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Contingent Government Liabilities

A Hidden Risk for Fiscal Stability

Hana Polackova

Many governments have faced serious fiscal instabilities as a result of their growing contingent liabilities. But conventional fiscal analysis and institutions fall short in addressing contingent fiscal risks. What approaches in fiscal analysis and standards for public sector management would foster sound fiscal performance? And how can policymakers be made accountable for recognizing the long-term costs of both direct and contingent forms of government activity in their decisions?

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Summary findings

Governments are increasingly exposed to fiscal risks and uncertainties for three main reasons:

- The increasing volume and volatility of international flows of private capital.
- The state's transformation from financing services to guaranteeing that the private sector will achieve particular outcomes.
- Moral hazards arising in markets because the government is perceived to have residual responsibility for market outcomes.

Sources of fiscal risk may be direct or contingent (a liability only if a particular event occurs). Whether direct or contingent, they are either explicit (recognized as a government liability by law or by contract) or implicit (a "moral" obligation reflecting public expectations and pressure from interest groups).

The recent Asian crisis revealed that major moral hazards exist in markets and that sizable hidden fiscal risks may arise from contingent forms of government support.

Governments must understand and know how to handle contingent liabilities if they are to avoid the danger of sudden fiscal instability and realize their long-term policy objectives. They can reduce fiscal risks by incorporating contingent liabilities into their analytical, policy, and institutional public finance frameworks.

Governments can address fiscal risk through three channels in particular, says Polackova:

- By including contingent and implicit financial risks in their fiscal analysis and (to deter moral hazard in the market) by publicly acknowledging the limits of state responsibilities.
- By reflecting the cost of contingent liabilities in policy choices, budgeting, financial planning, reporting, and auditing.
- By developing institutional capacity to evaluate, regulate, control, and prevent financial risk in both the public and private sectors.

Given the increasingly serious implications of contingent government liabilities for the fiscal outlook of countries, Polackova argues that it is time for the World Bank, the International Monetary Fund, and others to:

- Incorporate government contingent fiscal risks in their analysis of a country's fiscal sustainability, policies, and institutions.
- Require countries to disclose information regarding their exposure to contingent fiscal risks.
- Help countries embrace contingent liabilities in their analytical, policy, and institutional public finance frameworks.

This paper — a product of the Poverty Reduction and Economic Management Sector Unit, Europe and Central Asia Region — is part of a larger effort in the region to enhance the Bank's analytical and operational work in public finance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Alison Panton, room H11-033, telephone 202-458-5433, fax 202-477-1440, Internet address apanton@worldbank.org. The author may be contacted at hpolackova@worldbank.org. October 1998. (31 pages)

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GOVERNMENT CONTINGENT LIABILITIES: A HIDDEN RISK TO FISCAL STABILITY

Hana Polackova, The World Bank

The findings, interpretations, and conclusions expressed in this volume are those of the author and should not be attributed to the World Bank, affiliated organizations, or members of its Board of Directors or the countries they represent. The author thanks Hafez Ghanem, Sanjay Pradhan, Allen Schick, and Sergei Shatalov for their helpful comments and suggestions. The paper is a short version of a forthcoming, more comprehensive study that further elaborates the policy and institutional aspects of fiscal risks and includes several country case studies of direct and contingent fiscal risks and the quality of fiscal adjustment.

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SUMMARY

- i. Governments are facing increasing fiscal risks and uncertainties. Most recently, the Asian crisis revealed how contingent forms of government support create major moral hazard in the markets and severe fiscal instabilities. The main reasons for this situation are: (a) the increasing volumes and volatility of international private capital flows, (b) a shift in the role of the state from directly financing and providing services to guaranteeing that the private sector will accomplish particular outcomes, (c) biases in policy decisionmaking under fiscal constraints, and (d) the existence of moral hazard in the markets because of a perception that the government has some residual responsibilities.
- ii. Since off-budget government programs increasingly cause fiscal instabilities, a string of years with a balanced budget and low public debt figures does not necessarily suggest either past fiscal prudence or a good fiscal outlook. Thus, a study of government fiscal position must also examine the obligations taken by the government outside the budgetary system. The fiscal risks governments face are of four types: either direct or contingent, both of which in turn are either explicit or implicit. Governments that want to avoid the danger of sudden fiscal instability and accomplish their long-term policy objectives must have a good understanding of both their direct and contingent liabilities and must be able to handle them appropriately. But do governments have adequate incentives and capacities to deal with not only budgetary but also with all significant fiscal risks? Assistance and even coercion by international institutions may be required.
- iii. There are four main ways governments can address fiscal risks: (a) control the contingent as well as direct, and implicit as well as explicit fiscal risks and orient policies toward good quality rather than rapid fiscal adjustment; (b) publicly recognize the limits of the state's responsibilities so as to deter moral hazard in the markets; (c) ensure that institutional arrangements for public finance and standards for budgeting, accounting, financial planning, reporting, and auditing address both contingent and direct liabilities and promote fiscal prudence and equity in all contingent as well as directly financed public programs; and (d) develop and employ institutional capacities to evaluate, regulate, control, and prevent financial risks in both the public and private sectors.

INTRODUCTION

Governments are facing increasing fiscal risks and uncertainties. Two of the reasons for this situation are: first, the international integration of financial markets, which has meant greater volumes and volatility of cross-border flows of private capital; and, second, the privatization of state functions, accompanied by implicit or explicit state guarantees. State guarantees and insurance schemes, as opposed to budgetary subsidies and direct provision and financing of public services, have become a common method of government support. These off-budget programs and obligations involve hidden fiscal costs, with implicit and contingent liabilities that may result into excessive requirements for public financing in the medium and long term.

The third reason is that policymakers pursuing a balanced budget or some deficit target tend to favor off-budget forms of state support that do not require immediate cash and that, at least for some time, hide the underlying fiscal cost. Fiscal adjustment that concentrates on deficit reduction may overlook or elevate the fiscal risks associated with structural policies affecting pensions and health care. Major fiscal risks outside the budget derive from explicit promises and implicit expectations that government will help when various failures occur. The subsequent emergence of moral hazard in the markets can exacerbate these risks. Usually the support governments offer to large weak banks, enterprises, and subnational governments in troubles is outside the budget.

Although it is impossible for governments in a market environment to avoid all fiscal risk, they can control and reduce the risks, but only if they recognize and fully consider them in their policy debates. Whether governments have the incentives and capacities to reflect fiscal risks in their policy choices and to carry out appropriate fiscal adjustment is an important question. The incentives will reflect how well policymakers understand the issues and the pressures they face in dealing with them. The fiscal risks become apparent only when the institutions conducting fiscal analyses look beyond the government's budget and debt to include the contingent and implicit liabilities. The extent of the incentives governments have to make direct and contingent fiscal risks transparent is linked mainly to the definition and measurement of internationally recognized fiscal indicators, to the quality of public awareness, external monitoring, and to the sanctions imposed for concealing relevant data and exposing the state to excessive fiscal risk.

This paper first classifies and analyzes the potential obligations and fiscal risks governments face and their sources. It next outlines the options for reducing fiscal risks in the context of fiscal adjustment, with particular attention to the typology and analysis of specific fiscal risks, the high risk exposure of governments of transition and emerging-market economies, and the quality and bias in government decisionmaking at the time of fiscal adjustment. Several questions are addressed. How can policymakers be made accountable for recognizing the long-term cost of all forms of government activities? How can the moral hazard induced by government interventions be reduced? What standards for public sector accounting, budgeting, reporting, and risk management would foster sound fiscal performance in the long term? A forthcoming, more comprehensive study presents a framework for including direct and contingent fiscal risks in fiscal analysis and applies it to selected countries.

POSSIBLE FINANCING PRESSURES ON THE CENTRAL GOVERNMENT

The Fiscal Risk Matrix

Governments face four types of fiscal risk, each of which is a broadly defined liability that combines two of the following four characteristics: explicit versus implicit and direct versus contingent.¹

- *Explicit liabilities* are specific obligations of the government established by a particular law or contract. The government is legally mandated to settle the obligation when it comes due. Common examples are the repayment of sovereign debt and repayment of nonperforming loans the state has guaranteed.
- *Implicit liabilities* involve a moral obligation or expected responsibility of the government that is not established by law or contract but instead is based on public expectations, political pressures, and the overall role of the state as society understands it. Examples of implicit liabilities are future public pension benefits that are not specified by law, disaster relief for uninsured victims, and default of a large bank on nonguaranteed obligations.
- *Direct liabilities* are obligations that will arise in any event and are therefore certain. They are predictable based on some specific underlying factors; they do not depend (are not contingent) on any discrete event. For example, future public pensions specified by law are a direct liability whose size reflects the expected amount of the benefit, eligibility factors, and future demographic and economic developments.
- *Contingent liabilities* are obligations triggered by a discrete event that may or may not occur.² The probability of the contingency occurring and the magnitude of the government outlay required to settle the ensuing obligation are difficult to forecast. Probability and magnitude depend on some exogenous conditions, such as the occurrence of a particular event (for example, a natural disaster or banking crisis) and some endogenous conditions, such as the design of government programs (an example being the contracts for state guarantees and insurance), as well as on the quality and enforcement of regulations and supervision. The fiscal risk matrix in table 1 provides a typology of the sources of the potential financial requirements central governments face. Under each category are examples of government programs and promises that can create fiscal pressures. Some of the examples apply across all countries (such as sovereign debt), whereas others are more country-specific (such as crop insurance).

