EUROPEAN UNION ACCESSION

The Challenges for Public Liability Management in Central Europe

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The Challenges for Public Liability Management in Central Europe

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Foreword

The process of European Union (EU) accession and, more immediately, the launch of the European Monetary Union (EMU) in 1999 pose new opportunities and challenges to Central European (CE) states.

The most pressing issues they will have to address are strengthening their public liability management and achieving significant adjustments in their sovereign borrowing practices and policies. In the context of EU accession, both the macroeconomic environment of the national borrowing policy and the choice of borrowing and risk management instruments will be evolving rapidly. Several CE countries have been developing sophisticated national debt offices and have shown their commitment to adhere to the principles of prudent fiscal management; others need to make fundamental institutional changes.

The European Commission's Directorate-General for Economic and Financial Affairs and the World Bank have received requests from several CE countries for support of their efforts to adopt the best international practices in public liability management as a means of integrating smoothly into the EU. The European Commission and the World Bank joined forces and responded to these requests by spearheading an informal regional "network of excellence"—the European Borrowers Network (EBN)—to disseminate the best practices in public liability management and institution building.

EBN's first activity was the organization of a two-day seminar in Brussels in mid-December 1997, cochaired and cofunded by the European Commission and the World Bank. The seminar featured presentations by senior debt management officials from CE and EU countries, as well as from the European Commission, EBRD, IMF, the World Bank, and other institutions. The following are examples of some of the panel topics presented: sustainability of borrowing policy; institution-building for active liability management; and portfolio optimization in the context of EMU and EU accession. All 10 CE countries applying to the EU participated in the seminar: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia.

Findings of the Brussels workshop are presented in this publication. The first segment gives a brief overview of eight of the major presentations, while the second part presents these eight presentations in their entirety, including conclusions and recommendations. This publication
will be disseminated through the Commission’s website (on the home page of either Phare or DG II) and via the World Bank’s EBN web page, as well as through the publications offices of the European Commission and the World Bank.

As one of its next activities, EBN is working on a follow-up seminar to the policy workshop held in Brussels in late 1997. The forthcoming seminar will focus on “Private Capital Flows and EU Accession: Implications for Sovereign Liability Management,” and will be once again co-sponsored by the European Commission and the World Bank. Officials from all 10 CE countries preparing for accession to the EU have been invited, and presenters include experts from both international organizations and the acceding countries.

EBN is planning to produce a publication similar to this one after the forthcoming seminar and will continue to disseminate knowledge on public liability management using several venues, including a hotline and the aforementioned web pages. The primary aim of these communications will be to facilitate EBN agenda-setting and activities, regularize the ties between national debt offices, and facilitate the development of joint initiatives. The contents of both the hotline and the web pages will be driven primarily by the interests of the EU applicant countries—to support their public liability management institution building and problem solving capacities.
Acknowledgments

This publication is a result of the December 15-16, 1997, Brussels Central European Policy Workshop, “EU Accession and Sovereign Debt Management,” sponsored jointly by the European Commission and the World Bank.

We would like to thank the European Commission for hosting this outstanding event, especially Mr. Joly Dixon and Ms. Joan Pearce from DG II and Messrs. Constantin Costopoulos and Antonio Pitrone from DG IA. We give special thanks to Ms. Karen Hodgson for her role in the preparation and execution of the workshop.

On the part of the World Bank, we would like to thank the team who contributed to the success of the workshop, as well as in the production of this publication: Mmes. Hana Polackova, Ilene Photos, Christina Bogyo, and Marinette Guevara; Mr. Sergei Shatalov; and Mr. Don Reisman from the Office of the Publisher. We would also like to express our gratitude to Messrs. Marcelo Selowsky and Hafez Ghanem, both of whom provided invaluable advice and support.

We also would like to thank the authors of the various papers presented in this publication, who were among the distinguished speakers at the Brussels workshop: Ms. Hana Polackova; and Messrs. Marcelo Selowsky, Homi Kharas, Hafez Ghanem, Graeme Wheeler (the World Bank), Mario Blejer (International Monetary Fund), Louis de Montpellier (Treasury of the Kingdom of Belgium), Dieter Glatzel (EUROSTAT), and Francesco Forte (University of Rome).

And, finally, we would like to extend our special thanks to the participants, colleagues, and experts from the 10 European Union acceding countries for their contribution and active participation.
Part 1

Introduction
Background

The process of European Union (EU) accession and, more immediately, the launch of the European Monetary Union (EMU) in 1999 pose new challenges for public liability management and sovereign borrowing policies of Central European (CE) states. In the context of EU accession, both the macroeconomic environment of the national borrowing policy and the choice of borrowing and risk management instruments will evolve rapidly. Several CE countries already have been developing sophisticated national debt offices and have shown their commitment to the fiscal criteria of the Maastricht Treaty; others need to make fundamental institutional changes.

The World Bank and the European Commission have received requests from many CE countries to support their efforts in adopting the best international practices in public liability management as a means to integrate smoothly into the EU. The World Bank and the European Commission joined forces and responded to these requests by spearheading an informal regional “network of excellence”—the European Borrowers Network (EBN)—to disseminate the best practices in public liabilities management and institution-building.

A two-day seminar, cochaired and cofunded by the European Commission and the World Bank, was held in Brussels in mid-December 1997. The seminar featured presentations by senior debt management officials from CE and EU countries, and international organizations. Among the panel topics were the following: sustainability of borrowing policy; external and fiscal aspects; institution-building for active debt management; liabilities management and portfolio optimization; and implications of EMU and EU accession for public debt management. All 10 EU applicant countries, Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia, were invited and participated in the seminar.

The workshop pursued the following goals:

- To investigate the implications of the launch of the Euro and of the EU accession on fiscal prudence and borrowing strategies of CE countries
- To facilitate the dissemination of the best public liabilities management techniques developed worldwide
• To explore plausible arrangements for promoting prudent public liabilities management in Central Europe through a regional expertise network.

Main findings and recommendations of the workshop fall into the following categories: fiscal prudence and integrated management of public liabilities, globalization and volatility of financial markets, the implications of the proposed launch of the Euro for public liabilities management policy choices, and institutional issues, which are the key requirements for public liabilities management.

Fiscal prudence and the integrated management of public liabilities require the following actions:

• Ensuring a good quality of fiscal adjustment that emphasizes not only deficit reduction, but also adequate public investment and prudent levels of contingent fiscal risks outside the budgetary system—for example, in the banking sector, pension system, and subnational governments.

• Developing an integrated analytical and institutional framework for governments' prudent and effective handling of direct and contingent liabilities, both explicit and implicit.

The globalization and volatility of financial markets have the following implications:

• Emerging economies are now more resilient to crises than they were a decade ago, but only the countries committed to introducing unpopular austerity measures quickly can minimize the losses from capital flows volatility.

• CE countries urgently need to enhance their overall competitiveness if they are to successfully withstand further global shocks.

The following are implications of the proposed launch of the Euro for public liabilities management policy choices:

• The emergence of the Euro market significantly changes the structure of portfolio risks in sovereign debt portfolio.

• CE countries must position themselves now through large benchmark issues in the Euro, even though non-Euro markets may offer lower costs.

• The Euro may stimulate demand for issues in CE currencies as a diversification tool.

• The development of secondary markets must be sequenced carefully.
Dealing with institutional issues is a key requirement for public liabilities management. The following actions will be necessary:

- The integration of domestic and external debt management
- The full integration of public debt management and fiscal risk into a broader Treasury function
- The insulation of debt management from monetary policy, but close coordination between the ministry of finance and central bank
- The necessary financial and institutional measures to retain the best staff and enable the debt management office to fulfill its performance criteria and respond quickly to the shifting market conditions.

Summaries of eight speakers’ presentations follow. The presentations in their entirety appear in Part 2 of this text, and profiles of the speakers appear in the appendix.

**FISCAL DEFICITS AND THE QUALITY OF THE FISCAL ADJUSTMENT**

Marcelo Selowsky

Significant progress has been made in the reduction of fiscal deficit throughout most of Central Europe. The issue is whether such a quantitative improvement has also been accompanied by progress in the “quality” of the fiscal adjustment—and what more can be done to improve this qualitative dimension.

The quality of fiscal adjustment has two dimensions: sustainability and efficiency. Fiscal deficits must be reduced through widely accepted and institutionalized measures, such as durable tax reforms and clear rights and responsibilities of local governments on the revenue and expenditure sides. Deficits that are reduced through measures that everyone knows are unsustainable—such as wage arrears or unpaid bills to suppliers—will not have the same positive impact on interest rates, creditor attitudes, or the overall investment climate. And deficits that are closed through raising already high but easy-to-collect taxes or cutting public investment expenditures (to protect salary expenditures) are inconsistent with long-run efficiency and growth.

There may even be a trade-off between the speed at which deficits are reduced and the quality of that reduction. Examples include the following:

- If public investment is suppressed, public sector infrastructure may deteriorate sharply.
• If little attention is given to the banking sector reforms, future contingent liabilities may emerge from the banking sector.

• If pension reforms are delayed, liabilities may emerge from unfunded pay-as-you-go pension systems.

Some of the most radical reforms to assure sustainable reductions of deficits in the long run, such as pension reform or downsizing bloated civil services, may increase that deficit in the short term. External capital markets may be called upon to finance these temporarily higher fiscal deficits. These markets should be able to value slower, but more sustainable and efficient, paths of fiscal deficit reductions.

Although important reductions in fiscal deficits have taken place, the possibility of large future fiscal liabilities still remains. Some are contingent on future events; others can be predicted with some certainty. But what is most important is that future fiscal liabilities can be reduced with decisive policies today.

MACROECONOMIC ISSUES FOR SOVEREIGN DEBT MANAGEMENT IN THE EU ACCEDING COUNTRIES
Hafez Ghanem and Homi Kharas

Three developments in the Central and Eastern European and Baltic countries (CEECs) make this discussion of debt management practices especially relevant today: the increase in the size of foreign capital inflows partly in anticipation of EU accession, which raises broad issues of foreign exchange availability to meet future debt servicing needs, the change in the composition of inflows toward more private and more short-term flows, with a corresponding need to manage the potentially higher volatility of such flows, and the importance of market credibility—based in part on an assessment of incentives facing policymakers—in determining the sustainability and impact of macroeconomic policies. Each of these trends has important consequences for how public debt is managed in the CEEC countries.

The Size of and Composition of Capital Inflows to the CEECs

The CEECs have greatly liberalized their financial sectors and opened their capital accounts. EU accession will mean greater and freer capital flows. Future accession to the EU may lead to an increase in the expected rate of return on investment in the CEECs, because of the opportunities offered by the single market and the free movement of goods, labor, and capital.

The increased inflows we observe in the CEECs are coming from the private sector. Higher cross-border capital flows to the private sector in
the CEECs mean that debt managers can no longer make some assumptions about growth and then devise public borrowing strategies. Growth itself will depend upon the perception of the strategy.

The size of capital inflows to the CEECs should push debt managers in those countries to ask questions about sustainability. Are the CEECs building debt at a rate fast enough to compromise their ability to service it? Is their stock of foreign debt becoming too high?

The increased inflows we observe in the CEECs are coming from the private sector. Debt managers in the CEECs need to look carefully at what is happening to the real exchange rate, because this will determine whether enough foreign exchange resources are being generated to service the public and private foreign debt over the medium term. Rapidly appreciating real exchange rates that support higher consumption and lower saving are usually a sign that problems may be on the way.

Debt managers need to look carefully into the private sector uses for foreign borrowing. Borrowing for consumption can be an indication of an unsustainable boom, while borrowing for investment is more sustainable.

It is not enough to look solely at aggregate debt to GDP ratios. The job of CEECs debt managers is becoming more complicated because the extent and nature of public sector involvement in the economy are changing. It is now taking on more of a regulatory role where contingencies and guarantees (for example, in the financial sector and in public pension schemes) are increasingly important. Governments more and more frequently have to deal with the contingent liabilities coming out of the financial sector.

Higher cross-border capital flows to the private sector in the CEECs means that debt managers can no longer just make some assumptions about growth and then devise public borrowing strategies.

The amplitude of economic cycles, or at least of such key economic prices as interest and exchange rates, may be quite high, and the public debt may jump suddenly, independently of the budget deficit, or have an unsustainable future trajectory.

A conservative debt management strategy takes these factors into account.

*The Interaction between Public Debt Management and Macroeconomic Policy*

Public debt management choices, though seemingly a rational way of reducing borrowing costs, can end up being much more costly for the country because of the interaction with other elements of macroeconomic policy and because the probability that a devaluation is not factored into borrowing costs. It is important to shift from a simple budget
cost approach in debt management to a more comprehensive total cost approach; public debt management choices should be thought of as a way to maintain macroeconomic flexibility; and public debt managers should take into account prevailing macroeconomic conditions.

CEECs' debt managers need to carefully monitor exchange rate developments and their implications for borrowing strategies. A key question facing them these days is how to adjust their portfolios in response to the introduction of the Euro. They also need to think of public debt management choices as a way to maintain macroeconomic flexibility and credibility.

Today's CEECs' public debt management officials who are getting ready for EU accession need to have a good understanding of the macroeconomy—not just in terms of how it functions in normal times and in terms of medium-term trends, but of how macroeconomic policy could be used in the event of a shock and of where structural weakness might force additional public intervention that must be factored into the risk side of the debt management policy equation.

**GOVERNMENT CONTINGENT LIABILITIES: A HIDDEN RISK TO FISCAL STABILITY—A CONSIDERATION FOR EU ACCESSION**

Hana Polackova

Most recently, the Asian crisis has indicated that major moral hazards in the markets and great hidden fiscal risks are associated with government contingent liabilities. Contingent liabilities have caused significant fiscal pressures in EU-applicant countries also.

Governments are being exposed to increasing fiscal risks and uncertainties. This trend has four main causes: the increasing volumes and volatility of private capital flows; transformation of the state from financing of services to guaranteeing particular outcomes; related to this, moral hazards in the markets; and fiscal opportunism of policymakers. Transition and emerging-market economies face particularly large fiscal risks. Their dependence on foreign financing, opaque ownership structures, low information disclosure, and weak regulatory and enforcement systems elevates failures in the financial and corporate sectors. Such failures, in turn, often generate political pressures on governments to intervene through various bail-outs.

Thus, a study of country fiscal position is far from complete if it skips over obligations taken by the government outside its budgetary system. All sources of fiscal risks must be addressed if governments are to avoid sudden fiscal instability and realize their long-term policy objectives. Fiscal risks are of four types: direct and contingent, each of which is either explicit or implicit.
Possible Financing Pressures on the Central Government: 
A Typology

Direct liabilities are obligations that will arise in any event. They are predictable according to specific underlying economic and policy factors. Contingent liabilities are obligations that are triggered by a particular discrete event, which may or may not occur. The probability of contingency to occur and the magnitude of the required public outlay are exogenous (e.g., the occurrence of a natural disaster) or endogenous (e.g., implications of market institutions and of the design of government programs on moral hazard in the markets) to government policies.

Explicit liabilities are specific government obligations defined by law or contract. The government is legally mandated to settle such an obligation when it becomes due. Implicit liabilities represent a moral obligation or an expected burden of the government not in the legal sense, but based on public expectations and political pressures.

According to these characteristics, the Fiscal Risk Matrix table below provides a typology of fiscal risks. For each category of fiscal risks, table 1 on page 38 illustrates its sources for central government.

<table>
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<tr>
<th>Direct Explicit</th>
<th>Contingent Explicit</th>
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Measures To Reduce Fiscal Risks

Fiscal analysis must factor in the cost of implicit subsidies provided by contingent support programs. For instance, arrears and other obligations of state-guaranteed and owned institutions may claim public resources in the future. Moreover, the government may have taken advantage of some institutions to finance and implement its policies outside the budgetary system. Thus, a string of years with a balanced budget and low public debt suggests neither that the government has been fiscally prudent nor future fiscal stability.

To identify the future potential fiscal pressures, contingent fiscal risks should be analyzed in the order of their significance, based on the stock of existing government programs and promises. The analysis focuses on the factors of risks and ways of controlling the government’s risk exposure, and allows to cost out alternative government programs.

An adequate institutional system requires that the government treat any noncash program involving a contingent fiscal risk like another budgetary or debt item. Most importantly, the system has to
make the potential fiscal cost of off-budget programs visible ex ante. Accrual-based budgeting and accounting systems help fiscal discipline but are neither sufficient nor necessary in their entirety. Rules on state guarantees and insurance programs, and on the behavior of state-guaranteed and public agencies and subnational governments, are critical.

MACROECONOMIC AND INSTITUTIONAL INTERACTIONS
Mario I. Blejer

This presentation dealt with two distinctive aspects of public debt management issues: a review of the connections, at the macroeconomic level, between monetary policy and public debt management; and the issue of proper institutional arrangements for macroeconomically efficient debt management—in particular, the policy linkages and the need for operational coordination between central banks and the Treasury, or, in relevant cases, the finance ministry.

The implementation of monetary policies and the management of the public debt are intrinsically connected aspects of macroeconomic policy. The main areas of concern for the monetary authority is the proper monetary management of the economy, and the debt-management authority is concerned with the provision of proper and efficient financing of the fiscal deficit.

A specific monetary policy stance could alter significantly the capacity of the government to finance the budget deficit by affecting the cost of debt servicing and conditioning the volume of available financing sources. On the other hand, the size of the fiscal gap that requires debt financing and the planned debt strategy to be followed constitute a constraint in the ability of the monetary authority to achieve its independent monetary goals.

_Institutional Arrangements for Macroeconomically Efficient Debt Management_

It is necessary to clarify the genuine functions of central banks, finance ministries, and treasuries in market economies. The central bank is generally more interested in fostering market liquidity because this enhances its ability to affect monetary conditions more swiftly. The Treasury, on the other hand, generally wishes to minimize the cost of borrowing. The central bank should play an advisory role in the design of public debt management strategy.
NEW ZEALAND'S TRANSITION TO RESPONSIBLE FISCAL MANAGEMENT

By the late 1970s, New Zealand had one of the poorest performing economies in the western world. The key to reversing this situation has been to reexamine the role of government in every aspect, to lengthen the focus of policy management, and to use institutional change to lock that in. Redefining the government’s role in the economy was essential and was accomplished in five major areas:

- Macroeconomic stabilization
- Tax policy
- Redefining its ownership of assets
- Public sector management
- Expenditures.

Since the mid-1980s, and because of this program, the number of people employed in the public sector has declined, the fiscal position has been completely transformed, and net public debt has fallen dramatically.

Several factors have helped to lock in responsible fiscal management. The redefinition of the role of government and the idea that fiscal policy is heavily constrained by monetary policy have been accepted. This is particularly true when the government has an open capital account and a floating exchange rate. Finally, the Fiscal Responsibility Act, which provides the legislative framework for the conduct of fiscal policy in New Zealand, was adopted.

Benefits of Greater Fiscal Transparency

These disclosure requirements are far-reaching. They force the government to be transparent about its fiscal intentions and the short- and long-term impact of its spending and taxation decisions. This emphasis on transparency and disclosure of fiscal risks and contingent liabilities has produced some major benefits. It has forced governments to give more weight to the long-term impact of spending and tax decisions, and it has led to more sustainable fiscal policy. It has significantly enhanced the credibility of the government’s economic strategy. This, in turn, has helped encourage strong private capital inflows into New Zealand.
The accession to the Monetary Union confronts the managers of public debt across Europe with a major challenge: an integrated financial market under the European Monetary Union (EMU) means that each issuer, and especially a sovereign issuer, will lose the natural protection of its domestic currency, as investors, whether domestic or foreign, will be able to diversify into a much broader credit universe denominated in the same currency. Furthermore, this broad investor diversification could occur rather quickly, and indeed this has already begun.

Any sovereign issuer should refrain from protectionist behavior regarding international investors; on the contrary, the sovereign issuer has a vested interest to be extremely proactive towards them.

Two fundamental orientations have been taken by the Treasury of Belgium in respect to the preparation for the EMU:

- The decision to issue the new debt and to convert the existing debt in Euro from January 1, 1999
- The accurate definition of the financial strategy, especially in terms of risk management, to be pursued by public debt managers.

The Treasury must respond to a twin challenge as it progresses toward the EMU.

The Belgian government debt market must remain attractive to its domestic investors and intermediaries, but it also must attract new, international, investors and intermediaries, particularly, but not exclusively, from the rest of Europe. In short, the Treasury must “Europeanize” its public debt market, and “internationalize” its investor base.

The challenge must be met at the same time in four different, but complementary areas. The Treasury must be able to offer to investors: a strong credit, in the framework of an efficient, transparent and liquid market; it must also broaden the investor base of Belgium’s debt, while continuously ensuring a highly professional debt management.
THE MEASUREMENT OF DEFICIT AND DEBT UNDER THE MAASTRICHT TREATY—SOME STATISTICAL CONSIDERATIONS
Dieter Glatzel

The paper sets out the legal framework and the decision process for the classification of financial and nonfinancial transactions under the Maastricht rules of the excessive deficit procedure.

The Legal and Accounting Framework

There is a distribution of responsibilities between the Commission’s directorate general of economic and financial affairs (DG II) and Eurostat: DG II is responsible for the economic assessment of the excessive deficit data and, thus, has to take into account aspects related to the economic sustainability of certain budgetary decisions of the member states’ governments; Eurostat, on the other hand, is authorized to evaluate the correct methodological application of the European System of National Accounts (ESA), 2nd edition, for the excessive deficit procedure.

ESA 1978, which is the basis for the implementation of the Maastricht criteria, was recently revised by Eurostat, and the new version (ESA95) will enter into force in the year 2000.

The new system will tend to produce smoother results because the time lag between accrued taxes and social contributions compared to cash payments tends to increase in such situations. Another matter on which the new ESA will bring more clarity is the delimitation of the sector general government in the sense that certain units (enterprises) that are now, by definition, inside the sector general government will be outside if the majority of their revenues are derived from the sale of market production.

Eurostat has uncovered several cases of opportunistic behavior:

- Decisions affecting the calculation of deficit (the France Télécom case)
- Treatment of receipts from indirect privatization (Belgium)
- Legal decision with a retroactive effect (Irish case)
- Treatment of transactions in financial leasing (case raised by Belgian authorities)
- Treatment of interest in the case of zero coupon bonds
- Financing and exploiting of public infrastructure by the enterprise sector
- Treatment of export insurance guaranteed by the state.
Eurostat deals with all 10 CEE candidate countries, and no distinction is made for those that may start their negotiations earlier than others. The problems that have been identified so far primarily concern the delimitation of the general government and the issues connected with the privatization process that goes on in these countries.

A starting point for the production of comparable statistics of deficit and debt are the government finance statistics compiled by the ministries of finance in these countries for the International Monetary Fund. In the future, because the revised Government Finance Statistics will be consistent with the System of National Accounts and the ESA 95, the need for close cooperation between the ministries of finance and the statistical institutes will tend to improve the deficit and debt statistics in these countries, as defined in the Maastricht Treaty.

ACCOUNTING AND FINANCIAL PRACTICES IN THE LIGHT OF THE CONTEXT OF THE MAASTRICHT TREATY
Francesco Forte

Prudential Accounting and the Maastricht Rules

Prudential accounting implies: greater attention to transparency; comprehensiveness as far as the public entities are considered; accrual accounting (that is, accounting by obligations); asymmetrical accounting—in the life cycle of the obligations, one shall choose the last stage for revenues to be sure that they are really collectible, and the first stage of obligations for expenditures, to take into account those that in the future the government shall be unable to escape; close linkage between the flows of the budget and the changes in the stocks of the balance sheet; and a careful consideration of the government risk portfolio.

