work towards bringing the IFRS and U.S. GAAP closer to each other (the Norwalk Agreement). In February 2006, the IASB and FASB issued a Memorandum of Understanding including a program of topics on which the two bodies will seek to achieve convergence by 2008.

Recognition

The question of whether contingent liabilities are true government liabilities when entered into (e.g., when a contract to provide guarantees is signed) is not an easy one, given the uncertainty about whether the contingency will materialize or not. The accounting and statistical standards provide different answers to this, the former relying on the probability of the contingency occurring and the latter on its occurrence or not.

Under the current accounting standards (IFRS for the private sector and IPSAS for the public sector):⁶⁰

- For accrual accounting, contingent liabilities are recognized as liabilities at the moment of initiation if: (a) the probability that the contingency will occur and hence a payment would have to be made is more than 50 percent; and (b) these payments can be reasonably measured.⁶¹ If both of these criteria are met, governments that prepare their budgets and financial statements on an accrual basis recognize the net present value of the amount expected to be called as a liability on the balance sheet and expense in the income statement at the time the contingent liability instrument is issued (this is recorded as a “provision,” or a liability/expense of uncertain amount and timing). Most of the guarantees would probably have a less than 50 percent chance of being called given that most one-off guarantees are given under the assumption that they will not be called. Because many individual guarantees are unlikely to be called, accounting standards allow the probability of payment to be determined by considering a number of similar guarantees as a class.⁶²
- For cash accounting, assets and liabilities are not recognized, and the expense associated with contingent liabilities is only recognized if and when the contingent event actually occurs and a payment is made.⁶³

The thinking in the accounting community about contingent liabilities has been changing, however. The International Accounting Standard Board (IASB) has issued an Exposure Draft in 2005 proposing to amend the IFRS so as to require contingent liabilities to be recognized immediately at fair value.⁶⁴ The draft comes to the conclusion that the contractual obligation itself is not conditional and therefore is a liability in full right, in fact proposing to do away with the term “contingent liability” altogether. What is conditional in these obligations is the amount that is required to settle the obligation because it depends on the occurrence or nonoccurrence of uncertain future events. This uncertainty about future events would therefore be reflected in the measurement of the liability recognized, rather than in the fact of whether it is recognized or not. This approach is consistent with the methods already used in Sweden and the U.S., where an estimate of the expected payment is made for all guarantees.

⁶⁰ This section focuses largely on the recognition and disclosure of contingent liabilities under IPSAS 19 (Provisions, Contingent Liabilities and Contingent Assets), but there are classes of contingent liabilities that could be treated under different standards depending on the type of contingency concerned. For example: (i) IPSAS 15 deals with financial instruments carried at fair value (financial guarantee contracts, letters of credit, credit default contracts, and possibly exchange rate and interest rate guarantees); and (ii) IFRS 4 deals with insurance contracts.

⁶¹ In IPSAS, contingent liabilities that meet these criteria and are recognized in financial statements are called “provisions” (defined as liabilities of uncertain timing and amount), with the remaining liabilities—under which the probability of an outflow is smaller than 50 percent and that cannot be reasonably estimated—defined as “contingent liabilities.” In this section, however, we continue referring to contingent liabilities in the more general sense noted earlier, rather than in the accounting sense.

⁶² See also Hemming et al., 2006, including for a description of the accounting and statistical treatment of contingent liabilities under PPPs.

⁶³ IPSASB, “Financial Reporting Under the Cash Basis of Accounting” (Unnumbered, January 2003).

⁶⁴ Exposure Draft of Proposed Amendments to IAS37 and IAS19.

Statistical
Treatment

Under current statistical reporting standards (the IMF's GFSM 2001 or the European Union's ESA-95) contingent liabilities are not considered liabilities until the contingency materializes, and therefore they need not be recorded in financial statements as a liability/expense until then. The reason for this approach rests largely on the need to ensure a consistent set of national accounts, in which an obligation that is recorded on the balance sheet of the private sector (e.g., the full amount of the loan) should not be also recorded on the balance sheet of the public sector (e.g., the expected cost of the loan's guarantee).⁶⁵

Work is currently underway to harmonize the statistical and accounting standards, including their treatment of contingent liabilities. An International Task Force on the Harmonization of Public Accounts has been set up under the aegis of the OECD to study the feasibility of harmonization between the different international government accounting and statistical standards, including the 1993 System of National Accounts (SNA), ESA-95, GFSM 2001, and IFRS/IPSAS.