¹ The international accounting standards for governments proposed by the International Federation of Accountants define a liability as a present obligation of the government that entails a form of economic benefits and that arises from past events whose settlement is expected to result in an outflow of government resources (International Federation of Accountants 1998).

² International accounting standards define a contingency as a condition or situation whose ultimate outcome is determined only by the occurrence, or nonoccurrence, of one or more future events (International Accounting Standards Committee 1997).

TABLE 1: THE FISCAL RISK MATRIX

Liabilities^a	Direct (<i>obligation in any event</i>)	Contingent (<i>obligation if a particular event occurs</i>)
Explicit Government liability is recognized by law or contract	<ul style="list-style-type: none"> • Foreign and domestic sovereign borrowing (loans contracted and securities issued by the central government) • Expenditures by budget law • Budget expenditures legally binding in the long term (civil service salaries, civil service pensions) 	<ul style="list-style-type: none"> • State guarantees for nonsovereign borrowing and obligations issued to subnational governments and public and private sector entities (development banks) • Umbrella state guarantees for various types of loans (such as for mortgages, students studying agriculture, and small businesses) • State guarantees (for trade and the exchange rate, borrowing by a foreign sovereign state, private investments) • State insurance schemes (for deposits, minimum returns from private pension funds, crops, floods, war risk)
Implicit A “moral” obligation of the government that mainly reflects public expectations and pressures by interest groups	<ul style="list-style-type: none"> • Future recurrent costs of public investment projects • Future public pensions (as opposed to civil service pensions) if not required by law • Social security schemes if not required by law • Future health care financing if not specified by law 	<ul style="list-style-type: none"> • Default of a subnational government and public or private entity on nonguaranteed debt and other liabilities • Cleanup of the liabilities of privatized entities • Bank failure (beyond state insurance) • Investment failure of a nonguaranteed pension fund, employment fund, or social security fund (social protection of small investors) • Default of the central bank on its obligations (foreign exchange contracts, currency defense, balance of payments stability) • Bailouts following a reversal in private capital flows • Residual environmental damage, disaster relief, military financing, and the like

^a Of fiscal authorities, not the central bank.

Direct Explicit Liabilities

In most countries, the central government commonly recognizes, quantifies, and discloses direct explicit liabilities. Even so, estimating the size of the government outlays related to these obligations in the medium term is not a simple task.

- Governments usually specify *obligations to settle direct foreign and domestic sovereign debt* in their loan contracts and securities. The future financing requirements mainly relate to the maturity, currencies, and interest rate of the debt instruments. Using these specifications, governments forecast their debt service profile, simulate the tradeoff between risk exposure and the cost of borrowing, and build debt service scenarios for alternative portfolio and macroeconomic developments. Denmark, Ireland, and the United Kingdom provide excellent examples of how to analyze and disclose sovereign borrowing risks.
- *Budgetary outlays* are normally embedded in an annual budget law, which contains the approved activities and policies of the government. In principle, the budget is legally binding, and outlays are to comply with the budgeted figures throughout the fiscal year. In practice, the budget is viable only if it is based on good macroeconomic analysis and if the government employs institutional mechanisms for fiscal discipline and control.
- Governments in many countries extend *legal entitlements to a salary and pension* at a specified retirement age to public employees. It is certain these legal entitlements will be a spending item in future state budgets. Their magnitude is based on forecasts of the numbers of public employees and their expected remuneration, pension benefit, and retirement age. Under New Zealand's Fiscal Responsibility Act, the government is required to analyze and disclose such forecasts in budget documents. (Where a government plans to downsize the civil service, it may be obligated to pay redundancy packages, whose overall cost would be contingent on the actual downsizing.)

In contrast to the environment depicted in the fiscal risk matrix (table 1), countries with legal provisions that the government finance future social security benefits, such as public pensions, universal health care, and education, list these as direct explicit rather than implicit items.

Direct Implicit Liabilities

Direct implicit government liabilities often arise as presumed, rather than as legal or contractual, obligations established by public expenditure policies in the medium term. Only governments that are committed to transparent medium-term expenditure planning and long-term fiscal discipline recognize and quantify these obligations. Assuming no policy changes, the implicit cost of demographically driven public expenditures is what in particular poses a danger to fiscal stability in the long term.

- *The completion of public investment projects and maintenance* are only expected, not mandated, by law. Governments analyze and quantify, and are accountable for, the ex-ante estimates and actual multiyear investment and ensuing long-term recurrent costs. Countries such as Australia and South Africa use a medium-term expenditure framework that automatically includes the financing requirements for operations and maintenance in the

fiscal outlook and future budgets. Thus, government obligations to sustain the benefits of public investments are explicit.

- In many countries, *future public pension benefits* are not grounded in any legal document and therefore are not explicit but rather are implicit government liabilities. Assuming that a given pension policy will continue, it is certain that the overall obligation of the government will occur (there are economic, social, and political reasons for assuming that a government would not stop paying the benefits unless it first reformed its pension system). Hence future public pension benefits are a direct liability, even though not in the strict accounting sense. Since the provision of public pensions is recognized as the most striking problem for fiscal sustainability in aging societies, many governments have been analyzing the long-term fiscal implications of their pension policies and of alternative reforms using long-term fiscal and pension models. (A point discussed below is that pension reforms often encourage private sector involvement in saving for retirement because the government provides indirect forms of support, such as guarantees of minimum pension benefits. These guarantees are an explicit contingent liability of the government.)
- Similarly, *future health care and social security* financing can be analyzed as a direct implicit government liability (even if not accounted as such). Research shows that the dynamics of the financing requirement for health care in an aging society is often even more explosive than that for public pensions. Modeling and recognition of the long-term fiscal implications of health care policies and their reforms are critically important for fiscal stability and equity in the long term.

Contingent Explicit Liabilities

Contingent explicit liabilities are a legal obligation of the government to make a payment if a particular event occurs; they are not directly associated with any existing budgetary program. A government's commitment to accept obligations contingent on future events amounts to a hidden subsidy and may cause immediate distortions in the markets and result in a major unexpected drain on government finances in the future.

Although governments recognize each contingent explicit liability in some formal documentation, many have yet to consolidate all these obligations and their total magnitude in one place and to include them in their overall fiscal analysis and expenditure planning. In contrast, many corporations, commercial banks, and insurance companies have made considerable progress in dealing with contingent liabilities in the past 10 years. Similarly, governments have not yet recognized the importance of good design, monitoring, and management of their programs to control fiscal risks. At the policy level, ex-ante analysis of the risks and future financial implications associated with the contingent forms of government support contribute to better policy choices on equity and long-term fiscal stability.

- Governments often issue *guarantees* to cover part or all of the risk that a borrower will fail to repay a loan or other guaranteed asset or that an institution will fail to fulfill its obligations. Common examples include state guarantees of debt and other obligations of subnational governments and various public and private entities, such as budgetary institutions, credit and

guarantee funds, development banks, and enterprises. Guarantees and credit issued through a state-guaranteed intermediary are particularly risky because they allow the government to pursue unannounced policy decisions, involve a problem of management incentives, and are difficult for governments to monitor and control. The hidden subsidy to the beneficiary of a guarantee, and the subsequent potential cost to the government, are positively correlated with the risk, size, and duration of the underlying asset. In addition, the probability of a default may be very high if the guarantee contract does not specify risk-sharing by both the government and the other parties in terms of both the financial coverage (part versus all of the loan) and risk coverage (specific political or commercial, versus all risks). Government guarantees routinely cover all risks fully. Such guarantees distort the markets and are called with high probability. The risk a government assumes can be estimated based on the experience of governments of different capacities, simple rules, and, where appropriate, more sophisticated methodologies such as actuarial, econometric, loss estimate, and option pricing models.³ Assessment of risks allows governments to reflect the potential fiscal cost associated with guarantees in their choices of policies and forms of support and in the design of a guarantee contract. Since passage of the Credit Reform Act, the United States provides good examples of government analysis and the design of credit guarantees.