Implementation of the Maastricht fiscal criteria has induced some of the following opportunistic budgetary and accounting behaviors by governments. Possible initial deficit parameters include the following:

- Overly restrictive definition of the government, so that part of the true government obligations are off-budget
- Restrictive definitions and underassessment of obligations, debts, and liabilities on the expenditure side, so that they are not recorded even if they already exist or have a great chance of coming into existence
- Shifting to past budget debts, which are coming into existence now but have to do with previous obligations
Possible initial debt parameters include the following:

- Overly restrictive definition of government, so that debts of governmental institutions are not consolidated in government debt
- Formalistic definition of public debt, so that some government debts are not included in it
- Exclusion of contingent liabilities for guarantees from debt
- Issuance of guarantees rather than concessional loans or grants

*Public Economy Derivatives and Public Debt Management and Control*

- Governments may become demanders and suppliers of derivatives to improve their public debt management by reducing its risks and containing its amount.
- Governments may also act as suppliers of derivatives, as a substitute for public debt, and a general guarantor of the financial system of the country.
- Accounting for derivatives in a public economy is possible, even if it is done in ways different from conventional ones, and it is necessary because the public economy needs derivatives.
- Governments buying and issuing derivatives to hedge against risks in their debt policy should not be expected to make gains on them.

*Contingent Liabilities and Debt Derivatives of Central Governments*

Accounting for explicit guarantees and government contingent liabilities is needed, in the context of the Maastricht Treaty, in order to have a comprehensive picture of the considered government's possible future debt burden—to be added to its standing liabilities for public debts and budgetary debts. Prudent recording of these liabilities should be a means to ascertain what the hidden costs of chosen policies are; and as a means to focus on measures to be undertaken to prevent governments' undesired coverage for liabilities of other public and private concerns. Transparent accounting is needed to assess the effective costs of the different ways of supplying public goods, to compare them with their benefits and with other alternatives. Government institutions' guarantees on loans of other institutions should be made transparent, by proper
recording in annexes to the annual budgets. Otherwise, they continue to constitute hidden transfers, with unknown costs and unknown beneficiaries. The surest way to avoid responsibilities for excessive liabilities of public enterprises is to privatize these enterprises. What is also needed are restrictive regulations that hinder subnational governments from making debts for current expenditures and limit their debts for investments, requiring further that these debts should be serviced through the provision of earmarked revenues.

As for nonprofit institutions, cooperatives, and concerns of dubious legal nature in which the government has a substantial involvement, it is necessary to decide whether they are really a part of the government or not. If they are part of the government, they should be recognized as off-budget government units. And their net debts should be consolidated in the government debt.
Part 2

Presentation of the Eight Major Papers from the Workshop
Fiscal Deficits and the Quality of the Fiscal Adjustment

Marcelo Selowsky

Significant progress has been made in the reduction of fiscal deficit throughout most of Central Europe (see table 1). Today many of these countries would meet the Maastricht criteria for fiscal deficit. Fiscal deficits in the five countries that have started formal EU accession negotiations (the Czech Republic, Estonia, Hungary, Poland, and Slovenia) are below those of many current members (particularly France, Germany, Greece, Portugal, and Spain). Only in Romania and Bulgaria have fiscal deficits increased in the 1996–97 period. But those are believed to be temporarily high deficits, fully financed by exceptional external financing as part of necessary macroeconomic workout scenarios accompanied by important structural reforms.

Table 1. Fiscal Deficit 1993–1996

(percentage of GDP)

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<tr>
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<td>Bulgaria</td>
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<td>-5.7</td>
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<td>-7.4</td>
<td>-3.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Latvia</td>
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<td>-4.0</td>
<td>-3.3</td>
<td>-1.3</td>
</tr>
<tr>
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<td>-3.4</td>
<td>-5.4</td>
<td>-4.3</td>
<td>-4.6</td>
</tr>
<tr>
<td>Poland</td>
<td>-2.3</td>
<td>-2.2</td>
<td>-1.9</td>
<td>-2.8</td>
</tr>
<tr>
<td>Romania</td>
<td>-0.4</td>
<td>-1.9</td>
<td>-2.6</td>
<td>-5.7</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>-7.1</td>
<td>-1.3</td>
<td>0.2</td>
<td>-1.3</td>
</tr>
<tr>
<td>Slovenia</td>
<td>0.3</td>
<td>-0.2</td>
<td>0.0</td>
<td>—</td>
</tr>
<tr>
<td><em>Average</em></td>
<td>-2.8</td>
<td>-2.3</td>
<td>-2.2</td>
<td>-2.9</td>
</tr>
</tbody>
</table>

Source: World Bank database
Comparing past trends in fiscal deficits is like comparing tips of an iceberg at different moments in time. In March 1998 the Czech government revealed that the debt created by the Central Government outside the budgetary system in the past eight years amounted to about 13 percent of GDP. This is double the earlier estimate of government debt—and contrary to the originally reported figures, which showed either a fiscal balance or a surplus during many of these years. There may be a lot of activity and hidden life under the water that are not explicitly observed. And the size and trends in that activity may dominate and be the major force of what we observe in the future. It is not wise to project future tips of the iceberg based solely on past tips. We need to understand and influence what is going on beneath the surface. This is what I call influencing the quality of the fiscal adjustment.

This quality has two dimensions: sustainability and efficiency. Fiscal deficits have to be reduced through measures that are widely accepted and institutionalized, such as durable tax reforms and clear rights and responsibilities of local governments on the revenue and expenditure sides. Deficits that are reduced through measures that everyone knows are unsustainable, such as wage arrears or unpaid bills to suppliers, will not have the same impact on interest rates, creditor attitudes, or the overall investment climate. And deficits closed through quickly raising high and easy-to-collect taxes or cutting public
investment expenditures (to protect salary expenditures) are inconsistent with long-run efficiency and growth.

Complicating the picture even more is the possibility of a trade-off between the speed of deficit reduction and the quality of that reduction. Sustainable and efficient reductions may call for institutional changes or changes in legislation (such as a new tax reform law), and these will take time. Other less sustainable and inefficient measures described earlier can be expedient—they can be implemented by default.

Finally, some of the most radical reforms that would assure sustainable reductions of deficits in the long run, such as pension reform or downsizing bloated civil services, may even increase the deficit in the short run. This increase may result from transitional costs of moving from a pay-as-you-go system to a fully funded one, or from severance payments that have to be paid to downsize civil service organizations.

We should explain these trade-offs to international investors and holders of government debt. These markets should be able to value slower, but more sustainable, and efficient paths of fiscal deficit reductions and incorporate them in their decisions to fund such deficits. In the following discussion, we will examine three specific areas that give rise to these trade-offs.

The Public Sector Infrastructure May be Deteriorating Sharply

In many cases the fiscal deficit reduction has been achieved through sharp contractions in public investment and maintenance expenditures for public infrastructure. As table 2 shows, in some years, such expenditures have been reduced to 1.5 percent of GDP in Bulgaria and Latvia and to about 2 percent of GDP in Lithuania and Slovenia. These expenditure figures surely do not cover the rate of depreciation of infrastructure—even if some part of that stock may have been unsuitable for a liberalized market economy. Some key infrastructure deficiencies may emerge. For example, maintenance and investment in rural roads is at present insufficient to accommodate the growing European trade and the 11.5-ton axle-load trucks common in Western Europe.

Off-budget cross subsidization remains high in some public utility services. Public utilities are being decapitalized when direct budgetary transfers are eliminated and cost recovery remains low in order to subsidize consumers—a situation particularly common for fuels and district heating (for example, only 70 percent of heating costs is recovered in Lithuania).

Sharply cutting public investment and eliminating transfer to public utilities while maintaining low consumer prices will decapitalize infrastructure. Opening the financing and building of infrastructure to the
private sector and advancing more aggressively in cost recovery (while focusing budgetary transfers on the poorer consumers) will make deficit reduction measures more compatible with the maintenance of infrastructure capital stock.

**Liabilities May Emerge from the Banking Sector**

This issue is now much more important after the lessons learned from the East Asia crisis. How is that experience relevant for Central and Eastern Europe? The recent large and persistent current account deficits of the crisis countries of East Asia have not been the product of fiscal deficits—which overall were on balance—but of the domestic private sector borrowing abroad directly or through the domestic banking system. A dangerous mismatch of maturities and foreign exchange open position of banks resulted. Significant insider lending and politicization of credit allocation characterized the overall process. In Thailand and Korea, the share of bad assets in the banking systems tripled between 1995 and 1997, and short-term private debt reached 25 percent of GDP. The insolvency of corporations and banks will have massive fiscal implications, dwarfing the fiscal progress made in the past.

Lately, many countries in the Baltics and Central Europe have experienced large current accounts in spite of small fiscal deficits. This has been particularly true for Estonia, Lithuania, Croatia, and the Slovak Republic (table 3). Although data are scanty, there is evidence that an important part of the current account deficit is the product of increased external borrowing by domestic banks to finance investments, purchase of durables (particularly cars), and lending for housing and real estate (table 3). There are obvious differences between this situation and the one in East Asia: the initial stock of private debt is very small and we do not observe the “bubble booms” characterizing the East Asian economies.

The crucial lesson is to advance quickly in enhancing the prudential regulations and enforcement of banking regulations. The Basel Core Principles must be implemented, perhaps even surpassed. Public disclosure of banking information and full independence of supervisory agencies is crucial. Central banks have to act forcefully in confronting the typical political resistance to dealing early on with the issue of problem banks. Delayed action on problem banks has compounded the problem over time. These are the bitter lessons of the Bulgarian and Romanian experiences, where bad loans mounted even without external borrowing by the banking system.

In summary, the banking sector may be the major source of future fiscal liabilities if actions are not taken today. Bailouts and recapitaliza-
Table 3. Central Europe: External Indicators 1993–96  
(percentage of GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>Current Account Balance</th>
<th>Private Capital Inflows</th>
<th>External Borrowing by Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>0.9 0.7 -9.5 -7.6 -11.0</td>
<td>1.1 2.1 2.7 1.8 1.6</td>
<td>-2.6 -1.6 -1.5 -3.6 n/a</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.7 -0.1 -2.9 -8.7 -8.4</td>
<td>8.2 7.3 14.5 6.9 n/a</td>
<td>0.1 2.0 6.6 0.7 n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>1.3 -7.1 -4.6 -9.8 -10.0</td>
<td>9.2 8.7 5.4 7.6 5.8</td>
<td>-2.2 -2.8 1.1 4.5 n/a</td>
</tr>
<tr>
<td>Hungary</td>
<td>-9.0 -9.4 -5.6 -3.7 -3.3</td>
<td>16.9 11.5 20.7 5.9 3.3</td>
<td>1.6 -0.5 1.3 1.0 n/a</td>
</tr>
<tr>
<td>Latvia</td>
<td>7.0 -2.4 -3.6 -7.0 -4.5</td>
<td>2.5 7.1 5.2 3.4 4.4</td>
<td>-2.0 -3.5 4.2 2.5 n/a</td>
</tr>
<tr>
<td>Lithuania</td>
<td>-3.2 -2.2 -10.3 -9.3 -7.6</td>
<td>1.1 1.4 1.8 3.9 3.3</td>
<td>1.6 1.4 -0.1 -0.4 n/a</td>
</tr>
<tr>
<td>Poland</td>
<td>-2.7 -1.0 4.6 -1.0 -4.1</td>
<td>2.0 1.2 3.6 3.6 3.4</td>
<td>0.9 2.1 7.6 1.5 n/a</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>-5.2 5.1 2.2 -11.5 -8.5</td>
<td>-0.3 7.2 5.3 10.3 4.5</td>
<td>-3.9 -2.2 1.2 4.3 n/a</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.5 3.8 -0.2 0.3 -0.1</td>
<td>2.1 4.3 3.7 7.6 1.7</td>
<td>-4.1 -3.1 -0.2 -1.9 n/a</td>
</tr>
<tr>
<td>Average</td>
<td>-0.9 -1.4 -3.3 -6.5 -6.4</td>
<td>4.8 5.6 7.0 5.7 3.5</td>
<td>-1.2 -0.9 2.2 1.0 n/a</td>
</tr>
</tbody>
</table>

1 Includes foreign direct investment, portfolio and nongovernment external borrowing  
Source: World Bank database
tion can be massive relative to fiscal finances. Even if the probabilities of this occurring were low, the expected value of fiscal liabilities is significant.

Liabilities Emerging from Unfunded Pay-as-you-go Pension Systems

In most of Central and Eastern Europe, long-term projections show that pay-as-you-go pension systems are unsustainable, given the aging of the population. The ratio of (present value of) unfunded pension obligation to official public debt is greater than in Western Europe. Long-run fiscal balances depend on the strength of today's pension reforms. Figures 1 and 2 show projections of the pension system deficit for Hungary and Slovenia under a no-reform scenario and a reform scenario that gradually introduces a multipillar system. This system diverts a portion of contributions toward a fully funded scheme with private sector participation and, it is hoped, with a better rate of return. With reform, both figures show a temporary higher deficit of the system—as the diversion of contributions generate a higher deficit in the pay-as-you-go system. However, as the relative size of the fully funded scheme increases over time, the overall deficit is reduced sharply over the long run.

Fortunately, most countries are now implementing or considering reforms of their pay-as-you-go systems and introducing fully funded pillars. Hungary is ahead in the process, but Poland, Latvia, Slovenia, and Croatia are also now in different stages of reforming their systems. Estonia, Lithuania, and the Czech Republic are also considering moving in this area.

These reforms will entail some extra fiscal costs during the transition from the pay-as-you-go to the fully funded system. For that reason, long-run sustainability entails higher fiscal costs now. Obviously an integral application of the Maastricht criteria will have to incorporate such links, and external capital markets may be called upon to finance these temporarily higher fiscal deficits.

Conclusions

Despite important reductions in observed fiscal deficits, the possibility of large future fiscal liabilities still remains. Some are contingent on future events; others can be predicted with some certainty. But what is most important is that some fiscal liabilities can be reduced with decisive policies today. A full analysis of fiscal performance should discuss such policies explicitly.
Figure 1. Public Pension Deficits in Hungary; No Reforms vs. Multipillar Reforms 1997–2015

Source: World Bank staff

Figure 2. Public Pension Deficits in Slovenia; No Reforms vs. Multipillar Reforms 1997–2015

Source: World Bank staff
Macroeconomic Issues for Sovereign Debt Management in the EU Acceding Countries

Hafez Ghanem and Homi Kharas

Macroeconomic developments are occurring very rapidly around the world, and the role of debt management is changing. Debt management policy now must be included along with fiscal, monetary, and exchange rate policy in discussions of a consistent macroeconomic policy mix. This is becoming very clear in the Central and Eastern European and Baltic countries (CEECs) that are candidates for European Union (EU) accession.

Three developments in the CEECs make discussion of debt management practices especially relevant today: the increase in the size of foreign capital inflows partly in anticipation of EU accession, which raises broad issues of foreign exchange availability to meet future debt servicing needs; the change in the composition of inflows, that is the increase of private and shorter term flows; and the corresponding need to manage the potentially higher volatility of such flows, and the importance of market credibility—based in part on an assessment of incentives facing policymakers—in determining the sustainability and impact of macroeconomic policies. Each of these trends has important consequences for how public debt is managed in the CEEC countries.

The Size of Capital Inflows to the CEECs

The CEECs have greatly liberalized their financial sectors and opened their capital accounts. EU accession will mean greater and freer capital flows. As shown in table 1, net capital inflows (measured by the current account deficit) to the CEECs have increased significantly between 1992 and 1996, with the median current account deficit to GDP ratio rising from around 0.0 percent in 1992 to more than 4 percent in 1996. Deficits continued to be high in 1997—reaching 10 percent of GDP in Estonia; 8.5 percent in the Slovak Republic and the Czech Republic; 7.6 percent in Lithuania, and more than 4 percent in Latvia, Poland, and Romania.
<table>
<thead>
<tr>
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<td>-4.7</td>
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<td>1.3</td>
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<td>6.5</td>
</tr>
<tr>
<td>Lithuania</td>
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<td>-9.3</td>
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<td>0.1</td>
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<td>0.4</td>
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<td>0.2</td>
<td>1.1</td>
<td>0.5</td>
<td>1.5</td>
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<td>Poland</td>
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<td>-0.6</td>
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<td>0.1</td>
<td>0.3</td>
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<td>-0.1</td>
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<td>0.8</td>
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<td>Romania</td>
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<td>5.1</td>
<td>1.8</td>
<td>-0.4</td>
<td>5.7</td>
<td>5.9</td>
<td>5.7</td>
<td>-1.2</td>
<td>1.8</td>
<td>0.4</td>
<td>0.7</td>
</tr>
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<td>Slovak Republic</td>
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<td>-11.1</td>
<td>1.6</td>
<td>0.4</td>
<td>-1.3</td>
<td>11.7</td>
<td>-0.3</td>
<td>5.6</td>
<td>0.6</td>
<td>6.5</td>
<td>0.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Slovenia</td>
<td>7.4</td>
<td>0.3</td>
<td>0.0</td>
<td>-0.2</td>
<td>0.0</td>
<td>3.6</td>
<td>0.0</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Median</strong></td>
<td>0.4 or -3.9 or 1.2</td>
<td>0.0 or -0.4</td>
<td>2.6 or 0.3</td>
<td>2.0 or 0.0</td>
<td>1.3 or 0.8</td>
<td>1.5 or 1.4</td>
<td>0.3</td>
<td>7.0</td>
<td>0.4</td>
<td>3.6</td>
<td>3.4</td>
<td>1.4</td>
</tr>
</tbody>
</table>
High capital inflows could be explained by the prospects for EU accession. Future accession to the EU may have led to an increase in the expected rate of return on investment in the CEECs, because of the opportunities offered by the single market and the free movement of goods, labor, and capital. Indeed, as shown below domestic savings rates in the CEECs, except for in the Baltics, have been stable or increasing, suggesting that high capital inflows and current account deficits may be explained by higher domestic investment rates in these countries.

The size of capital inflows to the CEECs should push debt managers in those countries to ask questions about sustainability. Are the CEECs building debt at such a fast rate that their ability to service it could be compromised? Is their stock of foreign debt becoming too high? A look at debt data indicates a great deal of variability. As far as the size of their debt is concerned, the CEECs could be divided into three groups. The first group, which includes Bulgaria (92 percent), Hungary (73 percent), and Romania (73 percent), has high debt-to-GDP ratios. The second group has moderate debt-to-GDP ratios: the Czech Republic (37 percent), Poland (36 percent), Slovenia (33 percent), and the Slovak Republic (33 percent). Finally, there are the Baltic countries who chose the zero-debt option at the time of the dissolution of the former Soviet Union (FSU) and whose debt-to-GDP ratios are approximately 10 percent.

It is not enough to look solely at aggregate debt-to-GDP ratios. The job of debt managers in the CEECs is becoming more complicated because the extent and nature of public sector involvement in the economy are changing. Debt managers are now taking on more of a regulatory role where contingencies and guarantees (for example, in the financial sector and in public pension schemes) are increasingly important. Governments are more and more having to deal with the contingent liabilities coming out of the financial sector. This could become important in some CEECs (for example, in the Slovak Republic recapitalizing the banks in order to comply with prudential rules may cost the equivalent of 6 percent of GDP). Demographic trends imply that pensions will continue to be an important source of public sector liabilities. For example, in Poland pension and unemployment benefits amounted to 16.2 percent of GDP in 1996, and they will continue to be a major source of budgetary instability unless the system is reformed. These expenditures typically are financed by issuing new debt. To understand the potential for recording new liabilities in the government’s books calls for a higher degree of expertise in credit ratings and in financial management than ever before.
The Composition of Capital Flows

The increased inflows we observe in the CEECs are coming from the private sector. The share of net official debt flows to the CEECs fell from a median of 1.2 percent of GDP in 1992 to about 0 percent in 1996. Countries such as Hungary and Poland are reducing the stock of their official debt, with net official debt flows of 1.6 percent and -0.6 percent in 1996. At the same time, private debt and equity flows increased substantially. Net private debt flows rose from a median of around 0 percent of GDP in 1992 to roughly 3 percent in 1996, with flows to the Slovak and Czech Republics reaching 11.7 percent and 7.4 percent, respectively. A large portion of this debt is short term, and net short-term debt flows to the CEECs increased from a median of 0 percent in 1992 to 1.3 percent in 1996. Foreign direct investment (FDI) also rose from a median of less than 1 percent of GDP in 1992 to about 2 percent in 1996. FDI to Hungary and Poland in 1996 was 4.4 percent and 3.3 percent of GDP.

Debt managers in the CEECs need to look carefully at what is happening to the real exchange rate, because this will determine whether enough foreign exchange resources are being generated to service the public and private foreign debt over the medium term. Rapidly appreciating real exchange rates that support higher consumption and lower saving are usually a sign that problems may be on the way. The data for the CEECs does not show any particular trend for the real exchange rate. For example, between 1992 and 1996 the real exchange rate for Bulgaria, Estonia, and Lithuania depreciated by 30 percent, 60 percent, and 70 percent. At the same time, real exchange rates in Hungary, Poland, and Romania appreciated by 11 percent, 26 percent, and 40 percent. Even if the trend in all countries had been for a clear appreciation, it would have been difficult to draw any strong conclusions. It is generally believed that the beginning of the transition was characterized by highly undervalued real exchange rates, so that an appreciation would be a normal move towards equilibrium.

Debt managers need to look carefully into the uses for which the private sector is using foreign borrowing. Borrowing for consumption can be an indication of an unsustainable boom, whereas borrowing for investment is more sustainable. Also, if the short-term capital inflows are reversed, as has been happening in many countries, it is easier to make the necessary adjustments to reduce the current account deficit if the borrowing has been used to finance investment expenditures, because these are easier to cut than consumption.
Table 2. Changes in Gross Domestic Saving (percent of GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>1992</th>
<th>1997</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>32</td>
<td>17</td>
</tr>
<tr>
<td>Hungary</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Latvia</td>
<td>48</td>
<td>15</td>
</tr>
<tr>
<td>Lithuania</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Poland</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Romania</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>24</td>
<td>28</td>
</tr>
<tr>
<td>Slovenia</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Table 2 shows that, except for the Baltic countries, gross domestic saving rates have been either stable or increasing in the CEECs. The sharp decline in savings in Estonia and Latvia from 32 percent and 48 percent of GDP in 1992 to 17 percent and 15 percent in 1997 is a sign of concern, but it could be explained as a reflection of systemic change once shortages of consumption goods were eliminated after the disintegration of the Soviet Union. The decline in Lithuania’s savings rate from 18 percent to 13 percent is worth looking at carefully, because it may indicate sustainability problems. The remaining CEECs have strong saving rates, with no obvious indication that foreign borrowing is displacing domestic saving. Those are issues that debt managers should be analyzing and discussing continuously.

Higher cross-border capital flows to the private sector in the CEECs means that debt managers can no longer just make some assumptions about growth and then devise public borrowing strategies. Growth itself will depend upon the perception of the strategy. Talk about confidence, expectations, and multiple equilibria will increasingly be the norm rather than the exception, and this will make forecasting debt indicators much more complex.

Taken together, the trends discussed above imply that the amplitude of economic cycles, or at least of key economic prices, such as interest and exchange rates, may be quite high (as a result of swings in private sector confidence); and that public debt may jump suddenly, independently of the budget deficit (as a result of contingent liabilities suddenly falling due), or it may have an unsustainable future trajectory.
(when pension liabilities fall due). A conservative debt management strategy takes these potential changes into account. Certainly, the lives of debt managers are not getting any easier.

The Interaction between Public Debt Management and Macroeconomic Policy

Recent experiences around the world show that public debt management and macroeconomic management are interacting in important and quite novel ways. We first demonstrate this point using examples from Latin America and East Asia.