DisclosureAccounting
Treatment

IPSAS includes disclosure requirements for contingent liabilities that have already been recognized in financial statements and those that haven't.⁶⁶

For the contingent liabilities that have already been recognized (called "provisions"), IPSAS requires disclosure in notes to financial statements of the information that would help users understand changes in contingent liabilities during the reporting period. Thus, for each class of recognized contingent liability, the government should disclose:

- the amount at the beginning and end of the period;
- additional provisions made in the period, including increases to existing provisions;
- amounts used (that is, incurred and charged against the provision) during the period;
- unused amounts reversed during the period; and
- the increase during the period in the discounted amount arising from the passage of time and the effect of any change in the discount rate.

In addition, for each class of recognized contingent liability, the government should also disclose:

- a brief description of the nature of the contingent liability and the expected timing of any payments;
- an indication of the uncertainties about the amount or timing of these payments, including the major assumptions made concerning future events where necessary to provide adequate information; and

⁶⁵ Only when a contingent contract relates to a financial arrangement (e.g., a financial derivative), where the arrangement has value because it is tradable, does GFSM 2001 call for recognition of the contingency as a liability.

⁶⁶ IPSAS 19. See also Appendix D of IPSAS 19 for examples of how information could be disclosed.

- the possibility of any reimbursement.⁶⁷

For the contingent liabilities that have not been recognized in financial statements, either because the contingency is not likely to materialize (probability is less than 50 percent) or because the payments cannot be estimated reasonably well, IPSAS requires the disclosure of the same information as presented in the previous paragraph, unless the probability of payments is remote. In addition to this information, however, the government is required to present, where practicable, an estimate of the financial effect of each class of contingent liabilities (and if it is not practicable, that fact is required to be stated).

At the same time, IPSAS allows for exemptions from the disclosure requirements in those cases when disclosure can be expected to prejudice the position of the government in a dispute with other parties. In such cases, while the information itself need not be disclosed, what should be disclosed is the general nature of the dispute, together with the fact that, and reason why, the information has not been disclosed (IPSAS 19, paragraph 109).

Statistical
Treatment

The statistical reporting standards (GFSM 2001) require the disclosure of contingent liabilities as a memorandum item to the balance sheet, including a description of the nature of the various contingencies and some indication of their possible value (without giving specific recommendations, but mentioning among the options the face value of the loan and the present value of expected government payments).

Measurement of Risks under the Standards⁶⁸

The public sector accounting standards suggest that the best estimate of the amount required to settle contingent obligations is the “expected value”, which weighs all possible outcomes by their associated probabilities, measured before tax or tax equivalents.⁶⁹

Where the time value of money would have a material impact on the estimate, the estimate should be the present value of the expenditures expected to be needed to settle the obligation. When a contingent obligation is discounted over a number of years, its present value will increase each year as the provision comes closer to the expected time of settlement. The standards require (paragraph 97(e)) that this increase in the recorded liability that is due to the passage of time be disclosed.

⁶⁷ It suggests that in determining which provisions or contingent liabilities may be aggregated to form a class, it is necessary to consider whether their nature is sufficiently similar for a single statement about them to fulfill the requirements of the first and second bullets in this paragraph. Thus, it may be appropriate to treat as a single class of provision amounts relating to one type of obligation, but it would not be appropriate to treat as a single class amounts relating to environmental restoration costs and amounts that are subject to legal proceedings (IPSAS 19).

⁶⁸ Based on IPSAS 19, paragraphs 44–57.

⁶⁹ Where there is a continuous range of possible outcomes, and each point in that range is as likely as any other, the mid-point of the range is used.

Table A1. Summary of the Main Requirements for Recognition and Disclosures of Contingent Liabilities

		Recognition	Disclosure
Cash Accounting	IPSAS 19	Only when the contingency is called and cash payments need to be made.	Encouraged.
Accrual Accounting		The expected cost of a contingent obligation should be recognized if: (i) it is more likely than not (50 percent) that the event will occur; and (ii) the amount of the obligation can be measured with sufficient reliability. Liabilities that do not satisfy these criteria should not be recognized.	Required for the remaining contingent liabilities, unless the likelihood of the payment is remote.
Statistical Reporting	GFS 2001	Only when the contingency is called and cash payments need to be made.	Required as a memorandum item to the balance sheet.