- Governments extend *umbrella guarantees* to eligible persons or entities borrowing for a specific purpose, such as university studies, a mortgage, farming, and small business development. The rationale for these guarantees and the assessment of their risks and potential long-term cost are similar to those for the individual guarantees discussed above (and are also true for *trade and exchange rate guarantees* and *guarantees on foreign sovereign borrowing and private investments*).
- *State insurance schemes* often constitute a major risk to future fiscal balances. Common state insurance programs cover bank deposits, crops, war risks, minimum returns from pension funds, and floods, earthquakes, and other natural disasters. Although most of these programs cover losses that occur very infrequently, when the losses do occur, their total magnitude may be enormous. The risk pool under these programs, particularly in small markets, is very limited, one justification for government's involvement. State insurance schemes rely on net government financing from general taxes, rather than on insurance fees, and thus redistribute wealth. The analysis of risks and potential fiscal burdens associated with state insurance schemes requires sector data and sophisticated models (such as the hydrologic model used to estimate the probabilities of floods in a given year), and loss estimation methodologies and options pricing models to assess the riskiness of the returns of a pension fund. A qualitative analysis of the risk factors is, however, sufficient for the government both to design a sound insurance scheme that would not seriously distort market behaviors and to make a rough estimate of its potential fiscal cost. The United States may take the lead in this area as its government adopts the analytical and budgeting method for federal insurance programs proposed by the General Accounting Office (United States, General Accounting Office 1997).

³ For a detailed discussion of the valuation methodologies for loan guarantees and other contingent liabilities, see Mody and Patro (1996) and Mody and Lewis (1997).

Contingent Implicit Liabilities

Contingent implicit liabilities are not officially recognized and may be the product of declared policy objectives. Governments accept these liabilities only *after* a failure in the public sector or market and as a result of pressure by the public, possibly interest groups, or just too high an opportunity cost for not acting.

Contingent implicit liabilities often pose the greatest fiscal risk to governments. The event triggering the liability is uncertain, the value at risk difficult to evaluate, and the extent of government involvement difficult to predict. In short, it is very hard to identify and estimate the size of contingent implicit liabilities. They are particularly large if the macroeconomic framework in the country is weak, the financial sector vulnerable, regulatory and supervisory systems inefficient, and disclosure of information in the markets limited.

In addition, expectations of government involvement generate moral hazard in the markets. The scope for moral hazard is particularly large in economies in which the government significantly minimizes the pain of past failures of market agents and in which the government and investors do not have a good capacity to monitor the risk exposure of market agents. Governments can constrain moral hazard if, in advance and through their actions, they decide on and signal the limits of their potential intervention to the markets. To reduce rather than expand the moral hazard, the signals have to make clear that the government will be responsible for minimum public goods only and that there will be significant pain for agents that fail. The government needs to assess the costs and benefits and reveal its responsibility for each contingent implicit liability separately.

- In most countries, *the financial system* is government's most serious contingent implicit liability. International experience indicates that the markets expect the government to help financially if the stability of the financial system is at risk. In case of a failure in the financial sector, governments are compelled to intervene financially far beyond their legal obligation either to secure some critical functions of the financial system or to protect depositors and specific market agents beyond the limits of state insurance schemes.⁴ Such practice further exacerbates the moral hazard problem in the financial and corporate sectors.
- Uncovered losses and defaults on nonguaranteed debt and obligations by a *subnational government, state-owned or large private enterprise, budgetary or extrabudgetary agency*, or any other institution of political significance may induce the government to provide financing. Governments also accept various obligations of parastatal and public entities subject to privatization. (The government is often liable for the obligations, including contingent explicit ones, of state-owned financial institutions.) The contingent implicit

⁴ Standard & Poor's estimated the contingent fiscal cost of the domestic banking system in 1997 (the level of direct and indirect costs to the government under the worst-case scenario) in Argentina, Hungary, Italy, Poland, and Sweden to be less than 10 percent of gross domestic product (GDP), in Greece, the Philippines, Singapore, the Slovak Republic, the United Kingdom, and the United States to be about 10 to 20 percent, and in China, the Czech Republic, Hong Kong (China), Japan, the Republic of Korea, Malaysia, Thailand, and Taiwan (China) to be over 30 percent (Standard & Poor's, 1997).

government liability associated with both the financial system and nonguaranteed corporate debt increases with rising amounts and less efficient allocation of private capital.

- Depending on social preferences, some critical *social and welfare functions*, even when the government has contracted them out, are believed to be the ultimate responsibility of government. For example, where there is an investment failure of a nonguaranteed pension, employment, or social security fund, the government has to finance the social services from the budget. Thus, nonguaranteed private provision of social and welfare services poses a contingent implicit financial risk for governments (Heller 1997).
- The fiscal authorities also have ultimate responsibility for *currency stability* and *the balance of payments*, and therefore also for unmet obligations of the central bank. Most recently, Thailand and other Asian countries have shown that fiscal obligations may arise from a fixed exchange rate regime or the foreign exchange contracts of the central bank and, ultimately, are connected to international bailout packages. As in most of the instances listed above, the risk escalates with the macroeconomic vulnerability and moral hazard in the markets.
- *Private capital flows* entail contingent implicit risks to the government in four areas: (a) policy (the risks include exchange rate overvaluation and sterilization), (b) domestic assets valuation (an asset bubble for real estate, productive and intangible assets, financial instruments, and domestic currency), (c) intermediation (interest rate differential and weakness of the domestic financial system), and (d) borrowing (incentives for corporations, banks, and governments to overborrow and borrow short-term).
- Ultimately, *environmental damage* and *natural disasters* create a high demand for public monies, beyond explicit state insurance programs and guarantees. Many countries face the financial risk of operating and dismantling nuclear plants, disposing of nuclear and toxic wastes, and the residual cost of environmental recovery. In the absence of developed private insurance industries, particularly in countries with a history of caretaking, disasters such as floods, earthquakes, and droughts create major political pressures for government action.

THE INCREASING PROBLEM OF FISCAL RISKS

Trend, Bias, and Moral Hazard

As noted, recent trends show that governments are exposed to expanding fiscal risks. First, the high volumes and volatility of private capital flows and increasing economic dependence of countries on foreign capital have exacerbated the vulnerability of their domestic financial and corporate sectors and, implicitly, of the government. Particularly in transition and emerging market economies, domestic assets are subject to the rapidly changing preferences of foreign investors. An interplay of risks—policy (high exchange and interest rates), valuation of domestic assets (asset bubble), intermediation (interest rate differential and weak domestic financial system), and borrowing (overborrowing and short-term borrowing by government and market institutions)—may lead to a sudden dumping of domestic equity, bonds, and currency by investors. Such instances, which occurred recently in Mexico, Asia, and Russia, cause a crisis that is solved partly at taxpayers' expense.

Second, states have been transforming their role, moving from directly providing and financing services to guaranteeing that the private sector will accomplish certain outcomes. Privatization of state responsibilities and attempts to encourage private sector initiative through explicit or implicit government guarantees have left governments with increasing uncertainty about future public financing requirements. Will a guarantee be called? What will the outlays of state insurance programs be? Will reserve funds be sufficient to cover the contingent losses? Several governments have incurred expenditures above envisaged limits following a massive failure of projects covered by state guarantees, busted deposit insurance schemes, banking crises, and excessive private credit. In such instances, many transition and emerging-market countries have faced capital flight and plunged into fiscal crisis, whereas developed countries such as France absorbed the fiscal shock by issuing more public debt.

Third, governments may be biased toward off-budget policies, which pose more financial risk but require less immediate financing. Often, particularly in times of deficit reduction and a short-term political horizon, policymakers exploit the fact that off-budget commitments and obligations are not necessarily reported so that the cost of government policies is hidden. Under these conditions, decisionmakers favor off-budget forms of government support such as state guarantees, direct credit, and absorption of private liabilities and bad assets. There are many examples of fiscal opportunism, for example, in countries in the European Monetary Union's (EMU) subject to the fiscal ceilings of Maastricht as well as World Bank and International Monetary Fund (IMF) adjustment programs.⁵ Such forms of government support give rise to government contingent fiscal risks whose costs and cash consequences perhaps will not be seen for many years.