Consider a country where fiscal problems are endemic, a situation reflected in high domestic interest rates. By borrowing in foreign currency, the government could reduce its measured deficit. Foreigners might be prepared to lend because they see some possible seniority relative to domestic lenders, or because they believe Brussels or Washington will bail them out of a crisis. This scenario could leave public finances in a very vulnerable situation—and if the exchange rate is depreciated to cope with a real problem in the economy, like the current account deficit, it could trigger a public debt financing problem and require a far larger and more costly adjustment. This is a crude characterization of the Mexican situation before 1994. It illustrates, however, that public debt management choices, though seemingly a rational way of reducing borrowing costs, end up being much more costly for the country because of the interaction between other elements of macroeconomic policy and because the probability of a devaluation is not factored into borrowing costs.

Next consider a case where loose monetary policy triggers a private sector boom based on soaring asset prices that support rapid credit expansion. This can produce a bubble, accentuated by real exchange rate appreciation and private external borrowing—again, often on short maturities. Some have argued that this situation should be of no concern to public policy. But, when the bubble bursts and a major financial crisis erupts, the public sector usually intervenes. Some elements of this scenario took place in Thailand, where, what appeared to be a very conservative public debt management strategy was in reality quite loose because implicit contingent public liabilities were being accumulated at a very rapid rate.

Three lessons can be drawn from this discussion: it is important to shift from a simple budget cost approach in debt management to a more comprehensive total cost approach; public debt management choices should be considered as a way to maintain macroeconomic flexibility; and public debt managers should take into account prevailing macroeconomic conditions.
Shifting from a budget cost to a total cost approach implies accounting directly for contingent liabilities. The financial sector has often been an important source of implicit contingent liabilities, with governments intervening to protect depositors and supporting banks that are "too big to fail." The banking crisis in the Baltics in 1995 provides a good example. At the time of the crisis, the Estonian government decided that a harsh solution was needed and that it had no money for bail-outs. Nevertheless, it had to issue bonds to strengthen the balance sheet of the North Estonian Bank, thus increasing public debt. In Latvia the budgetary cost was more direct. The government decided to compensate household depositors of the failed banks.3

CEEC debt managers should also consider different types of contingent liabilities.4 The enterprise sector is an important candidate for scrutiny. For example, in Lithuania persistent financial deficits in state-controlled energy companies is a serious problem. It has been estimated that direct and indirect fiscal support to the energy sector's producers and consumers amounts to the equivalent of 2 percent to 3 percent of GDP yearly. Similarly, subnational finances are an important source of implicit contingent liabilities. In many CEECs there is no legal framework to regulate subnational borrowing and no market mechanisms for its operations. National governments could end up having to bail out failed municipalities.

Shifting to a total cost approach also implies expressly factoring in the likelihood of macroeconomic adjustments, such as changes in the exchange rate or short-term spikes in domestic interest rates. A depreciation in the exchange rate increases the cost of foreign borrowing. CEEC debt managers need to monitor carefully exchange rate developments and their implications for borrowing strategies. A key question facing them these days is how to adjust their portfolios in response to the introduction of the Euro. Similarly, some CEEC countries (for example, Bulgaria) have experienced huge fluctuations in domestic interest rates as central banks defend their inflation and exchange rate targets. The impact of those fluctuation on the cost and risk of domestic debt need to be carefully considered when developing a borrowing strategy.

CEEC debt managers need to think of public debt management choices as a way to maintain macroeconomic flexibility and credibility. For example, if the exchange rate is pegged through a currency board arrangement, as in Estonia, high domestic interest rates may be required on occasion to defend the peg from speculative attack. Having short-duration domestic public debt would reduce the credibility of the ex-
change peg because the markets may worry that high interest rates could not be sustained over time.

Public debt management must take into account prevailing macroeconomic conditions. For example, in countries like Hungary, where there are large private capital inflows that more than suffice to cover the current account deficit, efforts to increase public foreign debt without an associated real exchange rate adjustment (and a higher current account deficit) can simply lead to higher reserve accumulation and net domestic debt creation as the flows are sterilized. This can be very inefficient. Obviously, close coordination between debt management and monetary officials is required.

Today's public debt management officials in the CEECs who are getting ready for ECU accession need to understand the macroeconomy, not just in terms of how it functions in normal times and in terms of medium-term trends. It is important to understand how macroeconomic policy could be used in the event of a shock and where structural weaknesses might force additional public intervention that must be factored into the risk side of the debt management policy equation.

Bibliography


Endnotes

1 See Classens et al. (1998) for a more detailed description of capital flows to the CEECs and FSU.

2 Faulk and Giugale (1997) study whether the CEECs risk a Latin American-style debt crisis.

3 See Fleming et al. (1996) for a description of the Baltics’ banking crisis.

4 Easterly (1998) describes cases where fiscal adjustment was just an illusion, and hence simply looking at the measured deficit would be misleading.
Government Contingent Liabilities: A Hidden Risk to Fiscal Stability—A Consideration for EU Accession

Hana Polackova

Governments are exposed to increasing fiscal risks. Fiscal risks have grown primarily through the international integration of financial markets, which has brought greater volumes and volatility of cross-border private capital flows, and through privatization of state functions accompanied by implicit or explicit state guarantees. State guarantees and insurance schemes, as opposed to subsidizing and the direct provision and financing of public services by government, are becoming a common method of government support. Off-budget programs and obligations bring, however, a hidden fiscal cost. Consequently, government off-budget approvals give rise to implicit and contingent liabilities, which may result in excessive public financing requirements in the medium and long term.

A process of fiscal adjustment concentrating on deficit reduction may omit or even elevate fiscal risks. Such fiscal risks result from structural policies, like public pensions and health care, and from nonbudgeted schemes of promised or expected government interventions in cases of various failures, such as banking failures and defaults of large enterprises and subnational governments. Policymakers pursuing a balanced budget or some deficit target may favor off-budget forms of government support, which do not require cash in the short term and, for some time at least, allow the cost of the underlying state support to be hidden.

In a market environment governments cannot avoid risks, but they can control and reduce them to a large extent. Risks can be controlled if they are recognized, understood, and fully considered in policy debates. If policy choices are to reflect fiscal risks and pursue a better quality of fiscal adjustment, the government needs to exhibit adequate incentives and capacities. Government incentives for better handling of fiscal risks reflect both the extent of understanding of the risks and their possible consequences by policymakers and
coercion. Fiscal risks are better understood in a more comprehensive framework for fiscal analysis and management, which would extend beyond government budget and debt and include contingent and implicit liabilities. To be coercive toward a sound handling of fiscal risks, international definition and measurement of fiscal targets, the quality of external monitoring, the extent of punishment for concealing relevant data, and the comprehensiveness of sovereign rating practices must extend their focus well beyond government budget and debt.

This paper will first classify and analyze potential obligations and fiscal risks facing governments. Second, it will examine the sources of various fiscal risks such as contingent and implicit liabilities. Third, it will outline policy options for reducing fiscal risks in the context of fiscal adjustment and accession to the European Union. Particular attention will be paid to the typology and the analysis of specific fiscal risks, to the high risk exposure of governments in transition economies, and to the quality and bias in government decisionmaking in time of fiscal adjustment. How can we make policymakers accountable for recognizing the long-term cost of all forms of government activities? How can we reduce the moral hazard induced by government interventions? What standards for public sector accounting and government budgeting, reporting, disclosure, and risk management would foster fiscal prudence in the long term? The paper will attempt to respond to these and similar questions.

**Possible Financing Pressures on the Central Government: A Typology**

Governments face four types of fiscal risks. Each type of fiscal risk is a broadly defined liability combining two of the following four characteristics: explicit versus implicit, and direct versus contingent.

- **Explicit liabilities** are specific obligations of the government defined by a particular law or contract. The government is legally mandated to settle such an obligation when it becomes due. The most common examples include the repayment of sovereign debt and repayment of nonperforming loans guaranteed by the state.

- **Implicit liabilities** represent a moral obligation or an expected burden of the government, based not on laws, but on public expectations, political pressures, and the overall function of the state as understood by society. Implicit liabilities arise in respect to future public pension benefits if these 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 in this sense are certain. These obligations are predictable according to some specific underlying factors. They do not depend on any discrete event. For example, future public pensions constitute a direct liability, the size of which reflects the expected generosity of and eligibility for a benefit, and the future demographic and economic developments.

• **Contingent liabilities** are obligations that are triggered by a particular discrete event, which may or may not occur. The probability of the contingency to occur and the magnitude of the government outlay required to settle the ensuing obligation are difficult to forecast. For each contingent liability, both probability and magnitude of the resulting obligation 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 quality and enforcement of regulations and supervision and the design of government programs (for example, the contracts for state guarantees and insurance).

Table 1 provides a typology of the sources of future potential financing requirements facing central government based on these characteristics. For each category, the matrix contains examples of the most common sources of potential fiscal pressures. Some of these examples (such as sovereign debt) apply across all countries, and some (such as crop insurance) are country-specific.

**Direct and Explicit Liabilities**

In most countries, direct explicit liabilities are recognized by governments and commonly disclosed and quantified. The quantitative estimation of government outlays related to these obligations in the medium term, however, is not trivial and requires sophisticated economic, financial, and policy analysis.

• Obligations to settle direct foreign and domestic sovereign borrowing are usually specified by governments in their loan contracts and securities. Future financing requirements of sovereign debt mainly reflect the maturity, currencies, and interest rate of the debt instruments. On the basis of these specifications, governments are able to forecast their debt service profile, simulate the trade-off between risk exposure and borrowing cost, and build debt service scenarios for alternative portfolio and macroeconomic developments.
<table>
<thead>
<tr>
<th>Liabilities</th>
<th>Direct (obligation in any event)</th>
<th>Contingent (obligation if a particular event occurs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Explicit</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government liability as recognized by a law or contract</td>
<td>• Foreign and domestic sovereign borrowing (loans contracted and securities issued by central government)</td>
<td>• State guarantees for nonsovereign borrowing (by subsovereign government, and public and private sector entities)</td>
</tr>
<tr>
<td></td>
<td>• Expenditures by budget law</td>
<td>• Umbrella state guarantees for various types of loans (mortgage loans, student loans, agriculture loans, small business loans)</td>
</tr>
<tr>
<td></td>
<td>• Budget expenditures legally binding in the long term (civil service salaries, civil service pensions)</td>
<td>• Trade and exchange rate guarantees issued by the state</td>
</tr>
<tr>
<td></td>
<td>• Social security schemes if not required by law</td>
<td>• State guarantees on private investments</td>
</tr>
<tr>
<td></td>
<td>• Future health care financing</td>
<td>• State insurance schemes (deposit insurance, minimum returns from private pension funds, crop insurance, flood insurance, war-risk insurance)</td>
</tr>
</tbody>
</table>

| Implicit | | |
| A “moral” obligation of government, that primarily reflects public expectations and pressures by interest groups | • Future recurrent cost of public investment projects | • Default of a subsovereign government, and parastatal or private entity on nonguaranteed debt and other liabilities |
| | • Future public pensions (as opposed to civil service pensions) if not required by law | • Banking failure (intervention beyond state insurance schemes) |
| | • Social security schemes if not required by law | • Investment failure of a nonguaranteed pension fund, employment fund, or social security fund (social protection of small investors) |
| | • Future health care financing | • Default of central bank on its obligations (foreign exchange contracts, currency defense, balance of payment stability) |
| | | • Residual environmental damage, disaster relief, military financing, and so forth |

*Note: The liabilities listed above refer to the fiscal authorities, not the central bank.*
• Budgetary outlays are normally embedded in an annual budget law, which relates to the intended 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 reality, the budget is viable only if it originates in a good macroeconomic analysis, and if the government employs institutional mechanisms for fiscal discipline and control.

• Legal entitlements to a salary and pension at a specified retirement age are extended to public employees by governments in many countries. Thus, with certainty, these legal entitlements will become a spending item in future state budgets. The magnitude of the subsequent spending requirements can be forecasted from the expected numbers of public employees and their expected remuneration, pension benefit, and retirement age. (Should the government plan to downsize the civil service, it may be obligated to pay redundancy packages. Such an obligation would be contingent on the fact of downsizing.) In contrast to the case depicted in table 1, countries that have legal provisions for government to finance future social security benefits, such as public pensions, universal health care, education, and so forth, would include these items among the direct explicit rather than implicit items shown below.

Direct and Implicit Liabilities

Government direct implicit liabilities often arise as a presumed rather than legal or contractual consequence of public expenditure policies in the medium term. Such obligations are quantified and recognized only by governments that are committed to a transparent medium-term expenditure planning and long-term fiscal discipline. The implicit cost of demographically driven expenditures poses dangers to fiscal stability in the long term. Direct implicit liabilities are quantified and recognized by governments that have institutionalized a framework for fiscal discipline. Good examples include multiyear budgeting and reporting practices of Australia, Canada, Germany, and the Netherlands.

• The social and economic benefits and maintenance associated with public investments are only expected, not mandated by law. To deliver these, governments analyze and quantify and are made accountable for the ex ante estimates and actuals of both the multiyear investment cost and the ensuing long-term recurrent cost. Countries implementing a medium-term expenditure framework automatically include the financing requirements for
operation and maintenance in their fiscal outlook and future budgets, which makes the government obligation to sustain the benefits of public investments explicit.

- In many countries, future public pension benefits are not grounded in any legal document and thus, they constitute an implicit rather than explicit government liability. Assuming that a given pension policy will continue (and there are economic, social, and political reasons to assume that governments would not stop paying benefits without reforming the pension system first), then the overall obligation of the government is certain to arise in any event, and, hence, it is a direct liability. As the provision of public pensions has been recognized as the most striking problem for fiscal sustainability in many aging countries, governments have analyzed the long-term fiscal implications of their pension policies and alternative reforms using long-term fiscal and pension models. (Pension reforms often encourage private sector involvement in saving for retirement through indirect forms of government support, such as guarantees of minimum pension benefits. Such guarantees then represent an explicit contingent liability of the government and are discussed below.)

- Similarly, future health care and social security financing can be analyzed as government direct implicit liability. Research has shown that, compared to public pensions, the dynamic of the financing requirement on health care in an aging society is often even more explosive. Thus, modeling and recognition of the long-term fiscal implications of health policies and their reforms are critically important for fiscal stability and equity in the long term.

**Contingent and Explicit Liabilities**

Commitment of a government to accept obligations contingent on future events represents a hidden subsidy and may cause immediate distortions in the markets as well as major future unexpected drains on government finances. Nonetheless, contingent explicit liabilities, such as state guarantees and insurance programs, generally remain outside fiscal analysis and the planning framework for public expenditures.

Each contingent explicit liability is recognized by the government in some formal documentation. However, many governments do not consolidate the full list and total magnitude of these obligations. As these obligations are contingent on unpredictable events, the risk that any of them would fall due and the amount of the subsequent financing requirement are difficult to assess. In contrast to many corporations,
commercial banks, and insurance companies, which have made a great progress in dealing with contingent liabilities in the last 10 years, governments have yet to include contingent explicit liabilities in the overall fiscal analysis and to ensure that their risk-bearing programs are well designed, surveyed, and managed. At the policy level, an ex ante analysis of the risks and future financial implications associated with the forms of contingent government support would contribute to better policy choices toward equity and long-term fiscal stability. Country examples of good management of contingent explicit liabilities include the following: Australia and New Zealand include contingent explicit liabilities and contingency expenditure provisions in government financial statements. Italy and the United States make a budg appropriation for the net present value of the future fiscal cost of issued loan guarantees and direct loans. The risks and reserve adequacy of federal insurance schemes are reported by the United States General Accounting Office outside the budgeting system.

- Guarantees are often issued by governments to cover some or all risks that a borrower will fail to repay loan or other guaranteed asset. The hidden subsidy to the beneficiary of the guarantee, and the subsequent potential cost to the government, are positively correlated with the riskiness, size, and duration of the underlying asset. In addition, the probability of default under a guarantee may be very high if the guarantee contract is not carefully designed with the inclusion of some risk-sharing between the government and the lender, in terms of both the financial coverage (part of the loan versus the whole loan) and the risk coverage (specific political and/or commercial risks versus all risks). Depending on the capacities of the government, the risk assumed by the government can be estimated according to the historical experience, simple rules of thumb, and, where appropriate, more sophisticated methodologies, such as actuarial, econometric, and option pricing models. A sophisticated risk assessment allows the government to make policy choices based on the extent of its risk exposure and the net present value of the fiscal cost associated with guarantees and other possible forms of support.

- Umbrella guarantees are extended to eligible persons or entities borrowing for a specific purpose, such as university studies, 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 the individual guarantees discussed above. This holds also for trade and exchange rate guarantees and to guarantees on private investments.
• State insurance schemes often constitute a major risk to future fiscal balances. The more familiar state insurance programs include bank deposit insurance, crop insurance, war-risk insurance, insurance of minimum returns from pension funds, and insurance against floods, earthquakes, and other disasters. Most of these programs cover losses that occur very infrequently, but when they occur, their total magnitude may be enormous. The risk pool under these programs, particularly within a small market, is very limited, which also serves to justify the government's involvement. Thus, rather than financing themselves, state insurance schemes redistribute wealth and rely on government net financing. The analysis of risks and potential fiscal burdens associated with state insurance schemes requires sector data such as bank surveillance information and potential loss estimates, and sophisticated models, such as a hydrologic model to estimate the probabilities of floods in a given year, and an options pricing model to assess the riskiness of the returns of a pension fund.

Contingent and Implicit Liabilities

Contingent implicit liabilities are not officially recognized and may emerge apart from declared policy objectives. Traditionally, such liabilities are accepted by government only after a major failure occurs in the public sector or in the markets. They reflect either a pressure by the public, possibly an interest group, or just too high an opportunity cost of government nonaction.

Contingent implicit liabilities often present governments with the greatest fiscal risk. The triggering event for such a liability is uncertain, the value at risk difficult to evaluate, and the extent of possible government involvement difficult to predict in advance. Therefore, it is very difficult to identify and estimate the size of the contingent implicit liabilities. These liabilities are particularly large if the regulatory and supervisory systems are inefficient and if the self-regulatory market mechanisms are hindered by weak information disclosure in the markets.

In addition, expectations of government involvement generate moral hazard in the markets. The scope for moral hazard is particularly large in economies that have experienced government interventions, significantly relieving market agents from the pain of their failure. Moral hazard may be constrained if the limits for future potential government interventions are predetermined and signaled to the markets in advance. The signaling is credible if some minimum public goods are guaranteed, and if it is supported by nonintervention beyond the preannounced limits. In
addition, to reduce rather than expand the moral hazard, the signaling has to imply market expectation of significant pain for agents in case of their failure. The delineation of government responsibility and the assessment of the costs, as well as benefits of transparency about the extent of the government's commitment to intervene financially in cases of failures, require a careful approach for each contingent implicit liability.

- The financial system in a country represents the most obvious government contingent implicit liability. International experience has indicated a general understanding in the markets that the government will intervene financially should the whole financial system be at risk to create moral hazard in the system. 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 any state insurance schemes.4

- A default on nonguaranteed debt and obligations by a subsovereign government; state-owned enterprise; a large private enterprise; a budgetary or extrabudgetary institution; or any institution of political significance may induce government financial intervention. The debt of subsovereign governments and nonmarket-oriented public sector entities counts as general government debt against the Maastricht ceilings. Legal frameworks and, particularly, the autonomy of local governments in most EU-applicant countries, however, have not yet enabled central governments to actively control liabilities across the entire general government. Similarly, governments have yet to develop capacities to monitor the amounts and allocation of nonguaranteed foreign and domestic private borrowing.

- Some critical social and welfare functions, if contracted out by the government, are still understood as the ultimate responsibility of the government. For example, in the case of an investment failure of a nonguaranteed pension fund, employment fund, or social security fund, governments are called upon to assume financing of social services from the budget. Thus, nonguaranteed private provision of social and welfare services poses an implicit financial risk for governments (see Heller, 97).

- Environmental damage and disasters create a very high demand for public moneys even if no state insurance programs and guarantees exist. Several EU-applicant countries face the financial risk of operating, possibly dismantling nuclear plants, disposing nuclear and toxic waste, and accepting the cost of environment...
recovery in the privatization process. In the absence of developed private insurance industries, particularly in countries with histories of caretaking states, disasters such as floods, earthquakes and droughts induce major political pressures on government to help financially. Such pressures surfaced, for example, in Poland and the Czech Republic during and after the floods in 1997.

- Ultimately, governments are expected to cover unmet obligations such as foreign exchange contracts of central bank, and to finance a bail-out package in case of currency and/or balance of payment crises. The size of this risk is correlated with the macroeconomic vulnerabilities, with the magnitude of foreign and domestic borrowing by both the private and public sectors, and with the extent of moral hazard in the markets.

**The Increasing Problem of Fiscal Risks**

*The Trend, Bias, and Moral Hazard*

Recent trends suggest that governments are exposed to expanding fiscal risks. First, financial markets integration involving greater volumes and volatility of private capital flows has made governments as well as the domestic financial sector more vulnerable. Financial markets integration exacerbates the systemic risks of individual failures in the banking and enterprise sectors, and thus governments, more than ever, are engaged in bail-outs. Moreover, the access to government borrowing has become subject to massive shifts in the preferences of foreign investors.

Second, states have been transforming their role, moving from directly providing and financing services to guaranteeing that the private sector will accomplish certain outcomes. Many states have attempted to privatize some of their responsibilities and enable private sector initiative with the help of government guarantees. In the transition from direct providing and financing of public services to guaranteeing, explicitly or implicitly, policy results against market failures, governments face an increasing uncertainty about their future financing requirements. Would a state guarantee be called? What will be the outlays of state insurance programs? Would reserve funds be able to cover the contingent losses? In recent history, many governments have suffered from expenditures above any envisaged limits after a massive failure of projects under state guarantees—when deposit insurance schemes have failed, a banking crisis has been kicked off, or private credit has proven nonsustainable.
Third, governments may be biased toward off-budget policies, which imply more financial risk but less immediate financing. Often, particularly in times of deficit reduction and a short-term political horizon, policymakers exploit the nonreporting of off-budget commitments and obligations and try to hide the cost of various government policies. In such instances, decisionmakers favor off-budget forms of government support, like state guarantees, state insurance, and directed credit. The cost and cash consequences of these policy choices outside the budgetary system may not be seen for many years. However, these choices give rise to government contingent liabilities and potential future fiscal pressures.

Finally, explicit state guarantees and insurance schemes, or any implicit understanding that a government would come to rescue in cases 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 undertake excessive risks. This, in turn, makes it more likely that the government will have to extend its financial support later on.

**Fiscal Risks and the Challenge of Transition**

The fiscal risks both implicitly and explicitly facing governments of transition countries are particularly large. Vague ownership structures in the economy, underdeveloped regulatory frameworks, and weak enforcement exacerbate the potential for failure of banks, investment funds, and enterprises. Such failures, in turn, often generate political pressures on governments to intervene through various financial bailouts. Recent history of repeated bail-outs, coupled with an earlier tradition of interventions under the central plan, has produced enormous moral hazard in the markets. Bank bail-outs and recapitalizations in Hungary and the Czech Republic had to be repeated as long as the governments were willing to intervene. In the meantime, either public debt or liabilities outside the budgetary system were accumulating. Consequently, and as a result of past lax attitudes toward fiscal risks, the relatively low levels of sovereign direct debt of several EU-applicant countries may be outweighed by the public liabilities amassed outside the budgetary system.

Government fiscal risks in transition economies are also exacerbated by the weak disciplining effects of international financial markets there. Most of the transition countries have small markets with a short history and weak information disclosure. These factors reduce the comprehensibility of risks to foreign investors. Thus, in transition economies, credi-
tors seem to tolerate high risk exposures of financial institutions and enterprises, and credit ratings appear informative and predictive only to a limited extent.