The discount rate used to discount expected future cash payments should be a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. If the expected future cash flow has already been adjusted for risks (variability of outcomes) under a specific contingent liability, then this risk adjustment should not be reflected again in the discount rate. Disclosure of the uncertainties surrounding the amount of the expenditure is made under paragraph 98(b).

More generally, the standards put forward a number of general qualitative characteristics that the information presented in financial statements should meet, among them are those of neutrality (free from bias) and materiality (with information considered material if its omission or misstatement could influence the decisions of users or assessments made on the basis of the financial statements) (IPSAS 1, Presentation of Financial Statements).

Annex II. Measuring the Value of Contingent Liabilities

There are various ways in which the value of the guarantee could be measured. These include: (i) the face value of the guarantee or maximum loss under guarantee; (ii) the expected costs of the guarantee, which can also be viewed as the most government can lose at an about 50 percent confidence level;⁷⁰ (iii) “unexpected” costs of the guarantee, i.e., the most government can lose at, for example, a 95–99 percent confidence level (also called “cash flow at risk”); or (iv) the market value of the guarantee (i.e., the expected costs plus a risk premium). The face value is by far the easiest and most commonly reported measure. The other measures require, in addition, an assessment of the probability that the guarantee would be called. We focus on these in this annex, drawing on Hagelin (2003).⁷¹

The methods for estimating expected costs or market value range from the use of educated guesses, to market or historical data, to quantitative models, such as option pricing and simulations.

Implicit guarantee pricing on the basis of market or historical data

- *Market data* can be used to estimate implicitly the market value of the guarantee, which is equal to the difference between the value of a risk-free government bond and the value of a non-guaranteed bond issued by the potential recipient of the guarantee.⁷² In practice, this would involve estimating the credit rating of the borrower, then inferring how much higher an interest rate a bond with this rating would carry compared to a government security (Hagelin, 2003). This method can be used mainly when the borrowers, or companies comparable to the borrower, have issued bonds quoted in the market, or when it is possible to attach a specific credit rating to the recipient. In practice, this method may be difficult to use because: (i) many companies, especially in emerging markets, do not issue bonds; (ii) borrowers covered by state guarantees are often unique in character and it may be difficult to find comparable companies to estimate the credit rating of the borrower; and (iii) market values would be misleading if borrowers already have a guarantee or if markets assume that the borrower has “implicit” guarantees, as might be the case with state-owned or state-sponsored enterprises.
- *Market data* can also be used to estimate the expected cost alone, by using the historical default and recovery rates compiled by rating agencies for various rating categories. This could be compared to actual yield spreads, which include both expected loss and the risk premium, to obtain the risk premium.
- *Historical data* on loan loss experience could also be used, if available, to estimate expected costs in cases where there is a large portfolio of similar contingent liabilities, such as loan guarantees in housing, education, or agricultural sectors.

⁷⁰ This is generally an approximation, since the point that would divide the probability distribution of losses in half is the median, rather than the mean of the distribution, but would hold if the loss distribution is symmetric.

⁷¹ For a detailed discussion of valuation methodologies see Irwin (2007), chapter 7.

⁷² To determine the expected cost, one would then have to subtract the risk premium from the market value.