Finally, explicit state guarantees and insurance schemes, or any implicit understanding that a government will come to the rescue in the case of various market failures, generate serious moral hazard problems in the markets. Loans and investments with a full guarantee suffer from insufficient analysis and supervision by creditors. Beneficiaries of poorly designed state insurance schemes tend to expose themselves to excessive risks. For instance, in the United States, the generous benefits of the federal flood insurance program have resulted in excessive construction of houses in flood-prone areas (United States, General Accounting Office 1997). Given this market behavior, it is more likely the government will be called on to provide financial support later on.

Fiscal Risks and the Challenge of Transition and Emerging Markets

The implicit and explicit fiscal risks that both governments in transition and in emerging-market economies face are particularly large. Dependence on foreign financing, vague ownership structures in the economy, underdeveloped regulatory frameworks, and weak

⁵ The 1992 Treaty of Maastricht sets the following fiscal limits: general government deficit as a net borrowing requirement, 3 percent of GDP and total gross debt at nominal value outstanding at the end of the year and consolidated within general government, 60 percent of GDP. Both deficit and debt are calculated according to the European System of National Accounts ESA78. ESA78 only roughly defines the general government and does not require the recording of government transactions on an accrual basis and of assets at market value. For a description of the opportunistic fiscal behaviors of governments under fiscal constraints see Easterly (1998) and Forte (1997).

enforcement exacerbate the scope for failure in the financial and corporate sectors. Failures in turn often generate political pressures on governments to intervene, ad hoc and ex post, through various financial bailouts. The recent history of repeated bailouts, coupled with the lengthy tradition of a central plan, has produced enormous moral hazard in the markets. The Hungarian and Czech Republic governments were willing to repeat their bailouts and recapitalize banks while accumulating public liabilities. The public liabilities that the Czech Republic amassed outside the budgetary system outweighed its low sovereign debt levels (Czech Republic, Ministry of Finance 1998).

The weak disciplinary effects of the international financial markets exacerbate the fiscal risks that governments in transition and emerging-market economies face. Markets that are small in size and have a short history and limited disclosure of information limit the understanding that investors have of the risks. This factor in part explains why in many emerging-market economies creditors have tolerated excessive risk exposure by domestic financial institutions and enterprises before fleeing. As economies integrate with the international markets, more reliable data become available for statistical analysis, a shift that enhances the ability of both governments and investors to estimate risks with standard methodologies. These countries also have insufficient capacity to manage risk, a capacity that is expensive to build (for instance, it is costly for governments to replace low-paid bureaucrats with financial analysts).

Hidden Fiscal Risks and the Value of Transparency and Certainty

Government commitments and promises outside the budgetary system blur the analysis of past fiscal performance and future fiscal developments. Contingent fiscal risks surface only after a delay and in the form of unexpected requirements for public financing. Usually governments lack information on particular fiscal risks and overall risk exposure. Often they are not held accountable for the outcomes and cost of their off-budget commitments. As a result, contingent fiscal risks may accumulate and require substantial government financing in the future. In only a few countries are the governments required to assess and compare the full cost of alternative budgetary and off-budget programs and to report all contingent liabilities and other fiscal risks. The United States and Italy provide some good examples of risk assessment of state guarantees, and New Zealand and Australia do the same for the reporting of contingent fiscal risks.

In making policy decisions, governments often face a tradeoff between directly providing and financing services or guaranteeing their provision by the private sector. The former requires higher budget outlays in the short term. Provision by the private sector, with the state guaranteeing certain outcomes, means minimal budget outlays in the short term but exposure to higher fiscal risks and uncertainty about future public financing requirements in the longer term. If a government is trying to reduce the deficit and achieve certain short-term results, provision by the private sector looks attractive. Once a contingent liability falls due and requires government financing, however, the government has limited choices: it can increase the deficit, incur additional public liabilities without reporting any increases in the deficit, cut some envisaged expenditures, levy more taxes, sell state assets, default on some obligations, or engage in some combination of these activities. Each of these actions challenges government performance and

credibility, with an attendant reduction in the effectiveness of future policies, compromises political stability, and impairs future performance and growth in the overall economy.

In this respect, the positive value of certainty (the cost of uncertainty) about future public financing requirements is an important factor for government decisionmaking. Alternative forms of government support can be prioritized, not only based on their contribution to the desired policy objectives and long-term cost, but also to reflect the volatility of the financing requirement and contribution to the government's overall risk exposure.⁶

Certainty in public financing is particularly valuable to governments that have restricted or unreliable access to borrowing, low risk management capacities, low risk preferences, and strategic cash and debt management. Contingent liabilities are potentially very harmful for governments that cannot rely on continued favorable access to borrowing. Large reserve funds may reduce the potential harm from contingent liabilities when they fall due, but those funds come with an opportunity cost. Governments with low capacity to analyze and manage risks, and in economies where outcomes are less predictable and the asymmetry in information is greater, are ill-prepared to cope with the potential moral hazard and financial uncertainties.⁷ Ideally government risk preference reflects the risk preference of the median voter. A risk-averse government chooses direct provision, whose expected financing requirement is less volatile, over a guarantee, even if both involve equal risk-adjusted net present fiscal costs and both would deliver equal policy outcomes. Finally, for governments with sophisticated and efficiently managed borrowing and financing strategies, an ad hoc financing requirement involves costly disruptions and efficiency losses.

Fiscal Opportunism Under Debt and Deficit Ceilings

As yet there are no internationally accepted criteria for fiscal performance to address contingent government outlays and encourage truly sound fiscal performance by governments and their fiscal stability in the long term. Meanwhile, the tradeoff between long-term fiscal stability and the target level for the budget deficit and debt, and between the quality of fiscal adjustment and the speed of deficit reduction, may surface through fiscal opportunism (a bias toward excessive accumulation of contingent fiscal risks) and unsustainable policies.

Opportunistic behaviors by countries under IMF and World Bank programs and, more recently, by countries bidding for European Monetary Union membership indicate that a narrow

⁶ In a multipillar pension system, the adequacy of government guarantees for returns from private pension funds depends on the analysis and assessment of the risks of guarantees and on the government's capacity to regulate and supervise private pension funds and to cope with the problem of asymmetric information without incurring high transaction costs. Where the government provides pension benefits directly, it can predict total government outlays, and it seeks mainly to balance the size of the benefits, retirement age, and contributions to make the pension provision fiscally sustainable. In the guaranteed portion of the pension system, citizens save for their retirement privately. However, the government faces a high level of uncertainty about the amounts and timing of public financing that would be required should the pension guarantees fall due.

⁷ Consistent with the conclusion in the 1997 *World Development Report*, that governments should adjust the extent of their interventions to the level of their institutional capacities, this paper argues that governments should adjust their overall risk exposure to the level of their risk management capacities.

focus on budget deficit and debt compels governments to delay structural reforms and investments, conceal the cost and financing of programs outside their budgets, and raise temporary revenues. Such behaviors generate uncertainties about future public financing requirements and may endanger future fiscal stability. A focus on a cash-based budget, deficits, and debt also distorts government decisions about spending priorities and the timing and form of government support.

Governments may employ a number of opportunistic budgetary and accounting behaviors to meet their deficit and debt targets (table 2). The behaviors involve any or all of three types of imprudent actions: assumption of excessive liabilities for cash payment, a running down of public assets, and excessive use of off-budget support in public policies. Governments doing their accounting on a cash basis have wide scope to apply the first two actions. In cash-based accounting, expenses and liabilities are accounted not when the obligation is incurred, but only when the government makes the actual cash transfer. Thus governments collecting a fee for assuming a liability (for example, when it issues a guarantee or accepts the pension liability of an enterprise under privatization) report the income as a net revenue gain. The third action occurs under both cash- and accrual-based accounting standards but is eschewed in well-designed accrual budgeting rules.

An accrual-based accounting system without accrual budgeting is neither necessary nor sufficient to ensure that governments adequately consider contingent fiscal risks in policy. Although this system encourages governments to prepare a statement of contingent liabilities and financial risks, it generally does not require that the liabilities be included in the balance sheet and that the associated risks be evaluated and quantified. International accrual accounting standards require that liabilities be accounted only when the obligation is due with certainty.⁸

Policymakers are encouraged to make choices consistent with the risk-adjusted net present costs of alternative policies and forms of government support in an accrual-based budgeting system that is built on an accrual-based accounting platform. Accrual-based budgeting requires that the net present fiscal cost associated with various government programs and contingent liabilities be included in budget documents. This way, contingent liabilities enter the fiscal analyses and public accountability frameworks from the moment government recognizes them.⁹

⁸ For a discussion of the rules of probability and risk assessment see International Federation of Accountants (1998).