*The Hidden Fiscal Risks and the Value of Certainty*

Government commitments and promises outside the budgetary system blur the analysis of past fiscal performance and future fiscal developments. Fiscal consequences of contingent liabilities surface only with a delay and in the form of unexpected public financing requirements. Usually, governments lack information on their contingent liabilities and overall exposure to fiscal risks. Often governments are not accountable for the long-term cost of their off-budget commitments and promises of state support contingent on an uncertain event. As a result, contingent liabilities may accumulate and require large government financing in the future. In a few countries, governments are required to assess and compare the full cost of alternative budgetary and off-budget programs and report the full list of contingent liabilities and other fiscal risks.

In policy decisions, governments often face a trade-off between direct provision and financing of services versus guaranteeing private sector provisions. Direct provision and financing of services require a larger budget and higher taxes. Private sector provision with the State to guarantee certain outcomes requires no government cash initially but exposes the government to higher fiscal risks and uncertainty about future public financing requirements. If the government pursues a deficit target and short-term results, the latter looks more attractive. Once contingent liabilities fall due and require government financing, the choices are limited to the following actions: increase deficit, incur additional debt (without reporting any deficit increases), cut some envisaged expenditures, levy more taxes, sell state assets, and default on some obligations. Each of these actions challenges government performance and credibility, thus reducing the effectiveness of future policies, compromising political stability, and impairing future performance and growth in the overall economy.

In this respect, the positive value of certainty (the cost of uncertainty) in the future public financing requirement is an important factor for government decisionmaking. Alternative forms of government support can be prioritized, not only on the basis of their contribution to the desired policy objectives and their long-term cost, but also on the extent of the financing uncertainties and contribution to the government's overall risk exposure.
The value of financing certainty is particularly high for governments that have: restricted access to ad hoc borrowing, low risk management capacities, high risk aversion, and strategic cash and debt management. Contingent liabilities are potentially very harmful for governments that cannot rely on a continued and favorable access to borrowing. Large reserve funds may reduce the potential harm when contingent liabilities fall due. Such reserve funds have large opportunity cost, however. Governments with low capacity to analyze and manage risks that exist in economies of less predictable outcomes and higher asymmetric information, are ill-prepared to cope with the potential moral hazard and financial uncertainties. Government risk preference would ideally reflect risk preference of the median voter. A risk-averse government should prefer direct provision with predictable financing requirement to a guarantee even if both would deliver equal policy outcomes and would involve equal risk-adjusted net present fiscal cost. Finally, for governments that have invested in the development of sophisticated and efficiently managed borrowing, financing, and cash-management strategies, ad hoc financing requirements involve costly disruptions and efficiency losses.

_Fiscal Decisionmaking under Debt and Deficit Ceilings_

EU-applicant countries, as well as EU members attempting to meet the Maastricht criteria, have strong incentives for a rapid fiscal adjustment. The EU criteria are yet to be elaborated to encourage government fiscal prudence in a long-term horizon. Meanwhile, the trade-off between the speed of deficit reduction and the quality of fiscal adjustment may surface through the political attractiveness of various opportunistic behaviors, including an excessive use of off-budget forms of government support.

The EU has already witnessed rapid fiscal adjustments that may be achieved through nonsustainable policies. Recent examples of budgetary and accounting behaviors of EU-member countries indicate that a narrow focus on the aggregate fiscal targets compels governments to conceal some of their financial interventions. This, in turn, generates uncertainties about future public financing requirements, confuses fiscal outlook, and endangers future fiscal balance. The focus on cash-based budget, deficit, and debt also distorts government decisions about spending priorities and the timing and form of government support. Table 2, below, shows examples of specific opportunistic behaviors, as these have been observed in EU-member countries, and their influence on future government fiscal outlook as recorded in the EU.

As shown in table 2, opportunistic budgetary and accounting behaviors of governments to meet a deficit and debt target mainly...
Table 2. Government Opportunistic Behaviors to Meet the Maastricht Deficit

<table>
<thead>
<tr>
<th>Behaviors</th>
<th>On the revenue side</th>
</tr>
</thead>
<tbody>
<tr>
<td>With the effect of increasing future payables and liabilities of government</td>
<td>To meet the deficit rule:</td>
</tr>
<tr>
<td></td>
<td>• Introduce an ad hoc tax to be reimbursed in the future</td>
</tr>
<tr>
<td></td>
<td>• Accept cash with the promise of future benefits</td>
</tr>
<tr>
<td></td>
<td>• Record revenues gross rather than net of the reimbursements, which are due later</td>
</tr>
<tr>
<td></td>
<td>• Exchange some existing public debt instruments for indexed bonds sold at a premium</td>
</tr>
<tr>
<td></td>
<td>To meet the debt rule:</td>
</tr>
<tr>
<td></td>
<td>• Transform indebted government agencies into autonomous legal entities outside the general government while granting them a state guarantee</td>
</tr>
<tr>
<td></td>
<td>• Enter repo contracts with public debt</td>
</tr>
<tr>
<td>Reducing future receivables</td>
<td>To meet the deficit rule:</td>
</tr>
<tr>
<td></td>
<td>• Withhold revenues due in the following fiscal year</td>
</tr>
<tr>
<td>Diluting the value of state assets</td>
<td>• Accept cash in exchange for future tax exemptions</td>
</tr>
<tr>
<td></td>
<td>To meet the deficit rule:</td>
</tr>
<tr>
<td></td>
<td>• Record capital gains from a sale of property—possibly with a subsequent renting or lease back arrangement</td>
</tr>
<tr>
<td></td>
<td>• Charge a dividend from revaluation of the gold reserves of the central bank</td>
</tr>
<tr>
<td></td>
<td>• Charge a higher dividend from public holding:</td>
</tr>
<tr>
<td></td>
<td>To meet the debt rule:</td>
</tr>
<tr>
<td></td>
<td>• Sell gold of the central bank</td>
</tr>
<tr>
<td></td>
<td>• Sell state assets</td>
</tr>
</tbody>
</table>
and Debt Ceilings

On the expenditure side

To meet the deficit rule:
  • Postpone inescapable expenditures, such as infrastructure investment, maintenance, etc.
  • Favor off-budget forms of government support versus direct financing
  • Delay a legal recognition and financing of government purchases and transfers
  • Postpone legal recognition and quantification of rebates due to the taxpayers
  • Record subsidies as purchases of (bad) assets from corporations and banks at a face value
  • Record deficits of state-owned and municipal agencies providing nonmarket public services outside general government figures

To meet the debt rule:
  • Omit the existing net liabilities of public enterprises and agencies that are outside the sphere of general government but beneficiaries of government guarantees
  • Favor trade credit as a form of support
  • Exclude contingent liabilities from debt reports

To meet the deficit rule:
  • Cut operations and maintenance expenditures
  • Reduce expenditures on complementary inputs into the service provided by the asset
involve any or all of the three following types of imprudent actions by
the government: assume excessive liabilities for cash payment, run down
public assets, and use excessively off-budget support in public policies.
The first two options are large for governments accounting on a cash
basis. In cash-based accounting, expenses and liabilities are accounted,
not when the obligation is incurred, but only when the actual cash trans-
fer is made. Thus, governments collecting a fee for assuming liabilities
report such an event purely as a net revenue gain. The third is valid
under both cash- and accrual-based accounting standards, but it is re-
stricted by well-designed accrual budgeting rules.

An accrual-based accounting system, without accrual budgeting, is
neither necessary nor sufficient to ensure adequate policy consideration
for contingent liabilities and other fiscal risks. Although it encourages
governments to prepare a statement of contingent liabilities and finan-
cial risks, an accrual-based accounting system generally does not re-
quire that risks associated with contingent liabilities be evaluated and
quantified. International accrual accounting standards require that li-
abilities be accounted only when an obligation is due with certainty. 8

Policymakers are encouraged to make choices according to the risk-
adjusted net present costs of alternative policies and forms of govern-
ment support in accrual-based budgeting systems, built on an accrual-
based accounting platform. Accrual-based budgeting requires that an
estimate of the future cash outlays on contingent liabilities or of net present
fiscal cost of contingent liabilities be included in budget documents. This
way, contingent liabilities enter fiscal analyses and public accountability
frameworks from the moment of their issuance by government. 9

Understanding, Incentives, and Capacities to Reduce
and Control Fiscal Risks

In their totality, contingent liabilities may involve a large fiscal risk
that, if considered, may significantly affect the results of fiscal sus-
tainability analysis. Contingent liabilities and underlying financial
risks may be an important factor also for assessing allocative efficiency
in the use of public moneys (the relative risk exposures versus policy
priorities). Finally, contingent liabilities may be not only risky, but also
unnecessarily costly compared to direct, budgetary provision of gov-
ernment support, which brings up questions of operational efficiency
of government.

There are two main sets of incentives for governments to conduct
fiscally sound policies and minimize fiscal risks. First, there are incen-
tives to avoid crises in a politically meaningful time horizon. Second,
there are incentives to avoid punishment for accumulating risks that
surface in the long term. The former set of incentives evolves naturally when policymakers begin to understand fiscal risks associated with their proposed policies and promises and the potential consequences. The latter needs to be encouraged by external coercion. Effective coercion requires adequate definition and measurement of fiscal indicators by international authorities, such as the International Monetary Fund, the World Bank, or the European Union, external pressure to develop adequate public finance institutions and disclose relevant information, adequate external monitoring, comprehensive analysis to underlie sovereign ratings, and strict punishment of governments that attempt to conceal relevant data.

A government that intends to address contingent liabilities and other fiscal risks would work at three levels: to understand the existing and potential fiscal risks and pursue policies toward a good-quality fiscal adjustment, to develop an institutional framework, which involves adequate public disclosure and incentives in respect to contingent liabilities and other fiscal risks beyond the state budget and debt, and to build capacities to evaluate, regulate, control and prevent financial risks in the public and private sectors. The most basic steps at each of these three levels apply to every country. Most urgently, of course, they apply to economies that face large risks, weak market institutions, and high moral hazard, and to governments that need to prove their credibility. Governments may improve their overall fiscal outlook by initiating relatively simple measures that promote qualitative understanding and public disclosure of contingent liabilities and other fiscal risks, and by building institutional capacities to manage fiscal risks prudently and efficiently.

**Policy: Understand the Big Picture**

In order to ensure fiscal stability, it is critical for governments to understand their overall exposure to contingent liabilities and other fiscal risks. At a policy level, the government would analyze potential implications of its obligations and implicit commitments for future public finances and for incentives (moral hazard) in the markets. Fiscal risks relating to the intertemporary and residual state obligations would also enter the analysis of fiscal sustainability and would be considered against the government's risk-absorptive and financing capacities. In this context, the following steps are critical:

*Identify and classify fiscal risks related to government policies and promises.*

As we discussed earlier, governments are able to achieve long-term fiscal stability and a good quality of fiscal adjustment only if they understand
all the main sources of their future possible fiscal pressures. Policymakers must take stock of existing policies and promises of potential government interventions, identify the main sources of fiscal risks, and build the fiscal risk matrix, which we have shown earlier.

**Define and communicate credible limits of state commitments.**
The outer limits of state responsibilities are defined not so much by the budgeted expenditures but by contingent liabilities, particularly the implicit ones. Once contingent liabilities are in the picture, the government must decide on the extent and form in which it will perform each responsibility. This way, both direct and contingent liabilities within the government commitment area would be defined and made explicit.

The definition and signaling of government responsibilities affect the incentives in the markets. As we noted above, in order to minimize moral hazard in the markets, the government must define its responsibilities (its commitment area) in a way that is credible (ensure some minimum public goods) and that involves significant pain for market agents that happen to rely on government rescue. Thus, government's task is to communicate credibly to the markets what support is not to be expected from the state in case of various failures. The government must gain the needed credibility and reduce moral hazard in the markets and, thus, curtail fiscal risks by acting upon its announcement (by refusing to bail out banks or municipal governments or provide any support above the predefined levels).

To make its definition of responsibilities credible, the government must address the core of existing expectations about its potential interventions (implicit liabilities) in the markets. For example, in a society with a strong tradition of large public services, the government is likely to be more credible and to induce less moral hazard in the markets if it announces that it will ensure the provision of the most basic services to citizens of municipalities that go bankrupt rather than saying that it will not react to a municipal bankruptcy at all.

**Place a value on certainty in future public financing.**
The government, like any corporation, must judge alternative forms for implementing its policies not only according to their cost and benefits, but also according to the extent of uncertainty they involve for future public financing. Thus, the government would evaluate and compare the cost of alternative programs according to their net present value (including the assessment of risk premiums), volatility of financing, and the potential problem of asymmetric information and transaction costs under forms of contingent support, according to its own risk prefer-
ence. If it has a low risk preference, the government will try to minimize its issuance of state guarantees, insurance programs, and other forms of contingent support.

**Assess and predetermine the government's risk exposure and the impact of the quality of fiscal adjustment.**

The government must enter the stock of contingent liabilities in a single portfolio with other public liabilities to evaluate its overall risk exposure and roughly assess the correlations. In contrast to the deficit and debt rules, such as Maastricht criteria, a comprehensive analysis of government exposure to fiscal risks will have a predictive value for assessing future fiscal stability.

The government must aim at converging to a risk exposure that reflects the risk preference of the median voter. This aim would be predetermined in the government's comprehensive risk strategy, which would extend beyond public debt and include the risks of contingent liabilities. Also, the government will view new programs according to the marginal risks added by such programs to its overall risk exposure. For this purpose, as will be discussed in the following institutional section, guidelines and indicators for government risk exposure and prudent fiscal management will need to be established.

**Institutions: Internalize the Big Picture in Budget Process, Financial Planning, and Public Accountability Framework**

The institutional frameworks for public finances need to encompass contingent liabilities and other financial risks of government. Public finance institutions and fiscal measurement methodologies with respect to contingent liabilities strongly influence government decisionmaking. A public finance management framework that ignores the future fiscal implications of contingent liabilities and other off-budget commitments makes forms of contingent government support look politically too attractive. In an adequate institutional framework, government decisions and actions that involve contingent liabilities would be subject to similar considerations of aggregate fiscal stability and allocative and technical efficiency, and subject to similar control mechanisms, public disclosure, and accountability as any other budgetary or debt item.

**Estimate, budget, and account for the net present value of contingent liabilities and other risks.**

Availability of estimates of the net present values and hidden government subsidies associated with alternative government programs at the
time of commitment contributes to optimizing the choice and design of government programs. In case of guarantees and state insurance programs, the government subsidy cost equals the difference between the full risk premium and the fee charged by the government. Quantification of the full risk and net present value of government contingent liabilities and commitments, however, requires specialized methodologies, such as option pricing, actuarial, rate-setting, value-at-loss, and loss cost ratio.\footnote{1}

Accrual-based budgeting, if applied correctly, makes the cost of contingent liabilities transparent ex ante. It recognizes the difference between the full risk premium and the fees charged for guarantees and state insurance at the time coverage is extended. By bringing off-budget commitments into the budget and recognizing the hidden subsidies associated with government contingent liabilities, the government will better reveal the long-term cost and benefits of its commitments and enhance public scrutiny over the potential use of public moneys. The cost of evaluating, managing, and monitoring contingent liabilities will come on top of the future financing requirement. In addition, recognition of the hidden subsidies allows for a better assessment of the fiscal stance and reduces the dangers of sudden shifts in deficit and debt levels disrupting both the deficit financing and borrowing strategy of the ministry of finance and the monetary policy of the central bank.

To address the problem of contingent liabilities and other fiscal risks, public disclosure is more important than a fully fledged accrual-based accounting system. Statements of contingent liabilities (face values) and the overall risk exposure establish a good foundation for government accountability and fiscal discipline beyond the budget.

**Monitor, compare, and report the estimated and actual cost of government support.**

Governments are more likely to pursue the objective of long-term fiscal stability if they are publicly accountable not only for budget policies and compliance but also for all fiscal risks they assume outside their budget and debt portfolio. Therefore, the framework for transparent decisionmaking and fiscal reporting must be extended far beyond the budget to cover all potential risks to future fiscal stability. Governments should publicly disclose their overall risk-assumed estimate and be held accountable for the quality of their risk analysis that underlies policy decisions.

Public finance laws and regulations are comprehensive if they include provisions and an accountability framework for potential fiscal items outside the state budget. A comprehensive fiscal management
framework addresses the issuance, monitoring, and handling of state guarantees and state insurance programs and the monitoring and financial management of public, state-guaranteed, and subnational government institutions.

*Set reserves to cover the unexpected losses based on the unexpected loss profile of the whole portfolio of fiscal risks.*

The government must decide on reserve funds according to its overall risk exposure, risk preference, and its ability to manage risks and absorb contingent losses. The reserve fund will provide liquidity of guarantees and other contingent liabilities and, thus, protect the government against pressures to increase deficit and debt, cut some envisaged expenditures, or default on some of its obligations if a contingent liability falls due. The benefit of a reserve fund for fiscal stability and government credibility is a trade-off with the opportunity cost of keeping resources in a reserve fund instead of spending them on other government programs or cutting taxes. To signal their commitment to certain policies, offset financial risks and finance unexpected losses, governments can also use newly designed debt instruments, such as catastrophe bonds or credibility bonds when issuing a contingent liability.

*Only expose the government to as much financial risk as it is capable of handling.*

The government should accept forms of contingent and implicit financial support only to the extent to which it is able to evaluate, regulate, control, and prevent financial risks and absorb unexpected losses (assuming that such support is within the appropriate function of the state, given the state's overall capacities). If it has a low capacity to evaluate and manage risks, then it will favor a direct subsidy and direct provision rather than a guarantee, budget-financed schemes rather than insurance-based systems of services. In transition countries, risk management capacities are scarce in contrast to the large risks and information asymmetry in the markets, but building government risk management capacities (which involves replacing bureaucrats by financial risk analysts) may be very costly. The next section will discuss the risk management capacities for governments to build on.

**Capacities: Evaluate, Control, and Prevent Financial Risks**

Governments' analytical and institutional capacities with respect to financial risks are a necessary condition of good fiscal adjustment and effective prevention and management of potential risks. In the
past 10 years, large international corporations, commercial banks, and insurance companies have concentrated on building their risk management capacities. As the role of a state changes from direct provision of services to the management of risks, governments begin to follow the example of the private sector in deepening financial analysis beyond the state budget. Governments develop the following capacities.

_Evaluate and control the risks of individual programs and commitments._

Any expectation that the government will extend financial support of various kinds in the future represents a potential fiscal risk. This risk reflects a complex set of particular risks and depends on the design of the program or delineation of the commitment. Evaluation of the particular risks of each individual program allows the design of such a program to be optimized. Risk evaluation enables the government to differentiate those risks it can control reasonably well from those fully under the control of other parties. With a proper understanding of the risks involved, the government can develop effective risk-sharing, regulatory, and control mechanisms, enabling it to minimize moral hazard, monitor performance of the parties under the program, and prevent a default. For example, for guarantees and state insurance, an optimally designed contract is likely to cover 30 percent to 50 percent of the value and the last portion of the loss rather than the first portion.

Risk evaluation and program design capacity is likely to be best placed with the Ministry of Finance, which should have the authority to approve and disapprove any potential government financial commitments. The lack of such a capacity causes governments to routinely extend guarantees and insurance covering all risks to the full extent. These guarantees distort the markets and have a high probability of being called. Integrated markets provide better data for statistical analysis and, thus, make it easier for governments and investors to estimate risks through options pricing and other models. The question is not whether the estimates of financial risk and the potential cost of government programs are exactly correct, but rather whether they improve the quality of information available to policymakers and the public.

For individual programs or their groupings, governments should try to contract out some risks and/or risk management functions and purchase reinsurance from private firms. Governments should also seek to deregulate insurance markets and encourage the entrance of foreign insurance firms into domestic markets that have a limited risk pool. Risks, such as crop insurance and flood insurance, which have been uninsurable by the private sector of a single country because of a lim-
ited risk pool, become insurable in internationally integrated markets; and governments thus may disinvolve themselves from such programs. European integration is expected to further expand risk pooling and, thus, open greater possibilities for private insurance business. The International Monetary Fund, the World Bank, and other multilateral agencies provide some kind of reinsurance for the largest financial risks and crises governments potentially face.

**Manage sovereign risk exposure including contingent liabilities in a single portfolio.**
Governments can understand and control their overall risk exposure, only if they include all their major financial risks in a single portfolio of public liabilities. Incorporation of all risks in a single portfolio allows evaluation of existing correlations and alternative macroeconomic and policy scenarios. The single portfolio of public liabilities may be developed as an extension of the public debt database and managed by the state debt management office.

In a single portfolio with the direct public debt, government contingent liabilities become subject to the government’s comprehensive risk strategy. Government guidelines regarding overall risk exposure and debt management tools such as benchmarking would, in the single portfolio, relate to both direct and contingent liabilities. Thus, in policy analysis, the government would analyze any commitment in terms of its implications for the overall government risk exposure before it is assumed. The debt management office would be accountable for the quality of such an analysis and the government for deciding in the context of this analysis.

**Prevent the emergence of fiscal risks from both public and private sectors.**
Fiscal risks are reduced when governments strive to prevent market failures and minimize the moral hazard associated with their programs, commitments, and residual responsibility for market failures. Prevention of market failures requires an efficient regulatory and law enforcement system and a very comprehensive public disclosure of information by market agents so that risks are understood in the markets and autoregulative market mechanisms are at work.

Governments can detect early warnings of fiscal risks if they monitor risks in both the public and private sectors carefully. Prevention of fiscal risks is an issue of analytical tools, incentives, and the capacities of parliamentarians, civil servants, regulators, supervisors, and market agents. Future research should derive relevant indicators to expeditiously warn about the dangers to fiscal stability. These indicators are likely to include the total face value of all contingent
liabilities, the overall risk assumed by the government, the size and allocation of foreign private borrowing and investment, accrual-based budget deficit, and so forth. Risk monitoring capacities of governments are potentially best developed at central banks, a reflection of their role in balance-of-payments data collection, and, in many instances, bank supervision. Specific risks may be well monitored by specific regulatory and supervision agencies such as securities and exchange commission. Ultimately, the ministry of finance and state debt management office shall bear the responsibility for monitoring the overall risk exposure of the government.

Conclusions

Governments are exposed to increased fiscal risks and uncertainties as a result of the volume and volatility of private capital flows, of the changing role of state from direct provision and financing of services to guaranteeing that the private sector will accomplish certain outcomes, of biases in policy decisionmaking under fiscal constraints, and of moral hazard in the markets associated with potential state interventions. Fiscal risks are particularly large for transition countries, that face greater market opacity and a greater danger of market failures. Potential fiscal risks of governments are of four types: direct and contingent, each of which may be explicit and implicit. Most government and fiscal sustainability analyses concentrate on direct liabilities (the state budget, public debt and, recently, future pension and social security liabilities). Recent international experiences, however, indicate that significant fiscal instability may result from contingent liabilities (state guarantees on private credit, deposit insurance, debt of state-guaranteed institutions, and implicit contingent liabilities such as nonguaranteed foreign private borrowing and investments, banking failures, and the balance of payments crisis).

It is crucial that governments understand the entire scope of their fiscal risks, including the contingent liabilities. A critically important aspect of long-term fiscal stability and equity is that governments publicly recognize the limits of the state and the associated fiscal risks, including contingent liabilities. Politicians' and civil servants' public accountability must be defined beyond the state budget to support prudent and efficient handling of the government's fiscal risks. Governments need to address the sources of these risks at three levels: by understanding existing and potential fiscal risks, and pursue policies toward a good-quality fiscal adjustment; by developing an institutional framework that involves adequate public disclosure and incentives in respect to fiscal risks and
promotes fiscal prudence and equity in all government programs, including promises of potential support extended outside the budget; and by building and employing institutional capacities to evaluate, regulate, control and prevent financial risks in both public and private sectors.