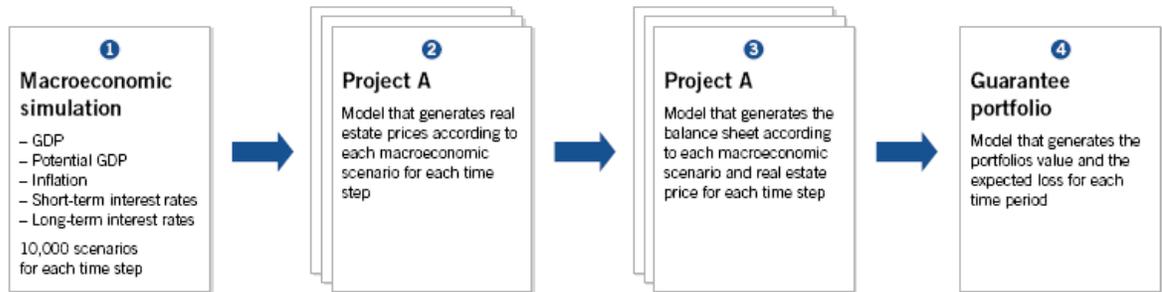
Direct guarantee pricing

- *Option pricing.* This method exploits the similarities between guarantees and put options, to determine the *expected cost* of a guarantee.⁷³ A put (call) option is a financial instrument that entitles but does not oblige the holder to sell (purchase) a particular asset at a price agreed in advance, if the holder so desires (Hagelin, 2003). By guaranteeing a firm's loan, the state issues a put option on the assets of the firm, which gives management the right to sell those assets for the face value of the loan on its maturity date (Merton, 1977). As the holder of a put option would exercise the option when the market value of the asset is below the agreed price, forcing the issuer to accept an asset with a value below what he promised to pay, so would the guaranteed lender exercise the option to call in the guarantee, forcing the state to accept the loan at par value when its market value is below par. In these analogies, the value of the government guarantee equals the value of the put option. It is worth noting that option pricing is based on a risk-neutral valuation, meaning that options are priced without taking into account any risk premium (Hagelin, 2003).
- *Simulation models* (e.g., Monte Carlo simulations). These estimate the probability distribution of losses from the guarantee by simulating, rather than assuming, the evolution of relevant risk factors underlying the guarantee. This distribution is then used to price the guarantees and also allows estimation of the maximum losses that may occur at a given confidence level. Simulation models are generally more flexible than option pricing models, as they allow more factors to be taken into account.

A simulation model normally could consist of a number of modules: the first to generate a number of macroeconomic outcomes, which are used in the subsequent modules to describe how the underlying assets of the borrower covered by the guarantee evolve over time. The figure below illustrates a simulation model designed by the Swedish debt office to price guarantees to a state financing institution, whose assets consists largely of loans to cooperative apartment associations.

The choice of method depends generally on the existence of comparable companies and the cost of the method. Implicit guarantee valuations are used when it is relatively easy to find companies comparable to the borrower that issue debt quoted in the market. If these are difficult to find, simulation methods are frequently used, but these are both time-consuming and expensive to develop. To justify such an investment of resources, the guaranteed amounts have to be large. In cases where the guarantees are relatively small and there is thus no reason to develop a simulation model, an option pricing model may be a good substitute (Hagelin, 2003). Any reasonable approach, including educated guesses, will produce better estimates of the cost of loan guarantees than the cash-based approach that will always assume zero cost in the budget year.

⁷³ Merton (1977) demonstrated that a government guarantee to banks could be modeled as an implicit put option.

Figure A1. The Swedish Debt Office Simulation Model

Source: Hagelin, 2003.