⁹ Accrual-based accounting in the public sector is the trend in countries in the Organisation for Economic Co-operation and Development. The International Federation of Accountants has proposed and elaborated accrual accounting standards for the public sector, and the proposed update of the IMF's Government Financial Statistics methodology implies accrual-based accounting. New Zealand and Iceland both have implemented accrual-based budgeting, and the United Kingdom, Sweden, the Netherlands, Canada, and Australia are doing so.

TABLE 2: OPPORTUNISTIC GOVERNMENT BEHAVIORS TO MEET THE MAASTRICHT DEFICIT AND DEBT CEILINGS

Behaviors	On the Revenue Side	On the Expenditure Side
That increase future payables and liabilities of the government	<p><i>To meet the deficit rule:</i></p> <ul style="list-style-type: none"> • Introduce an ad hoc tax to be reimbursed in the future • Accept cash for a promise of future benefits • Record revenues gross rather than net of the reimbursements, which are due later • Exchange some existing public debt instruments for indexed bonds sold at a premium <p><i>To meet the debt rule:</i></p> <ul style="list-style-type: none"> • Transform indebted government agencies into autonomous legal entities outside the general government while granting them a state guarantee • Enter repurchase contracts with public debt 	<p><i>To meet the deficit rule:</i></p> <ul style="list-style-type: none"> • Postpone inescapable expenditures, such as infrastructure investment and maintenance • Favor off-budget forms of government support versus direct financing • Delay legal recognition and financing of government purchases and transfers • Postpone legal recognition and quantification of rebates due taxpayers • Record subsidies as purchases of (bad) assets from corporations and banks at face value • Record the deficits of state-owned and municipal agencies providing nonmarket public services outside general government figures <p><i>To meet the debt rule:</i></p> <ul style="list-style-type: none"> • Omit the existing net liabilities of public enterprises and agencies that are outside the sphere of general government but that benefit from government guarantees • Favor trade credit as a form of support • Exclude contingent liabilities from debt reports
That reduce future receivables	<p><i>To meet the deficit rule:</i></p> <ul style="list-style-type: none"> • Withhold revenues due in the following fiscal year • Accept cash in exchange for future tax exemptions 	
That dilute the value of state assets	<p><i>To meet the deficit rule:</i></p> <ul style="list-style-type: none"> • Record the capital gains from a sale of property, possibly with a subsequent renting or lease-back arrangement • Charge a dividend from revaluation of the gold reserves of the central bank • Charge a higher dividend from public holdings <p><i>To meet the debt rule:</i></p> <ul style="list-style-type: none"> • Sell gold of the central bank • Sell state assets 	<p><i>To meet the deficit rule:</i></p> <ul style="list-style-type: none"> • Cut operations and maintenance expenditures • Reduce expenditures on complementary inputs into the service provided by the asset

UNDERSTANDING, INCENTIVES, AND CAPACITIES TO REDUCE AND CONTROL FISCAL RISKS

Contingent fiscal risks may significantly affect the results of a country's fiscal analysis. They may also be an important factor in assessing allocative efficiency in the use of public monies (the implicit subsidies and risk exposures relative to policy priorities). Finally, contingent and implicit forms of government support may not only be risky, but may also lessen the government's operational efficiency because they are unnecessarily costly compared to a direct, budgetary provision.

A first necessary condition for fiscally prudent policies is for policymakers to identify, classify, and understand the fiscal risks facing the government. Comprehension of the fiscal risks and their consequences will at least encourage the government to avoid risks that are bound to surface in a politically meaningful time horizon. For risks that extend beyond that timeframe, achievement of fiscally sound behavior may depend on coercion. In particular, policymakers are more likely to gravitate to fiscally sound decisions if the media, the public, investors, credit-rating agencies, and multilateral institutions understand the government's fiscal performance in its entirety and if there are sanctions when the government exposes the state to excessive risks and conceals those risks. (See the annex for a questionnaire to use in evaluating the problem of government fiscal risks and risk management in a country.)

Coercion as a means to discipline a government's fiscal behavior beyond the budget deficit and debt can be applied internally and externally. Internally, the principal audit institution can assess the direct and contingent fiscal risks of each government agency and of government as a whole and make the information public. Although voters do not necessarily care about government fiscal risk, public explanation of the fiscal risks by an independent State Audit Office would also empower the external forces of coercion. To be effective, external coercion should be used to ensure that the government applies the international rules for fiscal analysis not only to the budget and debt, but also to its contingent liabilities, and that it overcome the problem of asymmetric information. Specifically, external coercion would pressure the government to meet certain quality standards: the government must define, measure, and monitor fiscal performance in full, using sound indicators and methods as defined by international authorities such as the IMF, World Bank, European Commission, or sovereign credit rating agencies and investors, and it must develop adequate public finance institutions and disclose relevant information. Governments attempting to conceal data would be subject to sanctions.

The following sections discuss measures that a government can take to reduce its risk exposure and improve the quality of its fiscal performance. These measures apply at the policy and institutional levels, both systemically and at the various stages of government decisionmaking.¹⁰

¹⁰ For policies and fiscal institutions to reduce public risks see Schick (1998) and Irwin (1997).

Systemic Measures to Reduce Fiscal Risks

The main aim of systemic measures (table 3) to encourage sound fiscal behavior is to improve the understanding of policymakers, the public, and the markets of the fiscal risks.

TABLE 3: SYSTEMIC MEASURES TO REDUCE FISCAL RISKS

<i>Fiscal Policy</i>	<i>Public Finance Institutions</i>
<ul style="list-style-type: none">• Consider full fiscal performance beyond the budget and debt• Identify, classify, and analyze all fiscal risks in a single portfolio• Determine the government's optimal risk exposure and reserve policy according to its risk preference and risk management capacity	<ul style="list-style-type: none">• Internalize and disclose the full fiscal picture• Monitor, regulate, and disclose the risks in the public and private sectors

Policy

To achieve sound fiscal performance, the government needs to include in its fiscal analysis and decisionmaking the fiscal risks relating to future possible obligations of the state and to consider those fiscal risks in the context of its risk preference, risk financing, and risk management capacities. The following steps are critical.

Consider fiscal performance in full, that is, beyond the budget and debt. Fiscal analysis, especially of the quality of fiscal adjustment, is complete only if it factors in the cost of the implicit subsidies in the government's contingent support programs. In particular, the government cannot separate the analysis of its fiscal position from the obligations it has undertaken outside the budget system. The arrears and other obligations of state-owned and guaranteed institutions, for example, may claim significant public resources in the future. Moreover, the government may have mismanaged some institutions to finance and implement its policies outside the budget system. A string of years with a balanced budget and low public debt suggests neither that the government has been fiscally prudent nor that there will be fiscal stability.

In deciding between alternative forms of support, the government needs to consider the medium-term fiscal impact and allocative and operational efficiency of programs pursued outside the budget to the same extent as with the budget. Medium-term fiscal forecasts, the budget itself, and government financing and borrowing plans are truly viable only if they provide for contingent and other fiscal risks.

For international institutions, such as the IMF and World Bank, it is time to extend the scope of their fiscal policy and institutional analysis to address contingent and implicit fiscal risks. Also, international institutions should assist countries to develop adequate analytical and institutional capacities, require countries to disclose information regarding their fiscal risks, and enforce limits on the countries' exposure to fiscal risks according to the countries' analytical and institutional capacities.

Identify, classify, and analyze all fiscal risks in a single portfolio. To understand and prepare for the entire range of potential fiscal pressures, policymakers will have to take stock of all programs and promises and identify and classify the main sources of fiscal risks, as shown in the fiscal risk matrix (table 1). For each item of the fiscal risk matrix and in order of significance, the government needs to analyze the risk factors and ways to control and reduce its exposure to the risks. Qualitative analysis of risks would help the government formulate and design sound new programs and promises.

The government should consolidate the stock of contingent liabilities into a single portfolio, along with state debt and other public liabilities, so that it can evaluate correlations, sensitivity to macroeconomic and policy scenarios, and overall risk exposure. A single portfolio allows the government to relate its contingent liabilities to its comprehensive risk strategy and guidelines regarding risk exposure, asset and liability management, hedging, and benchmarking. As an input into the analysis of risk exposure, the government would also analyze information about budget arrears, state guarantees, state insurance programs, subnational government borrowing, obligations of state-owned and state-guaranteed institutions, effects of private capital flows, and similar factors. In contrast to the deficit and debt constraints, indicators reflecting a comprehensive analysis of the government's exposure to fiscal risks would have greater predictive value for fiscal stability. (The forthcoming, more detailed version of this paper includes a fiscal risk analysis for several countries.)