References:


Endnotes

1 In the proposed international accounting standards for governments, a liability is defined as a present obligation of the government arising from past events, the settlement of which is expected to result in an outflow from the government of resources embodying economic benefits (Public Sector Committee of the International Federation of Accountants, 1998).

2 International Accounting Standards define a contingency as a condition or situation, the ultimate outcome of which will be confirmed only on the occurrence, or nonoccurrence, of one or more future events (International Accounting Standards Committee, 1997).

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

4 In many EU applicant countries, banking systems still represent a very strong fiscal risk. The estimated contingent liability facing government from the risks of the domestic banking system has been estimated by Standard & Poor's at the level of about 5 percent to 10 percent of GDP in Hungary, Poland, and Slovenia, about 10 percent to 15 percent of GDP in the Slovak Republic, and 25 percent to 35 percent of GDP in the Czech Republic (Standard & Poor's, 1997).

5 In a multipillar pension system, the risk of government guarantees on returns from private pension funds depends on the analysis and assessment of the risks of guarantees to be called, and on the government capacity to regulate and supervise private pension funds and cope with the problem of asymmetric information without high transaction costs. In the direct provision of pension benefits, total government outlays are predictable, and the government mainly seeks to balance the size of benefits, the 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, but the government faces a high uncertainty about the amounts and timing of public financing that would be required in case pension guarantees fall due.

6 In a parallel to a conclusion of the 1997 WDR 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 their risk management capacities.

7 The 1992 Treaty of Maastricht sets the following fiscal limits: General government deficit as a net borrowing requirement: 3 percent of GDP; 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 European System of National Accounts ESA78. ESA78 defines general government only roughly and does not require recording of government transactions on an accrual basis and of assets at market value. For description of opportunistic budgetary-accounting behaviors of governments under fiscal constraints, applied to the European Union, see Forte 1997. For a discussion of the quality of fiscal adjustment in EU applicant countries, see the paper by Selowsky in this volume. For empirical evidence of the linkage between asset dilution and fiscal adjustment, see Easterly 1998.


9 Accrual-based accounting in the public sector has become a trend in both EU and OECD countries, and EU applicant countries will eventually have to conform. International accrual accounting standards for the public sector are proposed and elaborated by the Public Sector Committee of the International Federation of Accountants. Accrual-based accounting is also implied by the proposed update of the IMF Government Financial Statistics methodology. Accrual-based budgeting has been implemented in New Zealand and Iceland and has been proposed to be implemented in the United Kingdom and the Netherlands.

10 Risk assessment methodologies are used by governments in some countries for various guarantees and insurance programs, such as deposit insurance, pension insurance, disaster insurance, life insurance, etc. Often, there is a lack of consensus on risk assessment methods, particularly on deposit insurance. In the United States, for example, option pricing as well as loss estimation methodologies are used. For analysis and discussion, see GAO 1997, Penacchi 1997 and Mody and Lewis, 1997.
Public Debt Management and Monetary Policy: Macroeconomic and Institutional Interactions

Mario I. Blejer

These notes deal with two distinctive aspects of public-debt management issues. The first part reviews the connections, at the macroeconomic level, between monetary policy and public-debt management and discusses some of the major interrelationships in their design and implementation. The second part examines the issue of proper institutional arrangements for macroeconomically efficient debt management and addresses the policy linkages and the need for operational coordination between central banks and the treasury or, in the relevant cases, the finance ministry.

The Interrelationships between Monetary Policy and Public Debt Management

The implementation of monetary policies and the management of the public debt are intrinsically connected aspects of macroeconomic policy and, therefore, actions taken in one of these spheres tend to affect the other immediately and intensely. The aim of these policies in each sphere, however, is different. The main areas of concern for the monetary authority is the proper monetary management of the economy, while the concern of the debt-management authority is the provision of proper and efficient financing of the fiscal deficit. Although these two functions appear, on the surface, to be well-defined and separated, they are closely associated and mutually interdependent. Thus, a specific monetary policy stance could alter significantly the capacity of the government to finance the budget deficit by affecting the cost of debt servicing and by conditioning the volume of available financing sources. On the other hand, the size of the fiscal gap that requires debt financing, as well as the planned debt strategy to be followed, constitutes a constraint in the ability of the monetary authority to achieve its independent monetary goals. We review here some of these interactions.
Effects of Debt Management on Monetary Policy

The size and attributes of the outstanding stock of public debt, as well as the expected flows that are bound to alter the existing debt volume, should be taken into consideration when monetary policy is formulated. This is so because both stock and flows are certain to influence the public's demand for money and their reaction to central bank actions.

Public debt may affect the demand for money in two opposite ways. On the one hand, unless the public believes that all the outstanding stock of debt would give rise to future taxation (Ricardian equivalence), it is possible to postulate a positive relationship between the stock of debt and the demand for money, given that increases in debt could have a positive effect on wealth. On the other hand, liquid government paper can be regarded as a substitute for money balances and, therefore, may tend to contract money demand. Moreover, if the public believes there is a possibility that, in the future, at least part of the public debt will be monetized, increases in the stock of debt may raise inflationary expectations and reduce the demand for real balances. Since the central bank, in its design of monetary policy, would have to take into account the stance of money demand, it would have to consider these effects of public debt and assess which of them may prevail.

In addition, the structure and conditions of outstanding public debt and debt management strategy have a bearing on interest rates. In particular, if the public is skeptical about the sustainability of the government debt, interest rates will tend to rise. On the other hand, if the credibility of government fiscal targets is high (and if these targets imply continuous fiscal solvency), it is likely that interest rates will ease. These effects on interest rates (which are relatively independent of the precise monetary stance) have to be weighed by the monetary authority when it devises its monetary strategy.

The consequences of alternative debt-management strategies on the level and structure of interest rates may condition central bank policies in an additional, and not always desirable, manner. If the public becomes doubtful about the sustainability of public debt, the central bank may be called by the government to intervene in financial markets in order to attain a lower cost of financing government debt. This could be achieved in a variety of ways. The central bank may directly purchase public debt, which would complicate monetary management because the monetary base would expand as the government spends the proceeds of the sale. Alternatively, the central bank may set portfolio restrictions, forcing certain market participants to hold public debt at below-market rates. Pension funds and insurance companies, for example, could be required to hold government securities as part of their
technical reserves and the central bank could impose liquidity requirements on commercial banks, compelling them to hold public debt instruments (these types of measures have been used in a diversity of countries, including Brazil, Cyprus, and India). These type of requirements are implicit taxes on financial institutions. Therefore, if the central bank is obliged to reduce the cost of servicing public debt, it would be coerced into repressing the financial sector, creating distortions and incentives for disintermediation.

Another way in which the management of public debt may affect the stance of monetary policy is through the decision of how to distribute borrowing between domestic and foreign sources. In general, foreign borrowing tends to result in an expansion of the monetary base as the government changes the foreign exchange into domestic currency in order to meet its financing needs. Furthermore, if the central bank assumes the exchange risk involved in the operation, it may suffer severe losses in case of a devaluation. Of course, if these losses are monetized, an additional monetary expansion could result.

The Impact of Monetary Policy on Debt Management

Just as the modalities of debt management are bound to have a direct consequence on monetary policies, the ability of the fiscal authority to place debt and design its financing strategy is conditioned, to a significant extent, by the stance and the implementation methods of monetary policy. The channels through which debt management is affected are various, including the overall monetary conditions, the selection and the design of the monetary instruments chosen by the central bank, and the implementation of specific policies aimed at promoting and developing the financial markets.

The ability of the fiscal authority to obtain debt financing is largely contingent on the stance of monetary policy (particularly when the level of the outstanding debt is high and its maturity is short). An expansionary monetary policy will, in general, improve the conditions for the placement of public debt because it will increase market liquidity and reduce interest rates. However, if excessive money creation results in accelerating inflation, nominal interest rates (that incorporate the public's inflationary expectations) would start to rise and the debt management authority would be forced to adjust the yields of public paper accordingly (or to introduce indexation clauses that would insure the investors' real return). Of course, a similar analysis applies to restrictive monetary policies. While initially they may increase real interest rates, and therefore increase the cost of servicing public debt, they may eventually reduce inflationary pressures and strengthen credibility in the ability of the public sector to sustain the prevailing debt level. This
would eventually lead to lower yields and to a reduction in the cost of
debt servicing.¹

The central bank choice of monetary instruments also affects gov-
ernment debt management. For example, the central bank could reduce
the cost of public sector debt service by increasing the level of liquidity
of government securities (using them in its open market operations)
applying certain modalities in its rediscount practices, and enacting some
specific reserve requirement regulations.

Clearly, public debt instruments are not only a means for providing
financing to the government, but they can also serve as a monetary policy
instrument. The central bank must decide if its intervention would be
performed using its own paper or by dealing on government debt in-
struments. When the central bank participates actively, for the purpose
of its own monetary operations, in the public debt market, it enhances
the liquidity of public debt and, therefore, contributes to reduce govern-
ment borrowing costs. But central bank utilization of government securi-
ties for its operations requires a significant amount of coordination.

Conceivably, the central bank might issue its own securities for mon-
etary policy objectives and the treasury issues government paper to
sustain debt management goals. In this case, the central bank would
compete with the government and tend to increase the cost of govern-
ment borrowing. It is, usually advisable that the ideal choice, from the
point of view of the operation of financial markets, therefore, is for the
central bank to conduct its open market operations in the secondary
market for government securities while the treasury (or the debt man-
agement authority) places its debt instruments in the primary market.
This avoids crowding out and allows both the monetary and the fiscal
authorities to pursue their own targets simultaneously, increasing the
liquidity of public debt.²

Central bank rediscount procedures also affect the liquidity and the
demand for public debt instruments. When the central bank is willing
to rediscount government paper (or to accept it as a loan collateral)
investors may be willing to accept a lower level of yields and reduce
the cost of public debt service. Moreover, if the central bank is willing
to discount government paper in favorable terms, compared with pri-
ivate sector paper, it would lower the borrowing cost of the treasury
compared with that of private corporations.

The development of the financial markets, and the measures taken
by the monetary authority to improve its functioning, could also bear
on the demand for and the liquidity of government paper. For example,
the existence of deposit insurance schemes may have an impact on the
market for public debt. Deposit insurance tends to increase the percep-
tion of the safety of domestic deposits and to make these deposits a
closer substitute for government paper. This can reduce the demand
for government debt. However, if the deposit insurance scheme is funded and the funds need to be invested (at least partially) in government securities, their demand would tend to rise.

In addition, the central bank could also contribute to the liquidity of government paper through the improvement of the payment system, which would include mechanisms for the transfer of these securities, and by organizing and licensing primary dealers that, in exchange for the designation, would be required to quote buy and sell prices and to transact in government paper.

**Institutional Arrangements for Macroeconomically Efficient Debt Management**

Multiple interrelationships between debt and monetary management require a high degree of coordination in order to avoid duplications, contradictions, and inefficiencies. To attain effective coordination, suitable supporting institutional arrangements must be developed. These arrangements could take different configurations and reflect specific country attributes. However, the current general tendency in this field is to increase the degree of institutional separation regarding monetary and fiscal policy responsibilities. In order to analyze the features characterizing such separation, the qualities of the most adequate institutional arrangements, and the nature of the coordination process, it is necessary to clarify the genuine functions of central banks and of finance ministries and treasury in market economies.

Both the central bank responsibility for the operation of monetary policies and the treasury's responsibility for financing government deficits involve the sale and purchases of securities. The concerns of both entities could be, however, different. The central bank is generally more interested in fostering market liquidity because this would enhance its ability to affect more swiftly monetary conditions. The treasury, on the other hand, generally wishes to minimize the cost of borrowing. In some countries, the central bank and the treasury try to avoid conflict by issuing different types of instruments (central bank bills and treasury bills).3

In other cases the government debt is utilized by both the central bank and the treasury but the institutions operate on different maturities (in general, monetary operations are conducted with instruments of shorter maturities than debt financing). As mentioned above, however, if markets are sufficiently developed, best practices are oriented towards the use of the same instruments for both monetary and debt purposes but limiting the central bank to conduct its operations only in secondary markets, leaving issuances in the primary market solely to the treasury.
In all these cases, however, close coordination between the different levels of policymaking is required. Since the central bank operates in the financial markets practically on a daily basis, it has accumulated expertise over time, and has acquired the facilities to deal with the current market conditions which are also relevant for government debt management objectives. Therefore, the central bank should, at least, be endowed with a central advisory role in the design of public debt management strategy. In this context, it is advisable that the central bank should have a voice in the design and on the issuance of debt instruments. For example, the central bank must be able to influence the features and the characteristics of the instruments that would make them more appropriate for trading in secondary markets and for repurchase operations and for other monetary policy objectives.

While the need for coordination cannot be overstated, and while the monetary and the fiscal authorities should indeed agree on the specific objectives of debt issuing, there is an increasing trend towards the strengthening of the institutional “divorce” between debt management and monetary policy. The practical result is that the role of central banks as fiscal agent is being cut down, while the agency in charge of debt management is strengthening its responsibility for making the policy decisions regarding debt-policy strategies. This has resulted in a more transparent allocation of debt management functions.

The Location of Debt Management Functions

Public debt management comprises a number of quite well-defined functions. These include:

1. The Policy function: design of the characteristics of the debt instruments to attain the desired objectives, including the decision to issue domestic versus foreign debt.
2. The Planning function: the projection of fiscal needs and the preparation of a public debt program to meet these needs.
3. The Marketing function: putting in place the commercialization arrangement for selling and settling public debt.
4. The Secondary Market function: involves the management of the outstanding stock of public debt.
5. The Accounting function: involves the management of records regarding the new and outstanding debt.
6. The Advisory function.

Each one of these functions could be located in the ministry of finance/treasury or in the central bank. It should be mentioned that
there is no agreed international paradigm regarding their precise location. In one extreme of the spectrum we find cases where the central bank is the single financial agent of the government and sells its securities in the primary market, provides direct credit to the government, and performs most of the debt management functions. At the other end, we find cases in which the ministry of finance fulfills most of the functions above and depends for the execution of its decision on an agency ("treasury") directly under its surveillance.

It could be said, however, that most of the countries have arrangements that fall between the two extremes. In practice, the main objectives of public debt management play a central role in determining the location of the various debt management functions. If the development of secondary markets—and of financial markets in general—becomes the main debt-management objective, the central bank is expected to assume a central role in making the key decisions regarding type, size, and timing of debt issuance. This would be a characteristic situation for transition countries. On the other hand, in countries where developed markets are in existence, the main goal of debt management may become the minimization of interest costs. In this case, the treasury would take over most of the aspects of debt policy.

The Establishment of a Separate Debt Management Office

An issue that should receive specific notice is the establishment of a separate debt management office that may facilitate the formal separation of objectives, instruments, and functions. Examples of countries adopting this strategy include Ireland, New Zealand, and Sweden. In these countries, capital markets and secondary government debt markets are well developed and the overriding objective of debt management has turned towards cost minimization. The setting of these separate offices does not reduce the need for coordination and very careful arrangements for consultation and cooperation with the central bank and the ministry of finance should be put in place.

It is important to stress that in countries where financial markets are just beginning to develop, such as transitional countries, the establishment of a separate debt management office may, in fact complicate rather than help the development of the various debt management functions. It is, therefore, generally advised to keep, in these countries, the main debt management functions in the ministry of finance in close collaboration with the central bank.

In addition, in such circumstances, it is also recommendable to appoint formal coordination committees for debt management purposes. These committees, generally composed by the ministry of finance, the treasury, and the central bank, are specially valuable in providing the
channels for learning about the other institutions' objectives and operating procedures and priorities, and contribute to the generation of accepted norms about how macroeconomic policies could be implemented in a mutually reinforcing manner.

References


Endnotes

1 In this context it is important to note that extreme contractions in the monetary stance may give rise to the so-called "snowballing effect." Very tight monetary conditions may raise interest rates to levels that, perversely, result in an expansion in aggregate demand because of the growing volume of public sector interest payments.

2 In the absence of not developed secondary markets, both the debt-management and the monetary authorities may need to operate in the primary market, requiring an even higher level of cooperation and coordination.

3 Examples: In the U.S., where secondary markets are well established, the minimization of debt-service costs is a central objective of policy, and, therefore, the treasury manages most aspects of public debt. In France, a critical objective has been to capture foreign resources as a mean of minimizing debt costs. Here, also, the treasury assumes most of the functions (including, policy, planning, and secondary functions). In Canada, the central bank was the main institution that influenced public debt management during the process of financial market development. However, by the mid-1980s, many functions were transferred to the treasury as cost minimization became more important among the objectives.
New Zealand's Transition to Responsible Fiscal Management

Graeme Wheeler

New Zealand has undertaken one of the most comprehensive programs of economic reform attempted among OECD economies for decades.

Among the Organization for Economic Cooperation and Development (OECD) group of countries, New Zealand has the most open capital account and deregulated financial market; along with the United States, the most deregulated labor market; one of the simplest and most transparent tax regimes; a comprehensively redefined role of the state; and the best legislative framework of any country for conducting monetary and fiscal policy.

Several surveys from United States-based think tanks rank New Zealand among the leading economies in the world for openness and competitiveness. But it is fiscal management that this paper wishes to concentrate on. How did New Zealand turn around a history of fiscal recklessness and a crippling debt position and establish a reputation for fiscal responsibility within a decade?

Origins of the Crisis

The answer lies in the seeds that led to an economic crisis in 1984. This crisis had very close parallels to that of Mexico in 1993 and the crisis that is currently sweeping several East Asian economies. It also can be found in the broad public acceptance at the time that New Zealand was in a deep-seated crisis and that it had a strong government that was prepared to face up to the costs associated with both comprehensive and prolonged adjustment policies.

The following were the major policy distortions that led to the 1984 economic crisis. By the late 1970s, New Zealand probably had the poorest performing economy in the western world. From having the third highest per capita income in the world in the 1950s, New Zealand had slipped to twenty-third in per capita ranking by the late 1970s. There are several possible reasons for New Zealand being in this predicament:
The country had not dealt well with the oil shocks.

Its industries suffered all the inefficiencies that come from extensive protection through quotas, tariffs, and subsidies.

It had inefficient public sector enterprises.

It had built a gold-plated welfare system financed by very high tax rates and extensive borrowing.

Its debt overhang placed it in the group of very highly indebted countries.

Fiscal and monetary policy was set with elections in mind. Huge fiscal bribes were announced before elections for an electorate unwilling to contemplate how they would be financed. For example, the 1975 election was won by promising a universal pension scheme (with no means testing) and an indexed payout for married couples equivalent to 85 percent of the average income.

As unemployment and indebtedness grew, the government became even more of a risk taker. For example, it began an oil exploration program to the south of New Zealand in 2,000 feet of water, in a costly and unsuccessful bid to find oil just before an election.

The economic crisis hit in 1984 in the prelude to the election. At the time the fiscal deficit and the current account deficit both stood at 7 percent of GDP and real private sector credit growth was 15 percent. There was a strong expectation that the government would lose the election and that the incoming government would devalue the currency. Panicky investors drained capital from the country. The government almost ran out of foreign exchange reserves, and it borrowed extensively and expensively to try to rebuild them.

The Labor Party, which is traditionally a center-left party, won the election with an overwhelming majority and began a bold and wide-ranging program of reforms.

The Move to Responsible Fiscal Management

The incoming government saw the move to responsible fiscal management as one of the four cornerstones of the turnaround in their international competitiveness. It ranked along with price stability, an open economy, and flexible labor markets. The government believed that responsible fiscal management was necessary for two main reasons:

- A lack of fiscal discipline builds on itself. The lack of a clear role for government fosters expectations that it should try to deliver outcomes in areas where it cannot.
Secondly, a lack of fiscal discipline undermines the private sector. The private sector becomes inward-looking, heavily focused on what government is doing and subject to huge policy uncertainty.

This situation generates a very nasty dynamic that—when coupled with a short-term policy focus and a lack of policy transparency—produces rapid growth in government spending and in public indebtedness. The key to reversing this situation has been to reexamine the role of government in every aspect, to lengthen the focus of policy management and to lock that in with institutional change.

Redefining the government’s role in the economy in five major areas was essential. Redefining the role of government in macroeconomic stabilization was the first challenge. Fiscal policy, with its election-driven focus, had become an important source of macroeconomic instability. The incoming government decided that fiscal policy would be set on a medium-term path of deficit reduction and then aimed at running surpluses and reducing debt. If the government was to have credibility in this area, big changes in the transparency of fiscal reporting were required.

Second, the government redefined its role in tax policy. Before 1984, tax policy was aimed at “picking winners” as well as raising revenue. There were many different types of taxes, many different tax rates, a narrow income tax base, and high rates of income tax. The economic cost of raising revenue was high. The strategy aimed at broadening the tax base and lowering the tax rates in order to raise more revenue at lower economic cost.

The income tax scale was simplified to two rates with a top rate of 33 percent. Almost all exemptions were removed. A value-added tax with a flat rate was introduced and levied on all goods and services produced in the economy—with the exception of some financial transactions.

Third, the government redefined its role in the ownership of assets. Before 1984, state sector enterprises accounted for about 15 percent of GDP. They typically generated no financial returns and required large fiscal transfers to operate. The key problem was that they were required to achieve conflicting objectives, such as providing social services, generating employment, and being efficient. In the initial reform period, these enterprises were commercialized. Although the government retained ownership, the enterprises were given single commercial objectives and balance sheet gearing ratios that met industry norms. Boards of directors were appointed, and they operated at arms length from the government. Once the enterprises were on a sound commercial footing, they were usually sold. Since 1987, most of the governments’ state-owned enterprises have been privatized. All privatization receipts have been used to repay the governments’ net foreign currency debt.
Redefining Public Sector Management

The government overhauled New Zealand's public sector financial management system. Heads of government departments were placed on five-year contracts. They were made the legal employers of the staff in their offices and were free to negotiate all conditions of employment, including salaries. Performance contracts between ministers and heads of departments were introduced that specified the outputs government departments would produce, their quality, and their timeliness. Departments were made responsible for the output of goods and services, and ministers were made responsible for selecting and purchasing the output mix to achieve government outcomes. The focus of reporting moved away from what departments consume to what they produce. Accrual accounting was introduced into all government departments, and budgeting and reporting moved to an output basis.

All government agencies have also been required to prepare financial statements consistent with Generally Accepted Accounting Principles (GAAP). A complete set of financial statements for the government was first produced in 1991, and government financial statements are now produced monthly.

Redefining the Role of Government in Expenditure

The initial reforms removed all industry subsidies as part of moving away from "picking winners" to establishing "a level playing field." The second phase—and this was the most critical in terms of securing expenditure control—was to review the government's role in providing social transfers. Pension payments were frozen at their then current level, and a timetable was introduced to raise the pension age from 60 to 65 over a 10-year period. Over time, pension levels were also to be reduced substantially in relation to the average wage. Other benefits were cut by 9 percent in order to reduce expenditure and improve the incentives to work. User pay principles were introduced into tertiary education and health (except for those on low incomes). Expenditure on departmental outputs was cut significantly.

Results of These Fiscal Measures

- In the decade after 1984, the number of people employed in the New Zealand public sector declined by 60 percent.
- The fiscal position has been completely transformed. Government spending as a percentage of GDP has fallen by more than 10 per-
percentage points and for the past four years the government has had fiscal surpluses of about 3 percent of GDP.

- Net public debt has fallen dramatically from more than 50 percent of GDP six years ago to 27 percent of GDP currently. The objective is to reduce net public debt to below 20 percent of GDP. The government has already achieved zero net foreign currency debt.