REFERENCES

- Benavente, José Miguel, Alexander Galetovic, and Ricardo Sanhueza, 2006, “Fogape: an Economic Analysis,” University of Chile Economics Department Working Paper 222.
- Bennett, Fred, Alan Doran and Harriett Billington, 2005, “Do Credit Guarantees Lead to Improved Access to Financial Services? Recent Evidence from Chile, Egypt, India, and Poland,” Department for International Development, London, Financial Sector Team, Policy Division Working Paper.
- Bhatia, A.V., 2002, “Sovereign Credit Ratings Methodology: an Evaluation,” IMF Working Paper 02/170 (Washington: International Monetary Fund).
- Blöndal, Jón R., 2004, “Issues in Accrual Budgeting,” *OECD Journal on Budgeting*, Vol. 4, No. 1., pp. 103–210.
- Cardona, O.D., 2006, “A System of Indicators for Disaster Risk Management in the Americas,” in *Measuring Vulnerability to Hazards of Natural Origin: Towards Disaster Resilient Societies*, ed. by J. Birkmann (United Nations University, 2006).
- Cardona Bermeo, J.E., B. Contreras Monroy, E. Ortega Rosero, and A.R. Quevedo Caro, 2002, “Manejo de Pasivos Contingentes en el Marco de la Disciplina Fiscal en Colombia,” paper presented at the XIV Regional Seminar for Fiscal Policy, Santiago, Chile, January.
- Cebotari, Aliona, Jeffrey Davis, Lusine Lusinyan, Amine Mati, Paolo Mauro and Ricardo Velloso, 2008, “Fiscal Risks: Sources, Disclosure and Management,” International Monetary Fund, available at <http://www.imf.org/external/np/pp/eng/2008/052108.pdf>.
- Cooper, Russel, and Thomas Ross, 2003, “Protecting Underfunded Pensions: the Role of Guarantee Funds,” *Journal of Pension Economics and Finance*, Vol. 2, No. 3, pp. 247–272.
- Currie, Elizabeth, 2002, *The Potential Role of Government Debt Management Offices in Monitoring and Managing Contingent Liabilities* (Washington: World Bank).
- Demirgüç-Kunt, Asli, Thorsten Beck and Patrick Honohan, 2008, “Finance for All? Policies and Pitfalls in Expanding Access,” Policy Research Report Series (Washington DC: the World Bank).
- Edwards P., J. Shaoul, A. Stafford, and L. Arblaster, 2004, “Evaluating the Operation of PFI in Roads and Hospitals,” Research Report No. 84 (London: Certified Accountants Educational Trust) available at: <http://image.guardian.co.uk/sysfiles/Society/documents/2004/11/24/PFI.pdf>
- Ehrlich, Isaac, and Gary Becker, 1972, “Market insurance, Self-insurance and Self-protection,” *Journal of Political Economy*, Vol. 80, pp. 623–648.

- Elton, Gruber, Agrawal, and Mann (2001), "Explaining the Rate Spread on Corporate Bonds," *Journal of Finance*, Vol. 56, pp. 247–277.
- European Commission, 2004, "Public finance in EMU—2004," *European Economy, Report and Studies*, 3 (Brussels).
- Federal Reserve Bank of Cleveland (FRBC), 1991, "Government Risk-Bearing," Proceedings of a Conference Held at the FRBC, Cleveland, Ohio, May.
- Flannery, Mark J., 1993, "Government Risk-Bearing in the Financial Sector of a Capitalist Economy," in *Government Risk-Bearing*, ed. by M. Sniderman (Norwell, MA: Kluwer Academic Publishers).
- General Accounting Office (GAO) of the United States, 2003, "Catastrophe Insurance Risks: Status of Efforts to Securitize Natural Catastrophe and Terrorism Risk," GAO-03-1033 (Washington).
- Gramlich, Edward M., 2003, Remarks Before the National Economists Club, Washington DC, April 24, 2003.
- Hagelin, Niclas, "Pricing of state guarantees in practice," Swedish National Debt Office: Central Government Borrowing: Forecast and Analysis, October 22, 2003
- Hemming, Richard and a staff team, 2006, "Public-Private Partnership, Government Guarantees, and Fiscal Risk," International Monetary Fund, Washington.
- Honohan, Patrick, 2008, "Partial Credit Guarantees: Principles and Practice," Discussion Paper No. 244 (Dublin: Institute for International Integration Studies).
- Honohan, Patrick, and Klingebiel, Daniela, 2003, "The Fiscal Cost Implications of an Accommodating Approach to Banking Crises," *Journal of Banking & Finance*, Vol. 27, pp. 1539–1560.
- Hörngren, Lars, 2003, "Contingent Liabilities in Debt Management," issues paper prepared for the annual meeting of the OECD Working Party on Debt Management, October.
- Insurance Information Institute (III), 2004, *Terrorism, Insurance, and the United States Government* (New York). Available at <http://www.iii.org/media/hottopics/insurance/sept11/terrorismwhitepaper/>
- Insurance Information Institute (III), 2008, "Terrorism Risk and Insurance," Issues Updates. Available at <http://www.iii.org/media/hottopics/>
- International Monetary Fund and the World Bank, 2001, "Guidelines for Public Debt Management," Washington.