Determine the government's optimal risk exposure and reserve policy based on its risk preference and risk management capacity. The government needs to base its risk and reserve strategy on its overall risk exposure, risk preference, and ability to manage risk and absorb contingent losses. Ideally, the risk strategy would be tied to the risk preference of the median voter. Similarly, the government would assess new programs based on their marginal impact on overall risk exposure and fiscal outlook. It would agree to further contingent and implicit forms of financial support only to the extent it is able to evaluate, regulate, control, and prevent the risks. If the government has a low capacity to evaluate and manage risks, the best approach is to favor direct subsidies and provision of services rather than guarantees. That is, assuming that the government's intervention in a particular area is justifiable, the government would opt for budgetary financing of its intervention rather than ensuring that particular outcomes will be delivered by the private sector. To this end the government has to enact guidelines for prudent and sound fiscal management (as discussed in the institutional section below).

Reserve funds provide liquidity for guarantees and other contingent liabilities and thereby protect the government against pressures to increase the deficit and debt, cut envisaged expenditures, or default on its obligations if a contingent liability falls due. There is a tradeoff

between the opportunity cost of withholding resources instead of spending them or cutting taxes, on the one hand, and the benefits of a reserve fund in promoting fiscal stability and government credibility, on the other hand. A reserve fund offers the government more financial flexibility to deal with unexpected loss profiles if it sets the whole portfolio of fiscal risks centrally, rather than assigning a risk to each risk separately.¹¹

Institutions

An institutional framework for public finance will encourage the government to pursue sound fiscal performance only if it encompasses both direct and contingent fiscal risks. A framework for public finance management that ignores the future fiscal implications of contingent liabilities and other off-budget commitments will only make such forms of government support look inexpensive and politically attractive.

An adequate institutional framework requires that the government treat any noncash program involving a contingent fiscal risk as it does other budgetary or debt items from the viewpoint of aggregate fiscal stability and allocative and technical efficiency, control, public disclosure, and accountability. Rules for issuing, monitoring, and handling state guarantees and insurance programs and for monitoring and financial management of public, state-guaranteed, and subnational government institutions are also needed. As the role of the state transforms from direct provision of services to guarantees against residual risks, governments need to follow the example of the private sector in deepening their capacities for fiscal analysis and management beyond the state budget and debt.

Internalize and disclose the full fiscal picture. The rules and practices applied in the budget process, financial management, and public accountability framework determine how much flexibility the government has to assume immediate and future direct and contingent nonbudgeted obligations. Optimally, government choices will reflect qualitative and, where possible, quantitative evaluation of the future outlays and risks associated with alternative forms of government support, including programs outside the budget such as guarantees and activities of state-guaranteed agencies.

To address the problem of government accountability and fiscal discipline outside the budget, public disclosure is more important than full-fledged accrual-based accounting, budgeting, and risk measurement systems. Particularly for governments with lower institutional capacities, the system should require them to assess risk factors, make rough provision for contingent risks in the budget, and publish a statement of contingent liabilities and overall risk exposure. Such a system is more sensible than the optimal institutional framework, which involves accrual-based accounting and budgeting standards and sophisticated risk measurement methodologies.

¹¹ Recently, Australia, Canada, and the United Kingdom have moved toward a central pool of unallocated, government-wide reserves.

Accrual-based budgeting and accounting standards make the potential fiscal cost and hidden subsidies of contingent liabilities more transparent ex ante. In this context, quantitative risk analysis reveals the difference between the full risk premium, topped up by the cost of evaluating, managing, and monitoring risks, and the fees the government charges for assuming a particular obligation (for instance, the pension liabilities of a privatized enterprise, a guarantee, or state insurance) at the time the coverage is extended. By bringing off-budget commitments into the budget and recognizing the hidden subsidies associated with contingent forms of government support, the government better reveals the long-term cost and benefits of its commitments and enhances public scrutiny of the potential use of public monies.

Public disclosure of fiscal information extending beyond the budget and direct debt enables the public and markets to monitor the government's full fiscal performance, including the fiscal risks accumulated outside the budget. Market agents such as investors and credit rating agencies are then able to take both direct and contingent fiscal risks into account in their analysis and investment decisions. Their ability to do so in turn indirectly encourages budgetary and overall fiscal discipline. In addition, greater fiscal transparency facilitates parliamentary scrutiny and monitoring by the market, particularly by investors and sovereign credit rating agencies, and by international institutions such as the IMF, World Bank, and European Commission.¹²

Domestically, the government can promote both fiscal transparency and prudent government decisions by empowering the ministry of finance and principal audit institutions to monitor, control, and publish the size of contingent liabilities and other fiscal risks, the extent to which the government's risk exposures conforms to its proclaimed objectives, and the efficiency of both direct and contingent forms of government support.

Monitor, regulate, and disclose fiscal risks to the public and private sectors. Governments reduce the fiscal risks when they strive to prevent market failures and minimize the moral hazard associated with their programs, commitments, and residual responsibility for market failures. To reduce moral hazard and failures in the markets, the government maintains regulatory and law enforcement systems, monitors the systemic risks in both the private and public sectors, and enforces transparency about the risk exposure of both financial and nonfinancial institutions in the markets. Well-developed regulatory and public disclosure systems are particularly important when government embarks on privatization while assuming an explicit or implicit obligation to cover residual liabilities and ensure that private agents achieve particular outcomes.

Prevention of fiscal risks depends on a combination of analytical tools, incentives, and the capacities of parliamentarians, civil servants, regulators, supervisors, international institutions, and market agents. Research is being conducted to derive simple rules to indicate the dangers to fiscal stability, using indicators such as the total face value of all contingent liabilities, the overall risk assumed by a government, the size and allocation of foreign private

¹² The IMF has outlined the requirements and good practices for fiscal transparency in its *Manual on Fiscal Transparency* (1998). The manual briefly discusses the transparency requirements for contingent fiscal risks.

capital, and the accrual-based budget deficit. Potentially the best place to develop risk monitoring capacities is in the central bank, given its role in collecting balance-of-payments data and, in many instances, supervising banks. Specific regulatory and supervisory agencies such as the securities and exchange commissions may best handle the monitoring of specific risks. Ultimately, the ministry of finance and the office responsible for public liability management would handle the monitoring and prevention of the government's overall risk exposure.

Undertake measures to reduce the fiscal risk of individual government programs and promises. Whether the government's programs, promises, and exposure to fiscal risks are appropriate depends on their consistency with government policies and actions. The following aspects of consistency in particular influence a government's fiscal performance:

- Consistency of government programs and promises with the stated role and strategic priorities of the state
- Consistency in the eligibility and management standards applied across government programs over time
- Consistency of the risks assumed and reserves provisioned under a program with the risk management capacities of the government
- Consistency between the authority of policymakers to assume contingent fiscal risks and their accountability.

Table 4 summarizes the steps a government needs to take to control its fiscal risks before, when, and after it announces a program or promise.

**TABLE 4: STEPS TO CONTROL THE RISK OF INDIVIDUAL GOVERNMENT
PROGRAMS AND PROMISES**

<i>Measures</i>	<i>Fiscal Policy</i>	<i>Public Finance Institutions</i>
Before government admits an obligation (program, commitment, promise of support)	<ul style="list-style-type: none"> • Assess how the obligation fits the announced role and strategic priorities of the state • Consider the choices of policies and forms of support with respect to associated financial risks and government risk management capacity • Define and communicate the standards for and limits of government involvement to minimize moral hazard 	<ul style="list-style-type: none"> • Evaluate the program risks individually and in a single portfolio along with existing risks, estimate the potential fiscal cost of the obligation, and set an additional reserve requirement • Design the program to protect the government against risks
When the obligation is held	<ul style="list-style-type: none"> • Stick to the pre-set limits of government responsibility 	<ul style="list-style-type: none"> • Budget, account, and disclose the obligation • Monitor the program risk factors and reserve-fund adequacy
After the obligation falls due	<ul style="list-style-type: none"> • Execute the obligation within its pre-set limits and identify the lessons for future policy choices • If implicit, assess whether fulfilling the obligation coincides with the state's announced role and promotes desired behaviors in the markets 	<ul style="list-style-type: none"> • Compare and report the actual fiscal costs versus the estimates, evaluate performance, and impose sanctions for failures

Before Government Admits an Obligation

Fiscal Policy

Assess how the obligation fits the pronounced role and strategic priorities of the state. What types of support the government decides to offer both outside or through the budget define the actual role of the state. Therefore, programs outside as well as inside the budget should, in principle, be subject to the same type of policy analysis and consideration. In the case of contingent support programs such as guarantees for state institutions and funds, the government must consider whether their objectives fit within its announced role and priorities and whether they justify the potential, risk-adjusted, long-term fiscal costs.