**Factors Helping to Lock in Responsible Fiscal Management**

First, the redefinition of the role of government has been accepted. Although there is still a debate about the right level of social spending, there is virtually no demand for activist fiscal policy. The "level playing field" concept is accepted by business, and there is little demand for special tax breaks or subsidies. Commercial enterprises owned by governments are expected to make normal returns on capital, and all major political parties are committed to continued debt reduction.

Another important discipline has been acceptance that fiscal policy is heavily constrained by monetary policy. This is particularly the case when the government has a very open capital account and a floating exchange rate. In addition, monetary policy in New Zealand is conducted by an independent central bank that has the sole objective of delivering price stability (currently defined as an annual inflation range of 1 to 3 percent).

A third and very important discipline has been the Fiscal Responsibility Act, which provides the legislative framework for the conduct of fiscal policy in New Zealand. This act was prompted by the insolvency of the largest bank in the economy, which was government-owned at the time. The Bank of New Zealand ultimately required a recapitalization equivalent to one and one-half of GDP. The need for recapitalization, which became evident very shortly before an election, was not disclosed by the government at the time.

This act requires governments to:

- Follow a legislated set of five principles of responsible fiscal management, such as achieving prudent debt levels by running fiscal surpluses and pursuing policies consistent with a reasonable degree of predictability about the level and stability of future tax rates. Governments are required to publicly assess their policy against these five principles. Governments may temporarily depart from these principles, but they must do so publicly, explain why they have departed, and reveal how and when they intend to conform to these principles.
The act also requires governments to publish their strategic priorities for the budget and their overall fiscal objectives several months before the budget. On budget night the New Zealand Treasury publishes a report that assesses the budget's intentions by comparing them with those published in the strategy paper and the principles prescribed in the Fiscal Responsibility Act.

The treasury is also required to publish regular forecasts on the impact of fiscal policy, rather than relying on the judgment of the government. These reports contain three-year economic and fiscal projections based on all government policy decisions, with all valuations based on GAAP principles. To ensure that these fiscal forecasts are comprehensive, the three-year forecasts are to include annual forecasts of the government's balance sheet; its operating statement, its flow of funds statement, and a statement of borrowings.

To assist the treasury in this role, the government is required to publish all its spending and tax policy decisions and commitments, disclose all contingent liabilities on its books and identify all the fiscal risks it is facing. It must also indicate any significant changes in its accounting policies. Failure to disclose dollar amounts around risks is only permitted if it would compromise the governments' commercial interests. All of this information is published along with the treasury's fiscal projections. All reports produced under the Fiscal Responsibility Act are referred to a parliamentary select committee for discussion.

**Benefits of Greater Fiscal Transparency**

These far-reaching disclosure requirements force a government to be transparent about its fiscal intentions and the short- and long-term impact of its spending and taxation decisions. This emphasis on transparency and disclosure of fiscal risks and contingent liabilities has produced some major benefits. It has forced governments to give more weight to the long-term impact of spending and tax decisions, and it has led to more sustainable fiscal policy.

Second, it has significantly enhanced the credibility of the government's economic strategy. This, in turn, has helped encourage very strong private capital inflows into New Zealand. Annual foreign direct investment has been about 5 percent of GDP in recent years. Foreign investors own about 60 percent of the equity market and hold over 70 percent of the government fixed income market. The latter effect has been a significant influence in lowering long-term interest rates in New Zealand.
It is encouraging that all major political parties support the Fiscal Responsibility Act and the Reserve Bank Act, which makes New Zealand's Central Bank one of the most independent in the world. It is possible to turn around a very bad fiscal position and help lock in improvements by imposing real disciplines on fiscal policy. In New Zealand's case, that required:

- Strong governments who were willing to reexamine their role in every aspect of public policy and, particularly, in the area of social policy.

- It also required acceptance that monetary policy poses real disciplines on fiscal policy, and that for monetary policy to be successful it must be supported by other economic reforms such as reductions in border protection, extensive deregulation, and comprehensive labor market reform.

- It also required a legislative framework that imposed a high level of transparency and a long-term focus on the operation of fiscal policy.

New Zealand’s fiscal management policies do not stop debate about important political decisions—nor should they. There is still active debate in New Zealand about the size of government expenditure, especially in the social area. But that debate is much better informed about the longer term costs and financing implications of different choices—and the longer term demographic pressures on the budget.
Management Strategy of the Belgian Public Debt with Regard to the European Monetary Union: The Challenges of the Transition

Louis de Montpellier

Introduction

The accession to the European Monetary Union (EMU) presents major challenges to managers of public debt across Europe. Having now identified these challenges, the Belgian Treasury has begun responding to them. The Treasury's preparation to move toward an EMU-wide financial market is based on a fundamental inference and an important assumption. An integrated financial market under EMU will mean that each issuer, and especially a sovereign issuer, will lose the natural protection of its domestic currency, as domestic or foreign investors will have a much broader credit universe denominated in the same currency. The Treasury is also making the conservative assumption that such a broad investment diversification could occur rather quickly, and indeed it believes it has already begun. On the basis of this assumption, any sovereign issuer should refrain from protectionist behavior regarding international investors. On the contrary, any sovereign issuer has a vested interest to be extremely proactive toward them.

Before explaining how the Treasury has structured the Kingdom's debt management strategy in response to these challenges, it may be useful to summarize the macroeconomic policies being implemented in Belgium since several years in this rapidly evolving European context.

Macroeconomic Context

The road to the European Monetary Union has been an integral part of and a driving force behind the macroeconomic management plan of the Kingdom, even before the Maastricht Treaty was signed in February of 1992. Indeed, the Belgian Government had already embarked on the road to fiscal stabilization soon after the pegging of
EU ACCESSION

the Belgian franc to the strongest currencies of the European Monetary System in 1983.

Since the end of the recession of the early 1990s, the austerity measures taken have showed their most tangible results, which has allowed Belgium to be part of the first group of EMU participating countries. Between 1993 and 1997, considerable progress was made in reducing the public deficit and the government debt ratio. As a result, the deficit declined by 5 percentage points of the gross domestic product (GDP), to 2.1 percent at the end of 1997, whereas the public debt ratio declined by 13 percentage points of GDP, to 122.2 percent of GDP. The primary surplus (that is, the budget deficit with the exclusion of interest payments on public debt) rose to 5.8 percent of GDP.

The authorities have committed to maintain for years to come a sufficiently high level of primary surplus to guarantee that the debt reduction process will continue, even if economic growth slows down. This will be achieved through Belgium’s New Convergence Program, which was approved by the Belgian Government in December of 1996 and endorsed by the European Council of Finance Ministers in February of 1997.

Furthermore, more than 90 percent of the Belgian public debt is held by residents of Belgium and Luxembourg. This fact reflects the high savings of private individuals and the private sector. In this way, the private sector can not only finance its own investments, as well as meet the net financing requirement of the government, but also it can lend resources to the rest of the world, equal to the current account surplus. Indeed, for several years, Belgium has had one of the highest current account surpluses relative to GDP in the world; in 1997, it reached 5 percent of GDP. Through this accumulation of surplus, Belgium holds the highest net external assets in relative terms. Outstanding assets of the private individuals and the private sector substantially exceed the government’s net debt; therefore, despite its high public debt ratio, Belgium is not indebted abroad. On the contrary, it is creditor to the rest of the world.

Between 1993 and 1997, Belgium enjoyed one of the most stable monetary environments of the whole European Union, thanks to the conservative monetary policy followed by the National Bank of Belgium, the independent central bank. Between 1994 and 1997, inflation fluctuated between 2.4 percent and 1.5 percent, reaching as low as 1.6 percent in 1997. Apart from the ERM crisis in 1993, during which the Belgian franc briefly depreciated as high as 5 percent compared with the DEM, the Belgian franc has not devalued, unlike some other European currencies, for the last four years and has largely remained within its fluctuation band of 2.25 percent. In 1997, the fluctuation of the franc compared with the DEM seldom exceeded 0.1 percent. Similarly, short-term and long-term interest rates have almost totally reached the German rates: Since 1997, when a short period of liquidity rationing in the money
market occurred, the short-term difference between Belgian and German rates has virtually disappeared; the long-term (10 years) difference has fluctuated around 10 basis points, an improvement over a difference of more than 100 basis points in 1993.

National Changeover Plan to European Monetary Union

The management strategy of the Kingdom's debt is only part of the challenge facing the financial community and the monetary and financial authorities; therefore, in Belgium, funding and public debt management strategy with respect to EMU have been put into a broader, organized institutional context. The national changeover plan to the Euro, which was approved by the government in the summer of 1996, addresses public debt management strategy with respect to the EMU together with monetary policy, financial flows, payments and settlements matters, fiscal and social security aspects, accounting and statistics. The plan has also established a "Commissariat général à l'Euro," coordinating several commissions in which public and private sectors are represented. One of these commissions, "Fin-Euro," which is chaired by the Belgian Treasury, has been entrusted with preparing all the technical details on financial matters. It has published its final recommendations in November 1997.

Before commenting on some key features of our present public debt management plan in preparation to the EMU, it is important to mention two key steps taken by the Belgian Treasury:

- Issuing new debt and converting the existing debt to Euro values, starting January 1, 1999
- Accurately defining the financial strategy (especially in terms of risk management) that will be used by the public debt managers.

New Issuance and Conversion of Existing Debt in Euro

Since the national changeover plan was approved by the government in the summer of 1996, the Treasury has committed from the start of the EMU to issue all public federal debt in Euro and to convert the stock of existing book-entry public debt into Euro (that is, the linear bonds (OLOs) and the Treasury certificates (or T-bills), by far the most traded instruments of the public debt). The only exception is the debt aimed only at retail investors (for new issue and conversion) and old outstanding debt in material form (for conversion only, as there should not be any new issue under this old format).
Management Strategy: The Benchmark Debt Portfolio

In 1995, the Treasury undertook a thorough quantification of the risk management of the public debt in order to establish a "benchmark debt portfolio." The aim was to quantify an efficient and robust debt portfolio structure in terms of risk and cost (a portfolio structure that minimizes the cost of the public debt over the medium term) under widely differing and volatile, economic scenarios. Since the end of 1996, the public debt has been managed with direct reference to the benchmark debt portfolio, whose main risk factors are the proportion of the debt in core Euro currencies (BEF, DEM, NLG and FRF) compared to other foreign currencies; the composition of this debt in other currencies; and the average duration of the various segments (core Euro and foreign currencies) of the total debt.

The main risk measure used by the Treasury to establish the benchmark debt portfolio is the expected variability of the debt cost in future budgets. According to this risk factor, the risk implied by the actual public debt structure for the budget is very low: The Treasury has calculated that if the requirements of the National Convergence Plan are met, even considering a wide distribution of potential interest rate scenarios, the probability of not exceeding a maximum budget deficit of 3 percent of GDP over the next five years is 96 percent. In other words, the public debt management based on strict compliance with the benchmark debt portfolio will not jeopardize the government's budgetary policy within the next five years.

Therefore, since the end of 1996, the public debt has been managed with explicit adherence to the benchmark debt portfolio, as prescribed in the budget law and within the general guidelines issued by the Minister of Finance to the Treasury. The Treasury has now completed the first full year review of debt management with explicit adherence to the benchmark. Its review has been particularly encouraging.

The transition to the EMU confronts the public debt manager with unexpected conceptual challenges: For example, in terms of portfolio management, the Treasury considers as "core Euro debt" the domestic debt and the debt denominated in DEM, FRF, NLG, and XEU. For this portion of the debt, which represents 95 percent of the total, the Treasury considers only the interest rate risk as it relates to the currency risk that has disappeared in the core Euro zone. However, in terms of monetary policy and the central bank's operations (for example, sterilization, reserve management, and statistics) DEM, FRF, NLG, and XEU are still considered to be foreign currencies, and also foreign debt. Very soon,
however, these different approaches will end, and the ratio of foreign to
domestic debt will move from 92 percent/8 percent to 95 percent/5
percent, as the debt has been denominated into DEM, FRF, NLG, and
XEU represents presently 3 percent of the total debt.

From a Domestic to a European Public Debt Market

In Belgium, the public debt is largely “domestic” in two respects: 92
percent of the total public debt is denominated in BEF, and it is esti-
mated than more than 90 percent of the debt is held by investors living
in Belgium and Luxembourg.

Faced with the expected broad and rapid diversification of domes-
tic and international institutional investments across Europe, as men-
tioned in our introduction, the Treasury must respond to a twin chal-
lenge as it progresses toward the EMU: the Belgian government debt
market must not only remain attractive to its domestic investors and
intermediaries, but also must attract new, international, investors and
intermediaries, especially from the rest of Europe. In short, the Treas-
ury must “Europeanize” its public debt market and “international-
ze” its investment base.

The challenge must be met at the same time in four different, but
complementary, areas. The Treasury must be able to offer to inves-
tors strong credit in the framework of an efficient, transparent, and
liquid market. It must also broaden the investor base of the
Kingdom’s debt, while continuing to ensure a highly professional
debt management.

Promoting Belgium’s Creditworthiness

The strength of the Belgian credit is, in the Treasury’s opinion, largely
demonstrated by the fiscal achievement of the last seven years, as al-
ready described, and the qualification of Belgium to the EMU. Although
maintaining this virtuous path is obviously beyond the Treasury’s con-
trol, the promotion of the credit in the new European context is a new
and growing Treasury goal.

An Efficient, Transparent, and Liquid Public
Debt Market

Since the beginning of the 1990s, the Treasury has dramatically and to-
tally modernized the debt financing instruments, as well as the primary
and secondary markets of these instruments. Today, the Belgian public
debt market offers one of the most modern financial frameworks among the EU member states and even other countries.

But from the EMU’s perspective, there was still some room for fine-tuning this framework. Therefore, the Treasury and the primary dealers in the public debt have undertaken a thorough review of all market aspects in order to adopt specific requirements to fit the new EMU context.

First, the Treasury has adjusted the status of primary dealer. Following the European Directive on Financial Services, the Minister of Finance can grant primary dealer status to any market participant residing within the EU.

Second, the Treasury has improved several aspects of the competitive auction system. The Treasury announces one working day before the auction a range of amounts to be auctioned, therefore improving the primary market’s transparency. The Treasury has also shortened the delay of posting the auctions’ results and is working toward improving the computerized bidding system.

Third, in order to further the liquidity of the secondary market, the Treasury has begun to decrease the number of OLO lines; to standardize the OLO coupon dates (at March 28 and September 28); and to shorten the “exchange offers” process. Therefore, whatever curve the new Euro-denominated capital market chooses as the “benchmark curve” (the German government curve, the French government curve, the swap curve or any other composite), all lines of the Belgian debt will be well positioned to trade close to, or even on, the Euro benchmark curve.

Fourth, the Treasury is involved with the major European futures and options exchanges to best position the Kingdom’s debt regarding the upcoming Euro-denominated derivative instruments.

Finally, the Treasury has already brought the Belgian government debt market in line with best international standards as of the beginning of January 1999. Indeed, the “Fin-Euro Commission” has recommended that some “market conventions,” advised by domestic and international market participants as the adequate standards in a new, integrated financial market under EMU, be adapted from EMU’s inception. One such market convention is the day count basis for interest on Treasury bills and bonds. In this area, the Belgian Treasury is a leader among its European peers. The Treasury is chairing an ad hoc working group that was established by the EU Monetary Committee to involve all member states that have recognized the benefits and therefore the need to harmonize market conventions across Europe. On the domestic front, the “Fin-Euro” has already published recommendations in this direction. After the recent publication of the first progress report of the ad hoc working group, efforts of other member states in the same direction will certainly intensify.
A Broadening of the Investor Base of the Kingdom’s Debt

The Treasury’s aim has long been to familiarize international investors with the framework and the instruments of the domestic debt, in short to internationalize the Kingdom’s largely domestic public debt.

The Treasury has been proactive in different segments of the curves. With regard to the short-term debt, the Treasury created in the summer of 1996 the Belgian Treasury Bills (BTBs): These instruments are equal to BEF Treasury Certificates (book-entry format, governed by Belgian law) but denominated in major foreign currencies.

A major effort, however, was undertaken to broaden the investor base of the medium- to long-term debt: In November of 1997, the Treasury launched “converging” OLO lines denominated in BEF, DEM, and FRF. Market participants consider this issue to be the “ultimate transition instrument” that will transform the domestic government debt market framework into a pre-Euro context. This instrument should appeal to German and French investors, investors in their own currencies, or to other international investors in the major international currencies of Europe (DEM and FRF).

Key features of this new “pre-Euro” government bond market are continuous market liquidity, transparency, and efficiency, which is ensured by a group of market makers, who participate in auctions in the primary market and who quote in sizes in the secondary market, very much like primary dealers do on the BEF. On January 1, 1999 the three OLO lines in BEF, DEM, and FRF, with identical coupon and maturity, will all convert to Euro simultaneously, therefore further enhancing the market liquidity in Euro from the start of the EMU.

The first issues of DEM and FRF OLOs in November 1997 were placed using a syndication procedure to ensure solid placement of large amounts, geographical diversification, broad distribution to different investment categories, and immediate liquidity in the secondary market. The lines will be increased through auctions, which will further familiarize international investors and intermediaries with the normal issuing process of the Belgian public debt market. The first auction of DEM and FRF OLOs, which took place at the beginning of February 1998, has been more than five times oversubscribed, allowing the Kingdom to issue at a very tight spread of 10 basis points above German bunds and French OATs. Since then, two more auctions took place. These were also largely oversubscribed.

In more general terms, the new EMU environment will create much stronger competitive tensions between the major capital market issuers. The Treasury is acutely aware of the need for a genuine
marketing of the Kingdom's public debt toward European and other
international institutional investors, by establishing permanent con-
tacts with them. In EU countries, such a marketing approach will,
among other developments, cause a cultural revolution in the public
services sector traditionally in charge of the budgetary and financial
management of the state.

**A Highly Professional Debt Management:**
**Establishment of a Debt Agency**

To address these challenges in the most professional way in the area of
public debt management, the Belgian Government decided in March
1997 to establish a debt agency, incorporated within the Ministry of Fi-
nance as a special department of the Treasury. Specifically, this depart-
ment would take charge of the strategic and operational management
of the public debt and would be allocated appropriate human resources.
The agency began operation in October 1998.

**Conclusion**

The Belgian Treasury, in its role of managing the Kingdom's public debt,
views the EMU not only as presenting a competitive challenge, but also
as offering new opportunities to strengthen the management of the
public debt through an expansion of its investor base and through a
broadening of the spectrum of risk management instruments. Indeed,
it will no longer be prisoner of a captive but small market.
The Measurement of Deficit and Debt under the Maastricht Treaty: Some Statistical Considerations

Dieter Glatzel

Accounts and Financial Indicators, Statistics for the Excessive Deficit Procedure

Introduction

The paper sets out the legal framework and the decision process for the classification of financial and nonfinancial transactions under the rules of the excessive deficit procedure. It combines the decisions that were communicated to the press during this year and other decisions that were not given this publicity. Eurostat has learned a lesson from the France Télécom case, in which poor communication, not classification of transactions in national accounts, caused a serious problem.

In simple terms, the measurement of deficit comes down quite often to the question: Is this transaction a financial transaction that entails an exchange of one financial asset for another or a nonfinancial transaction? If it is the latter, then the deficit will be influenced; however, if it is a financial transaction, it does not have any influence on the deficit. For those not familiar with national accounts, it is quite difficult to understand this split of the accounts into financial and nonfinancial ones and the mechanics of the balancing items. A second question to pose is: What is the economic nature of the unit, and does it belong to the general government sector? Finally, what is the value of the outstanding debt?

The Legal and Accounting Framework: The Treaty and Regulation 3605/93

The Treaty on European Union stipulates in Article 104C that “Member States shall avoid excessive government deficits” (par. 1.) and that the “Commission shall monitor the development of the budgetary situation and of the stock of government deficits in the Member States with a view to identifying gross errors.” (par. 2.)
The protocol on the excessive deficit procedure which lays down the details of the procedure referred to in Article 104C states in its article 4 that "the statistical data to be used for the application of this Protocol shall be provided by the Commission."

Eurostat, the directorate general of the Commission in charge of statistics has set up the necessary institutional structures and procedures to provide the Commission and finally the Council with the most comparable statistics for the convergence criteria and for the excessive deficit procedure.

It is important to note in this context that although Eurostat is a directorate general of the Commission, it is independent in its technical work and makes its technical decisions concerning the statistical methods independently. This complete scientific independence was reaffirmed by the European Commission at the press conference on November 5, 1996, in which the forecasts of the EU member states' 1997 deficits were presented.

In addition, there is a distinct set of responsibilities for the directorate-general of economic and financial affairs DG II and Eurostat. DG II is responsible for the economic assessment of the excessive deficit data and thus must account for aspects that are related to the economic sustainability of certain budgetary decisions of the member states' governments. Eurostat, on the other hand, is authorized to evaluate the correct methodological application of the European System of National Accounts (ESA) 2nd edition for the excessive deficit procedure. The correct methodological application of the ESA 2nd edition has been and will be the guiding principle for all decisions by Eurostat. Other considerations which concern economic sustainability of national measures are under the competence of DG II.

**The European System of National Accounts (ESA)**

Council Regulation (EC) No 3605/93 on the application of the protocol on the excessive deficit procedure foresees that the member states present their government deficits in accordance with the ESA 2nd edition manual on national accounts. This manual was drawn up at the end of the seventies and is therefore ill-suited to describe the economic and financial transactions which have appeared since then. Moreover, in many cases the real world transactions are quite complex, and it is not always easy to interpret them within the methodological framework of the ESA. Therefore, in some cases, an extensive interpretation of the relevant ESA paragraphs was necessary to come to an economically satisfactory result for the classification of transactions.
Another inconvenience of the ESA 2nd edition was the absence of balance sheets and valuation principles for balance sheets. Therefore, there were no ready-made recipes available for the measurement of general government debt. The protocol to the treaty on the excessive deficit procedure stipulated that debt had to be measured “as total gross debt at nominal value outstanding at the end of the year and consolidated within the sectors of general government.” (Article 2, par. 4)

Starting from the definition of general government debt in the protocol, the authors of regulation 3605/93, which was adopted by the Council after intensive discussions in Eurostat and Council working parties, simply enumerated the instruments which fall under the heading of general government debt. General government debt is defined as the sum of the following items: currency and deposits, bills and short-term bonds, long-term bonds, and other short-term loans, medium- and long-term loans.

Trade credits were excluded from the definition of general government debt on the grounds that these credits are not typical for the general government sector and are difficult to estimate. Moreover, the exclusion of liabilities under the heading of accounts receivable and payable, which is a short-term liability, was adopted by using the same arguments.

Our experience from the monitoring process of the debt and deficit statistics during the last three years has told us that trade credits may well be a substantial source of finance for general government. We therefore ask member states to supply additional information on these liabilities, which can be taken into account when assessing the path of convergence of member states.

Another feature of the constraints of the valuation of debt as laid down in the protocol to the treaty was the valuation at nominal value (face value) of debt instruments. All instruments which are issued with a discount, like deep-discounted bonds or zero-coupon bonds are discriminated against other instruments because they have to be recorded at their face value, so the effective borrowing by the general government is lower by the amount of the discount multiplied by the nominal amount issued.