- Intosai Public Debt Committee, 2005, “Member States Questionnaire on Contingent Debt: Summary of Results” and “Member States Questionnaire on Contingent Debt: Outcomes and Recommendations.” Available at www.intosai.org
- Irwin, Timothy, 2003, “Public Money for Private Infrastructure—Deciding when to Offer Guarantees, Output-based Subsidies, and Other Fiscal Support,” World Bank Working Paper No. 10.
- Irwin, Timothy, 2007, “Government Guarantees: Allocating and Valuing Risk in Privately Financed Infrastructure Projects,” the International Bank for Reconstruction and Development/the World Bank.
- Kharas, Homi, and Deepak Mishra, 2001, “Fiscal Policy, Hidden Deficits, and Currency Crises,” in *World Bank Economists’ Forum*, ed. by S. Devarajan, F. H. Rogers, and L. Squire. (Washington: The World Bank.)
- Kraan, Dirk-Jan, 2004, “Off-budget and Tax Expenditures”, *OECD Journal on Budgeting*, Vol. 4, No. 1, pp. 121–142.
- Laeven, Luc, and Fabian Valencia, 2008, “Systemic Banking Crises: A New Database,” International Monetary Fund, Working Paper 08/224.
- Lienert, Ian, and Jung, Moo-Kyung, 2004, “The Legal Framework for Budget Systems, An International Comparison,” *OECD Journal on Budgeting*, Special Issue, Vol. 4, No. 3.
- Liu, Lili, May 2007, “Managing Subnational Fiscal Risks,” *mimeo*, background paper prepared by the World Bank Staff for the APEC Finance Ministers’ Meeting.
- Merton, R.C., 1977, “An Analytic Derivation of the Cost of Loan Guarantees and Deposit Insurance: An Application of Modern Option Pricing Theory,” *Journal of Banking and Finance*, Vol. 1 (June), pp. 3–11.
- MMC Securities Corp, 2007, “The Catastrophe Bond Market at Year-End 2006: Ripples into Waves.”
- Mody, Ashoka, 2000, "Contingent Liabilities in Infrastructure: Lessons from the East Asian Crisis," IBRD.
- National Economic Research Associates (NERA), 2000, “The Economic Rationale for the Public Provision of Export Credit Insurance by ECGD: A Report for the Export Credits Guarantee Department” (London).
- Organization for Economic Cooperation and Development (OECD), 2001, “OECD Best Practices for Budget Transparency,” Public Management Committee, PUMA/SBO(2000)6/FINAL.
- OECD, 2003, *Survey on Budget Practices and Procedures*, OECD and World Bank, <http://ocde.dyndns.org>

- OECD, 2005a, “Advances in Risk Management of Government Debt” (Paris).
- OECD, 2005b, *A pilot survey on budget practices and procedures for selected Latin American countries*, OECD, Inter-American Development Bank and the London School of Economics and Political Science.
- OECD, 2007, *Survey on Budget Practices and Procedures*. Available at <http://webnet4.oecd.org/budgeting/Budgeting.aspx>
- OECD, 2008, “Public-Private Partnerships: In Pursuit of Risk Sharing and Value for Money”.
- OECD/International Transport Forum, 2008, “Transport Infrastructure Investment: Options for Efficiency.”
- Polackova Brix, Hana, and Allen Schick, eds., 2002, *Government at Risk: Contingent Liabilities and Fiscal Risk*, (Oxford: The World Bank and Oxford University Press).
- Schick, Allen, 2002, “Budgeting for Fiscal Risk,” Chapter 3 in *Government at Risk: Contingent Liabilities and Fiscal Risk*, ed. by Hana Polackova Brix and Allen Schick (Oxford: The World Bank and Oxford University Press).
- Stiglitz, Joseph E., 1993, “Perspectives on the Role of Government Risk-Bearing within the Financial Sector,” in *Government Risk-Bearing*, ed. by M. Sniderman (Norwell, MA: Kluwer Academic Publishers)
- United Nations Commission on International Trade Law (UNCITRAL), 2001, *Legislative Guide on Privately Financed Infrastructure Projects* (New York) Available at: <http://www.uncitral.org/pdf/english/texts/procurem/pfip/guide/pfip-e.pdf>
- United Nations Development Program (UNDP), 2004, “Visions of Risk: A Review of International Indicators of Disaster Risk and its Management,” a report for the ISDR Inter-Agency Task Force on Disaster Reduction – Working Group 3: Risk, Vulnerability and Disaster Impact Assessment (Brussels).
- Webber, Lewis, 2007, “Decomposing Corporate Bond Spreads,” *Bank of England Quarterly Bulletin*. Available at: <http://ssrn.com/abstract=1077563>.