Consider the choices of policies and forms of support relative to the associated financial risks and government's risk preference and risk management capacity. The quality

of fiscal performance benefits when the government acknowledges the cost of uncertainty about future public financing requirements in considering alternative programs and forms of support for particular policy objectives. As with corporations, an unexpected requirement for financing disrupts financial planning and increases the cost of borrowing or, in a worse case, runs the risk that no credit financing is available. Governments need to evaluate alternative ways to implement their policies not only on the basis of their potential cost and benefits but also on the extent of the uncertainty they involve for future public financing. In addition, the government would judge contingent forms of support in terms of the extent of the asymmetric information and transaction costs. These considerations would be made in the context of the government's own risk preferences and risk management capacities and the reliability of its access to ad hoc borrowing.

Define and communicate the standards for and limits of government involvement to minimize the moral hazard. It is not so much the budgeted expenditures but the contingent liabilities, particularly the implicit ones, as understood by the public and markets, that define the outer limits of state responsibilities and affect the behavior of the public and market agents. The more formally and precisely the government defines and signals its responsibilities (its area of commitment), the more distinct are the explicit liabilities and the smaller are the implicit liabilities. The more credibly the government defines its responsibilities and the pain market agents will bear in cases of their failure and reliance on government rescue, the less is the problem of moral hazard. Take the example of a society where the government has a strong tradition of extensive public services. In such a case the central government may be expected to take over any obligations of subnational governments in troubles. Such an expectations raises a scope for moral hazard on the side of subnational governments. The central government can reduce the moral hazard by signaling that it will only ensure the delivery of core services to citizens of insolvent subnational governments. At the same time, it can state that it will not bail municipalities out from their debts and non-core expenditure obligations.

The particular task of government is to signal credibly what actions the markets should *not* expect of it in the case of various market failures. If these failures occur, the government will gain needed credibility and reduce moral hazard in the markets, and so curtail its fiscal risks, if it follows through on its stated policies and refuses to submit to pressures for alternative actions.

Institutions

Evaluate the risks of programs individually and in a single portfolio that also contains existing risks, estimate the potential fiscal cost of each obligation, and set additional reserve requirements. Qualitative analysis of the risk factors in alternative government programs and estimates of their potential long-term fiscal costs and hidden government subsidies prior to any commitment helps optimize the choice and design of government programs. Rough quantification of the risk and potential fiscal cost of government contingent liabilities and commitments requires good qualitative analysis of the underlying risks. Specialized methodologies such as option pricing, actuarial analysis, rate-setting, value-at-loss, and loss-cost

ratio are of great value in deriving a more precise estimate of the potential costs of a particular program.¹³ According to government reserve policy, the risk exposure of a proposed program added to overall government exposure determines the amount of additional resources that should go into the government reserve fund.

Design the program well to protect the government against risks. Based on the qualitative risk analysis, the government needs to identify those risks it can control reasonably well, decide which risks to cover under its proposed program of contingent support, and develop effective risk-sharing, regulatory, and control mechanisms to monitor the performance of the parties under the program. Apart from exogenous risks such as drought, the government faces endogenous risks that are mainly a function of program design. A poor design can create varying levels of market distortion and moral hazard, whereas a good design can reduce the potential fiscal cost of the program. An example is a guarantee contract that covers only political and not commercial risks, only 30–50 percent of the value of the potential loss, and the last rather than the first portion of the loss. Programs that involve implementation by an intermediary agency that itself must be established, such as a guarantee fund of any sort, are more difficult to design, particularly in terms of management incentives and performance monitoring by the government.

For some programs, the government may charge a risk-based premium, purchase reinsurance from private firms, or contract out particular risk management functions.¹⁴ It may cancel other programs altogether when it corrects market functioning through its regulatory policies. For example, deregulation of the insurance markets will encourage foreign insurance firms to enter the domestic markets and greatly expand the pooling of some risks so that the private sector can cover them. Risks related to disasters that are uninsurable in a domestic market because the risk pool is too limited become insurable in the integrated international market. The government can in turn end such programs as crop and flood insurance. For the largest financial risks, such as major banking and currency crises, it can be argued that the IMF, World Bank, and other multilateral agencies will provide governments with some kind of reinsurance.

¹³ Various types of risk, such as sovereign (political, legal, and regulatory), financial credit (foreign exchange rate, interest rate, and refinancing), and program performance (development, completion, and operating) compound the fiscal risks of government programs and promises involving both direct and contingent liabilities. For a more detailed analysis of the types of risk see Chase Manhattan Bank (1996). For methodologies to estimate potential fiscal costs see Mody and Lewis (1997), Mody and Patro (1996), United States, General Accounting Office (1997), and Penacchi (1997).

¹⁴ The ultimate responsibility for project risk evaluation and program design is probably best placed with the ministry of finance, which approves and disapproves any potential financial commitments of the government. The office for public debt management is likely the best equipped to analyze contingent fiscal risks and integrate them into a single public liability portfolio. It is also best placed to decide on hedging and other risk-control instruments. For examples of policies to protect the government against excessive risk exposure see Schick (1998) and Irwin and others (1997).

When the Government Accepts and Holds an Obligation

Policy

Stick to the pre-set limits of government responsibilities. After the government approves a program or commitment, the main challenge is to ensure that the markets and public do not expect any state support beyond the announced limits over the life of the obligation. Any indication that the government might provide financial support beyond the announced limits will raise the moral hazard for and distort the behaviors of the parties potentially benefiting from the program.

Institutions

Budget, account, and disclose the obligation. On the institutional side, the government faces the challenge of budgeting, accounting and provisioning for, and disclosing the obligation adequately. How does it ensure that no unknown contingent liability appears only after it is triggered? For instance, the public finance law can state that an obligation is valid only if it was assessed, budgeted, accounted, and, above all, disclosed at the time of its adoption by government.

Monitor the program risk factors and reserve-fund adequacy. Over the life of an obligation, the government needs actively to monitor the program's risk factors, the performance of the agents under the program and, in this context, also the adequacy of its reserve funds. Monitoring of intermediary agencies, such as banks and various credit and guarantee funds that the state uses to implement its policy objectives and guarantees, is particularly important. If the government lacks a good monitoring capacity, it can contract this task out for a performance-based fee. The cost of monitoring and administering programs of contingent support may be relatively high and should be reflected in the ex-ante calculations of the potential fiscal cost of a program.

After a Liability Falls Due

Policy

Execute the obligation within its pre-set limits and identify lessons for future policy choices. It is critical that the government meet an obligation when it falls due within the stated limits, particularly in terms of the credibility of future announcements and the scope for future moral hazard in the markets. For instance, paying depositors more than the specified deposit insurance levels tells the markets that the government will submit easily to political pressure, tells depositors that banks offering higher yields are "safe," and tells the banking sector that excessive risks are worth taking.

By applying the lessons from its involvement with direct and contingent liabilities, both explicit and implicit, the government is able to adjust its role incrementally, rather than abruptly, in a crisis. A timely and credible explanation of any adjustment in the state's role that will affect

future policy choices will prompt the public and market agents to adjust their expectations and behavior. For example, by explaining that the public pension scheme is not fiscally sustainable and that future governments will have to reduce the pension benefit significantly, the government influences the saving behavior of people in the labor force.

If an obligation is implicit, assess whether it coincides with the state's announced role and promotes desired market behaviors. When public interest groups or market agents suddenly call on the government to extend more support than was originally specified, policymakers need to ask whether extending that support coincides with its announced role and how it affects future behavior in the markets. The long-term damage to the government of acting upon an ad hoc request may sharply exceed the potential short-term benefit. Acting upon ad hoc requests may, however, be politically attractive, and the government is often able to find ways to improperly use financial institutions and funds outside the public sector to implement and finance its actions. Thus the public, investors, and international authorities need to monitor the government's responses to ad hoc claims of an implicit government liability and apply sanctions for fiscally irresponsible choices.

Institutions

Compare and report the estimated and actual cost of government support, evaluate performance, and apply sanctions for failures. The requirement that the government report and compare the ex-ante risk evaluation and actual layouts for a program is critical to government accountability. Performance evaluation applies to government departments and officials as well as to the parties under a program. Sanctions may involve government officials (the case where particular interests distorted the ex-ante risk analysis), the managers of state-guaranteed and intermediary agencies implementing the government's programs (such as for exposing the government to unnecessary and excessive risks), and the parties under the program (where they breached an agreement).

CONCLUSIONS

Governments are exposed to increasing fiscal risks and uncertainties as a result of the increasing volumes and volatility of private capital flows, the changing role of the state, which is shifting from direct provision and financing of services to guarantees for certain outcomes, biases in policy decisionmaking under fiscal constraints, and the moral hazard in the markets associated with expected state interventions. The fiscal risks are particularly large for transition and emerging-market economies, where market opacity and the danger of market failures are greater.