The ESA 2nd edition, which is the basis for regulation 3605/93 was recently revised by Eurostat, and the new version (ESA95) has been the subject of a proposed council regulation. This new version will not, however, enter into force before the year 2000 for the purpose of the excessive deficit procedure.
There are some important new features in the revised ESA which have implications on the calculation of debt and deficit by member states. The most important one concerns the general rule that all transactions are to be recorded on an accrual basis, which means that they have to be entered in the system as they occur and not when they are due for payment or effectively paid. This has an impact on the recording of interest paid, which will be treated more in line with the current accounting practices by banks. Several of Eurostat’s decisions, notably those which concern interest paid, would not have been necessary if the new system had been in force at the ratification of the Maastricht Treaty. The same applies to taxes and social contributions that have to be recorded in the new system on an accrual basis, whereas the ESA 2nd edition is more flexible on this point. This could mean that in future the distribution over time of taxes and social contributions may look different from the recording under the current ESA. During very pronounced business cycles of economic boom and depression, the new system will tend to produce more smoothed results because the time lag between accrued taxes and social contributions compared to the cash payments tends to increase in such situations. This time lag does not influence the recording of taxes and social contributions in the new ESA. On the contrary, the old system permits the cash recording of certain taxes and social contributions, and therefore could amplify the fluctuations of deficit measurement by the time lag between cash and accruals.

Another matter on which the new ESA will bring more clarity is the delimitation of the sector general government, in the sense that certain units (enterprises), which are now by definition inside the sector general government, will be outside if the majority of their revenues are derived from the sale of market production.

In order to ensure that deficit and debt statistics show a good level of comparability, Eurostat has, over the last three years, held consultations with each of the member states to make sure that economic and financial transactions, which are not clearly described in the ESA 2nd edition, are classified in the same way throughout the European Union.

**Eurostat Decisions for the Calculation of Debt and Deficit: The Decision Process**

The first stage of the decision process consists of auditing the debt and deficit statistics as notified twice a year by the member states. Every member state is visited at least once a year by a delegation under the leadership of Eurostat, including as observers DG II and the European Monetary Institute (EMI). A report which is agreed by both sides (the member states and Eurostat) summarizes the findings and highlights problematic issues. Some of these issues, which are general enough to
be treated in a consultation process, are subsequently taken up and proposed for methodological consultations. Other issues are directly treated between the member state and Eurostat, with close consultation with DG II and EMI.

The process of methodological consultation is prepared by a task force and submitted for discussion by groups of experts working in this same sector: the national accounts working party (NAWP) and the financial accounts working party (FAWP). Eurostat also consults the Committee on Monetary, Financial and Balance of Payments Statistics (CMFB). When the working parties have adopted a common position, this Committee normally endorses the conclusions reached. In cases where the groups of experts have been unable to reach a broad consensus, the CMFB gives its opinion by following its rules of procedure. This opinion is advisory in nature, but Eurostat gives it the utmost consideration when it decides on the methods to be used for the classification of a given transaction.

This decision-making process makes it possible to adopt principles on accounting methods and fill in the gray areas in interpretation left open by the ESA 2nd edition.

Once Eurostat has reached a decision, similar accounting transactions in all the member states must be processed in accordance with this decision. Eurostat draws up a methodological note for each type of decision and sends this to the institutions concerned.

**Some Selected Decisions**

Decisions can be grouped into those that affect the deficit and those that affect the measurement of the level of debt. However, in some cases, the level of deficit and the debt is influenced by the same decision. As it can be seen from the list below, Eurostat was more often confronted with problems concerning the measurement of the deficit than the measurement of debt. Among the decisions concerning the measurement of deficit, the France Télécom case became a cause célèbre and is therefore explained in some detail later. This paper summarizes the reasons for Eurostat's decisions, which have been explained previously in press releases and methodological notes.

As it can also be seen from the list of decisions, those on interest payments play quite a prominent role. This is because the ESA 2nd edition is not clear enough on the treatment of interest. Zero-coupon bonds, linear bonds, and deep-discounted bonds are not treated in the ESA 2nd edition. Eurostat therefore had to fill this gap by interpreting the ESA 2nd edition in the light of the new ESA 95, which does give clear guidance.

There are also some decisions, which were taken after bilateral consultations with member states. These decisions concerned, for example, the
classification of transactions with SECURUM, a company created by the state in connection with a debt crisis, and with ASFINAG, the Austrian operator of highways and high-speed roads. In these cases, Eurostat could rely on "jurisdiction" found in similar cases that had occurred in other member states. These and other cases are not presented here.

**Decisions Affecting the Calculation of Deficit: The France Télécom Case**

The France Télécom case became famous in the media. Because of the sometimes terse description of the facts and the decision process, misunderstandings arose about the role of Eurostat. It is for this reason that this case is explained here in great detail.

It will become clear from the description of the facts and the decision process that Eurostat followed the same principles as in other cases, which means discussion in the technical working parties and consultation of the CMFB. The only difference was that the decision process had to be accelerated because the Commission forecasts of the EU member states' deficits for 1997 were due at the beginning of November.

**Summary of Facts: The 1990 Reform**

The first reform of the PTT administration, which was made in 1990, resulted in two autonomous public enterprises, la Poste and France Télécom. Nevertheless, the employees of these two enterprises had kept their status as state civil servants.

Therefore the retirement scheme of the employees was that of civil servants, financed on a pay-as-you-go basis. However, in practice, France Télécom was offsetting each year the retirement scheme's deficit for the France Télécom part. In the national accounts, the former annexed budget of PTT was classified as a quasi-corporation (sector S10, Nonfinancial corporate and quasi-corporate enterprises). La Poste and France Télécom became corporations, classified under the same sector. Concerning the retirement pensions, flows have been recorded as if they were internal to the enterprise, as an employer's direct benefit scheme, showing nothing in the central government account.

**The Second Reform According to the July 1996 Law**

The July 26, 1996, law, relating to France Télécom, put in place a second reform, that went into effect December 31, 1996. This reform resulted in the following changes:
• France Télécom became a national corporate enterprise of which the state directly controls more than half of the capital.

• The France Télécom civil servants were made available to the national corporation, which also employs freely contractual agents under a normal collective contracts scheme.

• The rate of fiscal and compulsory social contributions based on France Télécom salaries became equal to that of other enterprises of the telecommunications sector for those risks that are common to private status employees and to state civil servants (this rate is evaluated at 38 percent).

• Beside these contributions (employees and employers), the global amount of which is limited in this way, a one-time exceptional contractual contribution will be paid by France Télécom.

The Draft Finance Law for 1997 (State Budget)

The July 26, 1996, law on France Télécom national incorporation has changed the previous obligation of France Télécom to refund the state for the amount of pensions paid to retired civil servants of this enterprise into an obligation to pay to the state an employer’s social contribution. This contribution will cover the retirement “liabilities” of the enterprise only partially. Thus France Télécom will pay to the State an exceptional contribution amount of 37.5 billions of FF, a one-time payment.

This contribution is earmarked to a public agency which will repay the State 1 billion FF in 1997. This repayment will be indexed each year. The aim of such a staggering payment is to avoid an artificial improvement of the state budget deficit in 1997 (see “Exposé des motifs,” Finance Draft Law of 1997, page 134).

The funds of Eurostat are deposited at a treasury account and are remunerated under the usual conditions fixed by the public accounting’s general regulations. Eurostat’s resources comprise the exceptional contractual contribution paid by France Télécom, as well as the interest paid by the treasury (approximate interest rate: 3.5 percent per year). Eurostat is not allowed to borrow. Its mission will end after the complete disbursement to the state of these resources.

According to the Draft Finance Law for 1997, the overall amount of sale of shares and other equities by the state in 1997 should not exceed 26 billion FF (including France Télécom equities), which means that the state would not sell more than approximately 15 percent (20 percent of its stake in France Télécom in 1997).
Treatment in the National Accounts

In order to classify the transactions described in the summary of facts in the framework of the ESA 2nd edition, Eurostat presented to NAWP and FAWP, the two technical working parties, a proposal in favor of treatment as a capital transfer, which would decrease the net borrowing requirement of the central government of France.

The proposed treatment was based on the fact that in the case of France Télécom the personnel, which were made available to the company had the status of civil servants ("fonctionnaire") and were under an unfunded pension scheme.

In the case of flows related to the financing of pensions the ESA 2nd edition prescribes the following rules:

"In all cases where there is a stable and normal relationship between the number of people at work and the number of persons receiving pensions, the imputed amount of retirement contributions is assumed to be equal to the pensions actually paid. (Payments by the State on behalf of the public enterprise are recorded, according to par. 215 of the ESA 2nd edition, as if they were transactions made directly between the public enterprise and employees and pensioners). This is a simplification based on the hypothesis that the pension system works on a pay-as-you go basis. Contributions paid by employees and imputed contributions are treated in the usual way: They form part of the compensation of employees of the public enterprise, but are then deemed to be paid to the enterprise. The retirement pensions are paid by the public enterprise in the form of employers' direct social benefits.

The public enterprise can thus find itself in the situation where the burden of pensions, and therefore the imputed social contributions, is higher than the contributions (real or imputed) of other enterprises operating in the same sector. To eliminate this difference, the State could undertake to finance part of the pension payments. The payments regularly made by the State as a result of this commitment are considered as miscellaneous current transfers (par. 471c of ESA 2nd edition)."

To compensate for this commitment, the state might ask the public enterprise for an exceptional payment. In the case of an unfunded retirement scheme, the ESA 2nd edition does not consider the pension right as an asset of households, nor a liability of the pensions scheme. Transactions concerning these pension rights are not, therefore, financial transactions. The exceptional contribution received by the state, linked to its future commitment in the financing of pensions, is thus a nonfinancial transaction. Its exceptional character leads one to conclude that it should be treated as a capital transfer (R70).
The capital transfer would immediately have a favorable effect on the state borrowing requirement, which will, however, be ultimately offset by a deterioration in the borrowing requirement over several years.

The Consultation of Member States and the Decision by Eurostat

The proposal to treat the exceptional payment of France Télécom to the French State as a capital transfer was discussed in the National Accounts and Financial Accounts Working Parties on October 21-22, 1996. During the meetings it became apparent that a consensus could not be reached at the level of the technical groups. Moreover, four alternative models, in addition to the Eurostat proposal, were put forward by the delegates.

In these models it was proposed to treat the exceptional payment by France Télécom as a prepayment of a future stream of pension payments, a sale of a Government financial asset (created by the first reform of 1990), a capital withdrawal by the French Government from France Télécom’s own funds, or a constitution of a funded pension scheme.

All these models had the effect of treating the exceptional payment by France Télécom as a financial transaction, with the effect of being neutral on the net borrowing requirement.

Following the decision made by the CMFB at its meeting on October 23, 1996, a written procedure was established that would allow Eurostat to obtain the opinion of the CMFB on the treatment of the transaction between the state and public enterprises related to the financing of retirement pensions in the framework of the ESA 2nd edition.

At this meeting the CMFB assigned a mandate to the Financial Accounts Working Party to “clarify the nature of the planned transactions between the French State and France Télécom” and “review the conformity of the treatment proposed by Eurostat with the ESA 2nd edition, and investigate the possible alternative treatment(s) respecting the recommendations of ESA 2nd edition.”

The FAWP, which met on October 24-25, 1996, developed five accounting treatments, including the original Eurostat proposal and the four alternative treatments proposed by member state delegations that were considered to be compatible with the rules of the ESA 2nd edition.

The CMFB members were requested to fax to the secretariat of the CMFB, by Thursday October 31, 1996, by lunch time, their opinion on which of these treatments was (or were) in conformity with the accounting rules of the ESA 2nd edition.
As a result of this consultation 11 member states found the Eurostat proposal acceptable within the strict application of the ESA 2nd edition to treat the exceptional payment by France Télécom as a capital transfer. However, many member states found that the prepayment model was also acceptable with the rules of the ESA 2nd edition.

Faced with the situation that a consensus would not be reached within a reasonable time horizon, Eurostat decided on October 31, 1996, three working days before the Commission forecasts for 1997, to recommend treatment of the France Télécom exceptional payment according to its initial proposal, which meant to record it as a capital transfer.

In its decision, Eurostat emphasized the exceptional character of this transaction, which would reduce the net borrowing requirement for one year, but would deteriorate the budgetary situation, all things being equal, for the coming years.

**Treatment of Receipts from Indirect Privatization: Belgium**

In the case of a direct privatization (sale of shares and other participations held by general government in a public enterprise), the treatment of the receipts from privatization in national accounts is clear. In the balance sheet of the general government sector, one financial asset (shares and other equity, F60) is replaced by another financial asset (liquid assets, F20/30). The transactions are purely financial and do not have any influence on the nonfinancial accounts and hence on the net borrowing requirement (N5) of the general government sector.

The treatment of indirect privatization, which was applied in Belgium in 1993 and in 1994, was followed by the reorganization of one of the most important financial institutions in Belgium, the Caisse Générale d'Epargne et de Retraite (CGER). The Société Financière de Participations, a public holding company, had sold half of its share in the two CGER subsidiaries, the CGER bank, and CGER insurance. The holding company then paid to its owner, the Belgian government, practically the total amount of the sale of its stock (32.2 billion BFR in 1993, and 12.7 billion BFR in 1994).

The Belgian national accountants wanted to treat this payment as a capital transfer, improving the net borrowing requirement of the general government. Eurostat, however, decided, after consultation with the working parties and the CMFB, to treat this payment to the general government in the same way as in the case of a direct privatization, which meant to treat it as a financial transaction. The interposition of a holding company did not change the economic nature of the financial flow. This transaction therefore had no influence on the net borrowing requirement of the general government. The treatment adopted in the case of the indi-
rect privatization of the Belgian companies' CGER bank and CGER insurance created a legal precedent, and consequently, Eurostat now recommends treating all cases of indirect privatization in the same way.

**Legal Decision with a Retroactive Effect: The Irish Case**

The accounting systems, the European ESA and the world System of National Accounts (SNA) of the United Nations, recommend to record transactions on the basis of an established right, which implies from the principle of prudent bookkeeping that the rights are to be recorded when they are acquired and the liabilities as soon as they are certain. The contrary principle is the registration on a cash basis, a principle quite common in public accounting, which means registering the transactions whenever a cash flow takes place. The ESA 2nd edition recommends registering the distributive transactions on the basis of the established rights or when due. (There are, however, exceptions to this rule.)

An association of Irish women took their government to court, over a European Union directive about equal rights for men and women, which should have been applied since 1985. The Supreme Court in Dublin ruled that the Irish government had not applied the directive of the European Union correctly over many years. Eventually, the Irish government was ordered to pay 183 million punts, which corresponded to the benefits due every year but not paid between 1985 and 1995, as well as a compensation penalty of 60 million punts.

The treatment envisaged by the Irish statistical office was:

- For the benefits due. Following the principle of right established, register the transactions when they were due, which meant to distribute between 1985 and 1995 and to record them in the accounts of the households sector and in the general government sector.

- For the compensation penalty. Since this right was established only by a court decision, it seemed appropriate to record it only for 1995.

Having consulted the working parties and the CMFB, Eurostat decided to follow their almost unanimous opinion, which was the recommendation that the benefits due should be recorded for the year in which the Supreme Court decision was made. This decision was based on the certainty principle, which means registering a transaction only when it is established with certainty for both parties. The capital transfer increased the general government net borrowing requirement for 1995.

The decision in the Irish case served as a model for the accounting of similar cases in other member states, notably in the Italian case, where pensioners obtained before the Italian Supreme Court the right to receive additional pensions.
Treatment of Transactions in Financial Leasing

Following a request for clarification brought forward by the Belgian authorities, concerning the sale of government buildings followed by leasing them (sale and lease back), Eurostat had to formulate a precise recommendation about financial leasing operations in the context of the excessive deficit procedure.

The ESA 2nd edition does not distinguish between normal renting and financial leasing. Renting is considered as a sale of a service, sold by the owner of the asset to the lessee. A strict interpretation of the ESA 2nd edition leads to recording the sale of a government building to a unit not belonging to the general government sector, and the subsequent lease back, as a normal sale of a nonfinancial asset, which reduces the net borrowing requirement in the period in which the sale takes place.

In the ESA 95, however, the durable asset that is the subject of the financial lease is recorded in the gross capital formation of the lessee when the financial lease is concluded. It is assumed that in the case of a financial lease an asset is sold (notionally) by the lessor. At the same time a (notional) loan is granted to the lessee. Consequently, the transactions are mostly neutral for the net borrowing requirement.

Eurostat recommended not to apply the rules of the ESA 95 because the Committee on Gross National Product (for the application of the directive 89/130/CEE, Euratom) decided to strictly apply the ESA 2nd edition in this respect and to treat the operations of financial leasing as ordinary renting. This decision created a legal precedent, and the regulation 3605/93, which sets the rules for the application of the excessive deficit, prescribes to use for the ratios deficit/GDP and debt/GDP, the GDP as it is calculated under the directive 89/130/CEE.

For these two reasons, Eurostat recommended to treat financial leasing as normal renting, in which case the sale and lease back would improve the net borrowing requirement. At the same time, Eurostat recommended that these operations should be clearly indicated, if they are important, in the biannual notification to the Commission.

Capitalized Interest on Deposits and Other Financial Instruments Covered by ESA79

Eurostat decided to record the interest separately from the principal and to record as interest the capitalized amount when it falls due for payment, rather than to distribute it among different periods. This means that, in the case of deposits or similar financial instruments that are liabilities of the general government, the capitalized interest will be re-
corded as general government expenditure when the interest is paid to the holders of these instruments.

**Treatment of Interest in the Case of Zero-Coupon Bonds**

Eurostat decided to treat the difference between the issue price and redemption price of a zero-coupon bond as interest, to be recorded as interest paid at the maturity of the bond. The reason for this decision is an interpretation of the relevant ESA paragraph, which defines interest as a payment at predetermined dates of a fixed percentage of the nominal value of the asset (par. 428 ESA 2nd edition). The economic interpretation of this paragraph led to the conclusion to treat the price difference as interest. Alternatively, to treat this as a holding gain or loss did not seem acceptable for two reasons. Holding gains or losses normally involve an element of risk, which is not the case for zero-coupon bonds. All information is known in advance and is certain. Second, the market itself considers these price differences as interest when calculating the yield on these bonds. Moreover, the treatment as holding gains or losses would have meant that these price differences are not recorded in the deficit as defined by the ESA 2nd edition, an unsatisfactory solution from an economic standpoint.

**Linear Bonds**

Eurostat examined the case of nonconventional bonds, that is, bonds whose treatment is not explicitly indicated in ESA 1979, and decided to treat them as linear bonds. Like fungible bonds, linear bonds are bonds issued in several tranches from the same lineage, that is, with the same nominal interest rate as well as identical dates for the payment of coupons and for reimbursement at maturity. New tranches can be issued for linear bonds several years after the first issuance. They are therefore issued with discounts and premiums, which can be significant as a result of changes in market interest rates in the intervening period since the first issuance. The question is to know how is the difference treated between nominal value and price at issue (discount or premium) at the time the new tranche is issued.

A distinction must be made between tranches issued within 12 months of the first emission, and tranches issued beyond 12 months.

For each tranche issued in the 12 months after the first issue, the difference between nominal value and issue price (discount or premium) must be treated as a capital gain or loss, without an impact on the public deficit.
For each tranche issued beyond the 12 months following the first issue, the difference between nominal value and issue price (discount or premium) must be treated as interest. Therefore, this has an impact on the public deficit: The discounts increase the deficit, and premiums reduce it. The total amount of interest recorded at the time of payment of coupon is therefore calculated as follows: the actuarial rate of interest of the tranche multiplied by the value of the tranche issue.

Linear bonds exist particularly in countries where the financial markets are relatively thin, as in Belgium, Sweden, Finland, and Portugal.

Sales of Gold by Central Banks

Eurostat decided that the sale of gold and the subsequent transfer of the proceeds from this sale to the general government should be treated as a financial transaction. This means that the proceeds from this sale cannot be recorded as a receipt reducing the deficit in the same way. The argument is based on the philosophy that the owner of the monetary gold is the central government and that the transaction is done on behalf of the general government.

Financing and Exploitation of Public Infrastructure by the Enterprise Sector

Eurostat was called upon to decide about the financing and exploitation of public infrastructure by the enterprise sector in three types of cases.

The first case examined was the following. An enterprise first constructs the infrastructure; it then operates it for a certain period during which it receives each year payments from the state: The annual payments of the state represent the purchase of services produced with the infrastructure. When the period of exploitation expires, the infrastructure is handed to the state without the latter making any additional payment.

Eurostat decided to treat this case in the following manner:

- The initial investment (gross fixed capital formation, GFCF) must be recorded in the accounts of the enterprise, without any impact on the public deficit.
- The annual payments of the state constitute the purchase of services that increase the public deficit each year.
- At the end of the period of exploitation, the state acquires the infrastructure: This positive GFCF has as a counterpart a nonfinan-
cial transaction, recorded at the same time in the accounts of the state. The acquisition of the infrastructure, therefore, has no impact on the public deficit.

This case concerns particularly the United Kingdom, where contracts are being established according to which, at the end of a certain period, the state takes control of infrastructure built and operated by enterprises.

The second case concerns an enterprise that is required to build and to prefinance a fixed asset for the general government and where the general government becomes the owner of the asset as it is being built: GFCF should then be recorded in the general government sector. This investment contributes to an increase in the government deficit. It has no impact on government debt as defined in Council Regulation N. 3605/93, because this regulation foresees that medium- and long-term trade credit liability recorded in the general government account toward the enterprise sector is excluded from the measurement of debt for the purposes of the convergence criteria.

This second case applies in particular to the construction and prefinancing of roads in Germany by the private sector: There are at least 12 projects under way in 1995/1996 at the level of the federal government, as well as a number of projects concerning the Länder and the communes. Moreover, a high-speed railway track is planned to be financed in the same way. Government deficit includes payments which are due as work is completed. The estimated amounts, 4–5 billion DM in 1997, are still small as a percentage of GDP.

The third case involves an enterprise that is required to build a fixed asset and exploit it for all its life, while the ownership of the asset is given to the enterprise: GFCF should then be recorded in the enterprises sector and thus should have no effect on the government debt and deficit.

One example of the third case is the bridge between Denmark and Sweden (Oresundbridge): A public corporate consortium owned by the Swedish and Danish governments began construction on this bridge in 1996. The consortium finances the operation through borrowing on the market, backed by state guarantees. The bridge is planned to be ready by the year 2000. The consortium will then have the concession of operating the bridge and will receive the tolls raised. The debt is estimated to be paid off in the year 2026, and after that, the consortium will continue to operate the bridge indefinitely. The GFCF is recorded in the enterprise sector, with no impact on the government deficit.

Another example of the third case is given by the intentions of some of the “private finance initiative” contracts in United Kingdom: Instead of the government buying an asset and operating it, the government buys services from a private sector operator. Such operators may equip
themselves with assets to provide the services. GFCF is recorded in the enterprise sector with no impact on government deficit; the general government account shows the purchase of services provided by the enterprise, which contributes to an increase in the government deficit every year.

Eurostat confirms that the treatments described above, and recorded as such in the accounts of Germany, Denmark, Sweden, and United Kingdom, are correct. These amounts are already correctly accounted for in the notifications that member states send to the Commission twice a year in the framework of the excessive deficit procedure.

**Treatment of Export Insurance Guaranteed by the State**

In each member state, there are institutions which specialize in export insurance and can operate with the guarantee of the state. According to the particular circumstances in each country, they are classified in the insurance sector (S50) or the general government sector (S60).

These specialized institutions receive premiums from exporters. They pay out indemnities in the case of default, but may also recover debt.

Eurostat decided that, generally, all of these flows should be recorded as nonfinancial transactions. Following this decision, coverage by the state of losses realized on risks that it guarantees must be recorded in the nonfinancial accounts, with an impact on the general government deficit.

**Treatment of Certain Taxes**

Eurostat has decided that the Italian tax on wage funds (linked to the "Eurotax") is a new tax and should be recorded as a receipt reducing the deficit, following the unanimous favorable opinion of the CMFB.