Governments face four types of fiscal risk: direct and contingent, each of which may be either explicit or implicit. Most government and fiscal analysts concentrate on direct liabilities (direct explicit, such as the public debt and government budget, and direct implicit such as future pension and social security liabilities). Recent international experience, however, indicates that significant fiscal instability may result from contingent liabilities (contingent explicit such as the obligations of state-guaranteed institutions and deposit insurance, and contingent implicit such as

local government obligations, foreign credit of the domestic corporate and financial sectors, and banking failures).

Therefore, a study of government fiscal position cannot be separated from obligations taken by the government outside the budgetary system. Fiscal analysis and medium-term fiscal framework for countries must factor in the cost of implicit subsidies provided by the government in the forms of contingent support programs. For international institutions, such as the World Bank and IMF, it is time to (a) extend the scope of their fiscal, policy, and institutional analysis beyond the budget and debt; (b) require countries to disclose information about their contingent government risks; and (c) assist countries to reform their analytical, policy, and institutional public finance frameworks to address all major fiscal risks.

Critically important to long-term fiscal stability and equity is public recognition of the limits of the state's role and the associated direct and contingent fiscal risks. Public accountability of politicians and civil servants in areas beyond the state budget must be defined to promote prudent and efficient fiscal policies and management. Governments need to address the sources of fiscal risks in three ways: (a) by understanding existing and future fiscal risks and pursuing policies that foster appropriate fiscal adjustment; (b) by developing an institutional framework that involves adequate public disclosure and incentives with respect to fiscal risks, and that promotes fiscal prudence and equity in all government programs, including those extending support outside the budget system; and (c) by building and employing institutional capacities to evaluate, regulate, control, and prevent financial risks in both the public and private sectors.

This paper offers an analytical framework to study contingent liabilities and other fiscal risks of governments so that analysts can better assess the quality of fiscal adjustment and the fiscal outlook of a country. A more detailed version is forthcoming that expands on both the policy and institutional aspects associated with fiscal risks and uses the analytical framework to assess fiscal risk in several countries.

ANNEX: PUBLIC LIABILITIES—HOW BIG A PROBLEM IN A COUNTRY? A SET OF QUESTIONS

The Whole Picture: Coverage

1. What are the major risks to future fiscal stability? Fill in the table below with specific items. *These include direct borrowing, guarantees, and institutions that are covered by some type of government guarantee, state insurance programs, and all government commitments to spend or intervene financially in the future. In classifying the items, think of direct liabilities (obligations of the government in any event) and contingent liabilities (obligations of the government if a particular event occurs), each of which can be either explicit (defined by a law or contract) or implicit (broadly predetermined by public expectations and pressures by interest groups).*

Liabilities^a	Direct (obligation in any event)	Contingent (obligation if a particular event occurs)
Explicit Government liability as recognized by law or contract	<ul style="list-style-type: none"> Foreign and domestic sovereign borrowing (loans contracted and securities issued by the central government) Expenditures by budget law Budget expenditures legally binding in the long term (civil service salaries, civil service pensions) 	<ul style="list-style-type: none"> State guarantees for nonsovereign borrowing and obligations issued to subnational governments and public and private sector entities (development banks) Umbrella state guarantees for various types of loans (mortgage loans, student loans, agriculture loans, small business loans) Trade and exchange rate guarantees issued by the state Guarantees on borrowing by a foreign sovereign state State guarantees on private investments State insurance schemes (deposit insurance, minimum returns from private pension funds, crop insurance, flood insurance, war-risk insurance)
Implicit A “moral” obligation of the government that mainly reflects public expectations and pressures by interest groups	<ul style="list-style-type: none"> Future recurrent cost of public investment projects Future public pensions (as opposed to civil service pensions) if not required by law Social security schemes if not required by law Future health care financing if not specified by law 	<ul style="list-style-type: none"> Umbrella default of a subnational government and public or private entity on nonguaranteed debt and other liabilities Liability cleanup in entities under privatization Banking failure (support beyond state insurance) Investment failure of a nonguaranteed pension, employment, or social security fund (social protection of small investors) Default of central bank on its obligations (foreign exchange contracts, currency defense, balance-of-payments stability) Bailouts following a reversal in private capital flows Residual environmental damage, disaster relief, military financing

^a Of the fiscal authorities, not the central bank.

2. Is there a precise legal delineation of the public sector (for example, in the form of a full list of public sector agencies) and of government responsibilities? *If yes, note the definition and reference appropriate legal documents.*

Selected Risks

1. State-guaranteed institutions and directed credit

- List all institutions that fulfill orders of the government to extend financing to enterprises, banks, agencies of any kind, or households. Provide their balance sheets and statements of contingent liabilities.
- What type of government support do these institutions receive (for example, privatization revenues, cheap financing via the central bank, state guarantee for borrowings)? *Try to draw a diagram showing the institutions involved in directed credit and the financial and cross-supporting flows.*

2. Guarantees

- List all government guarantees, their issuer (the ministry of finance or other government agency), beneficiaries, creditors, face values, the type of risks and their shares covered, currency of denomination, and risk estimates if any.

3. State-owned enterprises and banks

- List all large state-owned enterprises and provide their audited balance sheets and statements of contingent liabilities.
- List all large state-owned banks and provide their audited balance sheets, statements of contingent liabilities, and risk assessment of assets.

Recording and Reporting: Transparency

1. For each type of direct and contingent liabilities you identified in the table above, list the institutions responsible for final approval, recording, monitoring, and data consolidation.

2. Which institutions can instantaneously retrieve from their databases up-to-date figures for the items listed below? Which documents report such figures? What is the time lag in reporting:

- Sovereign debt portfolio (break down according to maturities, currencies, and interest rate types)
- Debt service profile for the next months and years?
- Guarantee portfolio (breakdown according to guaranteed institutions, sectors, currencies)?
- Total face value of all state guarantees?
- Total sizes of state insurance schemes?
- Total sizes of reserve funds associated with guarantees and state insurance schemes?
- Private foreign and domestic borrowing?
- Sector allocation of foreign credit?

2. Which sources of fiscal risks are, in your view, *not* reported to the:

- Ministry of finance
- Cabinet
- Central bank
- Parliament
- Foreign investors
- Public.

Institutional Arrangements: Accountability

1. Are there any legal requirements that the government estimate, account, and report the *future* fiscal costs associated with its budgetary policies and off-budget promises (such as guarantees and other contingent liabilities)?
 No
 Yes— in the budget process
 when the government is called on to pay
 when cash is transferred
 other
2. Which of the liabilities that you identified in the table are *not* regulated by any law and depend fully on ad hoc government decisions?
3. Describe or provide references for:
 - State guarantees: the requirements for their design (the type of risks that can be covered, the extent of required risk-sharing), issuance (is only the ministry of finance authorized?), government control mechanism (required reports from the creditor and beneficiary, audit and valuation requirements), and realization mechanism if they fall due
 - Subnational governments, public sector agencies and enterprises, and state-guaranteed institutions: the financial management and reporting requirements and government control mechanism
 - Demands on the government to extend ad hoc, previously unforeseen financial support: the legal requirements and practice for deliberation in government decisionmaking.
4. Is the government legally required to explain the amounts of public liabilities?
 No
 Yes— to the Parliament
 to the public
 other

Policy: Practice

1. When considering alternative policy choices and forms of government support (such as direct provision and financing versus guarantees), do the ministry of finance, cabinet, central bank or parliament

- Quantify the future fiscal cost of alternative options in a single medium-term fiscal framework?
 - Describe the risks of alternative options?
2. In which areas and under what circumstances do the public or interest groups expect the government to provide financial support beyond the budget?
 3. List examples when the government withstood political pressure and did *not* provide financial support beyond the budgeted figures (for example, when the government refused to solicit financial support for a failed enterprise or bank).
 4. Are public enterprises and banks, state-guaranteed institutions, and creditors and beneficiaries under state guarantees “rewarded” and “punished” for the quality of their management of risk? *Provide examples.*

Risk Management: Capacities

1. Describe the capacities of the ministry of finance, other government agencies, public sector institutions and enterprises, and state-guaranteed institutions to evaluate and control the risks of government programs and contingent liabilities.
2. Describe the process of designing a state guarantee or state insurance program.
3. How is the required size of the government reserve fund determined?
4. What steps do the ministry of finance and other agencies undertake to *prevent* fiscal risks arising from the public and private sectors (for example, are any actions taken if enterprise debt or central bank obligations appear too high)?

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