The Italian tax on wage funds ("fondi di quiescenza") which are accumulated in the enterprise balance sheet obliges the employees to pay a tax at the time of withdrawal of these funds. In 1996, the Italian government introduced a law whereby 2 percent of the amounts accumulated should be paid in 1997 by enterprises, whereas the rest of the tax remains due when the employees leave the enterprise.

Eurostat had to decide whether this tax was to be treated as a financial advance (no effect on the deficit) or as a new tax (reduces the deficit).

A financial advance is a payment agreed by both parties to be brought forward ahead of the original due date of the nonfinancial transaction that gives rise to the payment. Financial advances are to be recorded in the financial accounts as short-term or long-term loans.
(F70 or F80 in the ESA79 classification). They are not entered as a receipt in the distribution of income account of the general government sector and therefore have no effect on the deficit. A tax has to be recorded as such in the accounts only at that time it falls due, then reducing the government deficit.

In this case, Eurostat considered that the Italian government, by modifying the tax on wage funds, had introduced a new tax that is calculated on a new basis, with a new due date, and to be paid by the enterprises instead of the employees.

Therefore, the receipt from this tax which was due in 1997 is not a financial advance, but a tax that reduces the deficit in 1997. The estimated amounts to be collected are 3,500 billion ITL, which represents 0.19 percent of GDP.

**Decisions Affecting the Level of Debt: Debt Assumption by the Greek General Government**

The Greek case is taken here as an example among others, where it became apparent that the national classification of the transactions concerning debt assumption were not in conformity with the rules adopted by Eurostat.

It should be remembered that the ESA 2nd edition describes in detail the accounting rules for economic flows, but is silent on transactions in stocks (balance sheets) and other kinds of transaction (other changes in volume and revaluation). For this reason, and following an opinion of the CMFB, Eurostat decided that for the procedure of the excessive deficits, debt assumptions and debt cancellations should be treated in conformity with the rules of ESA 95 which consistently covers all these transactions.

The ESA 95 contains precise recommendations concerning the classification of debt assumption and debt cancellation by general government. The general rule is that the counterpart of the debt assumption or debt cancellation (decided by mutual agreement) belongs under the heading of capital transfers and has to be registered in the capital account. This general rule, however, foresees three exceptions of debt assumption or cancellation: toward a quasi-corporate enterprise; by general government from a public enterprise, which disappears as an institutional unit from the system; and toward a public enterprise in the process of a privatization to be achieved for the short term.

In the first and the third case, the counterparts of the debt assumption or cancellation are financial transactions, and in the second case, it is another change in volume.
Taking into account the rules described above, it became apparent that certain debt assumptions by the Greek government were incorrectly classified. As a matter of fact, only those debt assumptions that were linked to a payment from the general government to the creditor were registered as capital transfers, while those debt assumptions that were not directly linked to a payment were not registered in the accounts.

Following the recommendation from Eurostat, the Greek national accountants have changed the accounts for the relevant years and registered as counterpart a capital transfer for all those debt assumptions and debt cancellations by general government that correspond to the general rule described above.

Debt Assumed from the German Treuhandanstalt

The general rule and the exception from the classification of the counterpart transactions to debt assumption and debt cancellation have been already mentioned in the case of Greece. According to these rules, a debt assumption from a unit that disappears from the system is treated as an "other change in volume." An institutional unit disappears from the system whenever it is emptied of its economic and financial substance. It should be mentioned that the account "Other changes in volume" has been introduced in the new accounting systems (the SNA 93 and the ESA 95) in order to record those other flows (appearance or disappearance of assets in exceptional circumstances), which do not belong to normal transactions.

The Treuhandanstalt was in charge at the beginning of the 1990s of reorganizing and privatizing the public enterprises in the new German Länder. During its four years of existence the Treuhandanstalt accumulated a debt of about 204 billion DM. Once its work had finished, the Treuhandanstalt was absorbed by the state and its debt taken over in 1995 by a federal agency (Erblastentilgungsfonds), which means by the state. Subsequently, the outstanding level of the German public debt increased by this amount.

The German federal statistical office treated this flow as a capital transfer, deteriorating the net borrowing requirement of the general government, whereas in the biannual notifications to the European Commission, the German ministry of finance considered it to be an exceptional transaction that should not enter into the calculation of the deficit. Eurostat also argued that the Treuhandanstalt had disappeared economically and decided to treat this flow as an "other change in volume," which has no effect on the general government net borrowing requirement.
State Guarantees on Public Enterprise Debt

Eurostat has decided that public enterprises' debt "guaranteed" by the state should be directly taken into account in the government debt under the following conditions:

- The law authorizing issuance of the debt specifies the government's obligation of repayment.
- The budget of the state specifies each year the amount of repayment.
- This debt, issued by the enterprise, is systematically refunded by the state (interest and principal).

The Italian Railways have traditionally raised funds on the financial markets with the agreement of the Italian government. Since 1981, each debt issue (for the purposes of maintaining and developing the infrastructures) was individually authorized by the Ministry of Treasury, by means of a public law. Such public law stated the obligation of the treasury to serve this debt (interest and principal) and to identify for this purpose the funds in the budget law. Nevertheless, Italian national accountants used to consider this debt as belonging to the railway company. Eurostat believes that this debt should be regarded as belonging to the state, not the enterprise, and therefore its stock should be included in the stock of the government debt.

Currency Swaps

In the case of currency swaps Eurostat has decided "to value any outstanding foreign currency debt according to the market exchange rate and not at the exchange rate" agreed in the swap contract. The existence of a swap agreement is neutral for the valuation of debt outstanding at the end of period according to regulation 3605/93. This decision appeared as it is phrased above in a press release made by Eurostat. Apparently, this statement was not clear enough and therefore was misunderstood by some national accountants of the member states. In fact, this decision meant that the forward part of the swap transaction should not be taken into account when valuing the outstanding debt in foreign currency.

Outlook of Work

Being that this conference is devoted to debt management in central and eastern European countries, this paper should therefore conclude with a few remarks concerning the fiscal convergence criteria for candi-
date countries. It should be mentioned here that Eurostat deals with all 11 candidate countries equally, and no distinction is made for those countries which have started their negotiations earlier than others.

Eurostat started its work on the introduction of the methodology for the measurement of deficit and debt a few years ago. A first workshop on these themes was organized in 1994 in Jachranka, Poland, and a second one followed in Prague, Czech Republic, a year later. The problems that were identified at that stage concerned mainly the delimitation of the general government and the issues connected with the privatization process within these countries.

In addition, a starting point for the production of comparable statistics of deficit and debt are the government finance statistics compiled by the ministries of finance in these countries for the International Monetary Fund (IMF). These statistics are based on the IMF government finance methodology (GFS) and are reported to the IMF's Statistics Department for publication in the Government Finance Yearbook. They cover various subsectors of general government, including central government budget, extra budgetary funds, social security, and local authorities. Even though the GFS methodology differs from the ESA 95 methodology, the two methodologies contain many common elements. In particular, the GFS "below the line" accounts and debt statistics by type of financial instrument and creditor can be used as one building block for the compilation of the government sector financial accounts. Furthermore, because ministry of finance statisticians are generally familiar with detailed accounts of the government, their expertise is essential for the production of national accounts based on government sector statistics. In the future, as the revised GFS methodology becomes consistent with the SNA and therefore with the ESA 95, the need for close cooperation between the ministries of finance and the statistical institutes will tend to improve the deficit and debt statistics in these countries as defined in the Maastricht Treaty.

Imputed social contributions are the counterpart to the social benefits paid directly by employers, that is, not linked to actual social contributions, to their employees, or former employees and other eligible persons (ESA 2nd edition par. 411). A circuit for imputed social contributions is necessary when accounting for social benefits paid directly by the employer under the heading of social benefits, to record the cost of these benefits as part of compensation of employees paid by the employer.
Accounting and Financial Practices in the Light of the Context of the Maastricht Treaty

Francesco Forte

Prudential Accounting and the Maastricht Rules

The Maastricht Treaty sets two rules regarding public indebtedness: the yearly net debt of the budget of the general government (the word general deserves particular attention, as we shall see in a short while) should not exceed 3 percent of GDP; the gross debt of the general government should not exceed 60 percent of GDP; and in case of an excess, this should be rapidly reduced within the 60 percent ceiling.

In order to respect these two rules at the central government level and enforce them for the other public sector entities forming the general government (that is, regional and local governments, social security institutions, and government-controlled nonprofit institutions whose revenues total more than 50 percent nonmarket receipts), appropriate rules of budgetary and public debt accounting and management must be adopted. This paper will focus on two issues: the adoption of public accounting rules, defined as "prudential accounting," and careful adoption and control of "derivatives" relating to public debt.

In this first section, the principles of public prudential accounting are outlined in the light of the context of the Maastricht Treaty. In the second, the theme of public economy derivatives are dealt with, and in the third, a sketch is presented of the (often hidden) contingent liabilities and debt derivatives that the central governments should try to control and properly account for.

Let us now consider the prudential accounting principles that are relevant to the accounting practices consistent with the Maastricht rules on deficits and debts.

First, prudential accounting—in general and as particularly emphasized by the IMF—implies great attention to transparency. Indeed, a financial crisis may be initiated by the sudden realization that there is a hidden debt, that there are off-budget deficits, and
that the cash budget's balance does not reflect the arrears of the real situation.

Second, prudent accounting implies—for the Maastricht Treaty—a comprehensive consideration of public entities: not only the state budget and its official public debt, but also that of local institutions, health institutions, and social security institutions. Furthermore, one must go beyond the official definition of government—as in the accounting rules of the European System of Accounting (ESA)—to consider the commercial and financial debt of quasi-government entities that perform public services, charging "political" prices rather than the actual costs. These include municipal transportation, the railways, and the post office. One must also consider quasi-market entities (some nonprofit institutions in the social and cultural area, private and public mixed companies, and banks or other institutions performing services of general interest) guaranteed by the government. In these cases, one must try to separate the burden of government debts from those that others are likely to bear. These liabilities, as we shall see, may be considered to be public economy derivatives and should be included in appendixes to the (central) government accounts in order to make the government's obligations clearer (see the transparency principle above).

Third, prudential accounting—under the Maastricht rules—implies accrual accounting (that is, accounting by obligations.) Appropriations may be deceptive, because some of them take a great deal of time to be translated into obligations. For this reason, one usually focuses only on the cash budget, which also may be deceptive because public administrators may postpone payments, hoping that somebody else will take care of them. Thus, unsound arrears may build up, damaging the functioning of the economy and creating a situation of continuous tension in the management of the cash budget because of creditors' pressures. In any event, the new ESA rules of 1995 do not consider any cash budgeting.

Fourth, prudential accrual accounting implies asymmetrical accounting in the life cycle of obligations. One chooses the last stage for revenues to be sure that they are really collectible, and the first stage for expenditure obligations to take account of those that the government will not be able to escape in the future. Sometimes the government's obligation for public works infrastructure comes due in full only when projects are finished, but the obligations for the various years before final completion of the projects should be assessed in those years. In the case of zero coupon bonds, the government's cost appears only when they expire and their owners receive an amount many times higher than that originally paid to purchase them, but
actually the cost for the issuer takes place throughout their entire life. According to the older ESA rule applicable to Maastricht rules, some of these behaviors were allowed, but this is no longer the case under ESA 1995, which is relevant from 1999 on.

Fifth, prudential accounting as accrual means closely linking the flows of the budget to the changes in the stocks of the balance sheet. More attention must be given to apparent savings in expenditures owing to the system of replacing grants with guarantees on loans obtained by private or quasi-private entities that, in case of crisis, may need massive intervention by the warrantor. This is a topic belonging to the “derivatives” or contingent liabilities area of public economy. Here Maastricht rules are not explicit, but the pact of stability, signed by the member states of the European Union in the summer of 1995 in order to implement the European Monetary Union (EMU) requisites, clearly implies the consideration of these liabilities.

Sixth, prudential accounting implies that for foreign debts with apparently favorable interest rates, careful consideration should be given to the risk inherent in devaluation of the domestic currency, which would affect the cost of repayment (that is, it has a balance sheet effect, which in the devaluation years may remain unnoticed if traditional budgetary practices are adopted and the balance sheet is disregarded). Shifting to a consideration of the balance sheet implies a shift from a short-term to a long-term view, and also a shift from short-term to longer term indebtedness and the protection of foreign debts with derivatives. Maastricht rules, per se, do not consider these kinds of issues.

In any event, prudential accounting should show short-term debt as distinct from longer term debt, debt to foreigners in foreign currency as distinct from debt in domestic currency to domestic investors, and foreign debt in domestic currency distinct from domestic debt in foreign currency. It should also combine these aspects with those relating to various maturities (less than one year, one year, two years, three to five years and 10 years or more) and debts with banks and other institutions. Parameters of foreign debts and of their service on exports and GDP should also be shown and should include banking and commercial debts.

Any set of parametric rules on debt and deficit tempts governments to adapt to opportunistic behaviors, whether through mere accounting “creativity” or through more subtle operations, including formal changes in institutions and contracts.

We can analyze opportunistic behaviors to meet Maastricht deficit and debt targets by distinguishing the various components of the transactions (that is, their subjects, their objects, and their time periods). Obviously, some opportunistic behaviors or “creative account-
ing behaviors” bear on more than one of the three components simultaneously.

The Deficit Parameter

The subjects of the transaction may be slanted by:

- Defining government in an overly restrictive way, so that debts of governmental institutions are not consolidated in government debt
- Reporting revenue that consists of resources from institutions that should be considered part of the government

The objects of the transaction may be slanted by:

- Optimistically defining revenue credits and assets so that items are recorded with a higher value
- Recording as revenues credits that will not be collected
- Recording revenues that are collected but must be reimbursed
- Restrictively defining obligations, debts, and liabilities on the expenditure side, so that they are not recorded even if they already exist or have a good chance of existing
- Underassessing obligations for public expenditures, such as increases of wages, pensions, maintenance costs
- Considering expenditures for the purchases of assets having a real value lower than the price paid as neutral transactions

The time period of the transaction may be slanted by:

- Shifting existing obligations to future budgets on the grounds that they are not yet “mature”
- Shifting future budget revenues to the present budget debts, which are now coming into existence but have to do with previous obligations, to the past budgets.

The Debt Parameter

The subjects of the transaction may be slanted by restricting the definition of government, so that debts of governmental institutions are not consolidated in government debt.

The objects of the transaction can be slanted by:

- Defining public debt formulaically, so that some government debts are not included
• Excluding contingent liabilities for guarantees from debt
• Giving guarantees rather than concessional loans or grants

The time period of the transaction can be slanted by:

• Considering public debt as it is on 31 December, so that it appears late
• Excluding from debt those contingent liabilities whose magnitude is not clear (for example, pension debt)

Obviously these opportunistic accounting practices contradict the principles of prudential accounting.

**Public Economy Derivatives and Public Debt Management and Control**

Governments may become demanders and suppliers of derivatives to improve public debt management, reduce its risks, and contain its amount. Governments may also act as suppliers of derivatives as a substitute for public debt and as a general guarantor of the financial system of the country. In its performance of this last role, a government may become a debtor.

Derivatives, generally speaking, are rights or obligations that will become effective in the future and that derive their present existence and value from future, unknown variations in values relating to other standing assets or contracts among existing assets, whether financial or real: bonds, stocks, currencies, real properties, products, and immaterial goods. Derivatives are present titles to future rights and liabilities, whose value depends on the variations in values of other assets (the “principal assets” in a given period of time).

The value of the derivatives is both aleatory and high powered and derives from marginal changes. And because their life and value is discounted from the future of their principal asset, the smaller the time span of this connection, the smaller the problem of discount, but the more important the single marginal variation. The longer the time span of their principal, the bigger the problem of discount. Thus, the values of derivatives often are highly subjective and variable.

Derivatives may either consist of a right of one party with obligations of another, or of rights and obligations for both parties. Those giving a future right are called options, because those who have title to them can exert a right if they wish, but they are not obliged to exert it. Those giving to both parties a right and an obligation, are called futures—not to distinguish them from options that also materialize in future, but because this is the feature that distinguishes them from the
present bilateral nexus of mutual rights and obligations. Options, as any other right of a given party and the corresponding obligation of the opposite party, may originate from a unilateral or a bilateral transaction. But in a market economy, once options exist, their further transactions are normally bilateral trade transactions. Therefore, market derivatives, even if they arise as options from unilateral transactions have market values, effective or imputed. These values, as in the case of securities or currencies with high volatility, may reflect subjective, aleatory valuations. And because the entire value of the derivative consists of margins of changes in values of other assets, their market assessment may rest on a fragile consensus.

In the case of derivatives supplied or obtained by governments, market values may be nonexistent. Indeed, governments, because they are nonmarket players with sovereign power, widely operate through "public policy" unilateral or nonmarket bilateral transactions (these last at artificial prices, above or below the hypothetical "true" market prices). Governments may alter the conditions on which these aleatory discounted values depend. For instance, options on public institutions for guarantees of the exchange rate risk depend on the government's exchange rate policy. Furthermore, the circulation of some public economy derivatives (as most of its guarantees) is restricted by the nature of governments as players, who, by definition, only rarely engage in trades. When these derivatives are short-lived, this circulation is even more unlikely. Thus, accounting for derivatives by referring to market values, already problematic in a market economy, may be even harder in public economy matters.

But market values are not the only possible method for assessing public economy derivatives. One may try to evaluate them by relying on the direct analysis of the principles to which they are attached, and of the market trends that condition their value. This may be an expensive, difficult task for a private investor, but it may be easier for a big institution with broad information, particularly if a range of possible values (rather than a single value) is provided.

This is particularly true for the liabilities that governments may assume by willingly or unwillingly supplying derivatives to other public economy institutions and to market and quasi-market market economic entities. Thus, accounting for derivatives in the public economy is possible, even if it differs from conventional means, and it is necessary because the public economy needs derivatives.

Bureaucrats and politicians may maintain that it is impossible to account for public economy derivatives because they may not like their behavior and their results to be transparent. But lack of transparency in financial positions, as recent experiences show, can result in financial market turbulence, and it is viewed negatively by international finan-
cial markets. Those who persist in it have to pay a premium on their interest rates and hazard a greater risk of financial strain in case of symptoms of insolvency.

Derivatives are highly varied phenomena, as the types of artificial entities, imagined in finance, may be multiples of traditional monetary and real assets and liabilities. Let us begin with the distinction between the two categories of derivatives—those giving one party a unilateral right and the other a corresponding obligation, and those giving both parties a right together with an obligation (that is, options and futures). In the first, one party has all the risks, since the other has the choice of perfecting the contract or not sometime in the future. In the second case, both parties may have a risk because they are obliged to perform the contract at a future time.

Options may be offered on both sides of a transaction. In one instance, the entitled parties have the faculty ("call"), but not the obligation, to take an amount of the considered (real or financial or monetary) "principal" asset to which the derivatives are attached, and the owner of the principal, who is liable to the option, is obliged to accept the choice of the counterpart. In another case, the owner of the principal asset to which the considered derivative is attached can "put" it, at the agreed-upon cost, on his counterpart, who must take the asset or respond for its liabilities, giving the collaterals, if any.

Options, because their asymmetrical nature provides more unilateral rights than other derivatives, may arise from a risky unilateral decision of their supplier. They leave the counterparts a future decision, on an opportunity that they from the beginning have not chosen. This is the case of free options, given by corporations to their standing stockholders on new stocks. These options, having their origin in a unilateral decision by the governing bodies of the corporations, may be traded on the market and thus have a (potential) market value. But obviously this value is based on the expected value of the corporation offering the option.

Similar options may be given by corporations that issue bonds totally or partially convertible in stocks and options (warrants) on future stocks. Here too, besides the market price, it is possible to get an objective valuation by considering the net value of the corporation to which the options refer.

Governments, too, in relation to privatization of public enterprises, may issue options on their stocks, preferential stocks, and warrants, thus reducing and diversifying their indebtedness. These options become profitable to those who get them, if the value of the stocks to be optioned is high enough to compensate for the cost incurred to get them, plus a market interest rate. If this does not happen, those who took the option lose money.
People who buy a reservation for a train or a lottery ticket may risk their down payment to be assured of a desirable asset whose purchase might become, in the future, more expensive or impossible, and might make a capital gain through selling it when its value increases. The suppliers of options benefit by being able to sell future assets, getting a down payment in the present. Successful options must have a low enough cost to make their sale attractive. If the principal assets' price in the market is lower than their cost, they will remain unsold. Thus, the parties who issue the options on entities under their control, in exchange for the immediate benefit they obtain, may risk getting less than they might be able to get in the future, even discounting that a given amount of purchasing power in the present is higher than it will be in the future. They prefer something certain in the present to something uncertain, probably bigger, but never smaller, in the future. They "play it safe."

In this kind of transaction, one party (the seller of the option) is hedging, and the other party may be hedging by undergoing a present certain cost to assure to himself a choice that may become more expensive or impossible in future. Both parties are hedging, but one of them is taking a positive risk, as in a bet, that presumably appears to him to be "fair," or at least "not unfair."

These options and warrants may circulate on the market as derivatives, with a net value higher or lower than their original cost, depending on the valuation of the principal asset. In the case of a warrant WS with an initial cost of 10 that allows subscribers to buy a stock S at 100, if the market value of S is 120, the value of WS will be 20 and the gain for the initial subscribers 10. Those who buy WS at 20, again, will either hedge or bet, depending on whether they "fear" that all S and WS will be sold out or become too expensive to be purchased in the future or "hope" that WS will increase in value, so that they may realize a capital gain on it.

If S is quoted at 105, WS will have a value lower than S plus the purchase price of W; if S is quoted 100 or less, WS will have no value, and those who subscribed WS to make a capital gain will feel a loss of 10, plus interest. However, those who bought WS at 10, to be sure to get S, may still consider that is worth it for them to get S even if S is quoted 100 or less. They are like train passengers who paid for a reservation, and, when they got on the train, discovered that it was almost empty.

Issuers of WS at 10, however, if S is valued on the market at less than 110, may get a reputation for "cheating" by means of unscrupulous, hazardous financing, and they may find their financial credibility affected adversely. Rather than overshooting, they should undershoot the prices of the principal assets and those of their warrants. This may be
particularly true for government treasuries issuing warrants for the stocks of their public enterprises.

The options game also may imply hedging by one party and risk taking by the other, in contracts with different derivatives. A case relevant for governments engaged in debt service on foreign loans may be that of currencies options, where party A gets in time T0 from B, an option to get in T1, U units of a foreign currency F for an amount U' of domestic currency D, UF/U'D being the rate of exchange between F and D in T0, with the possibility of giving X units of D, UF/XD being the market rate of exchange between F and D in T1. Here, A gets the option for a certain amount of purchasing power denominated in F, at the present rate of exchange, with the certainty that he will not incur a loss, because he will not exert the option if UF/XD is greater than UF/U'D. B has the risk of providing in T1 more units of F for the U'D units than those due according to the then current market price. If this happens and he wants to resell, U'D will have a net loss. The supply of this option has a cost, related to the likelihood of a devaluation of the currency D. A here is hedging; B is risking. But B, who takes a risk by supplying the F option, does not need to be a risk lover. B may simply be a banker selling "hedging" at a premium, protecting his own risks with assets or with symmetrical derivatives.

This need for hedging may arise from exposure to the risks of foreign debt service. Other call and put options are related to risks in standing activities and to the need for credits guaranteed by assets exposed to risks. Typically, the producer of a given crop may buy the "put" option of selling it at a predetermined price, which normally will allow him a reasonable margin of gain, thus assuring that he will have a given revenue. He may thus be able to get a credit, giving the option as collateral. The owner of given stocks or bonds, may buy "put" options in order to sell them at a predetermined price for similar "play safe" strategies. Obviously, in these cases, those who sell the "put" may risk a net loss because they commit themselves to take, in the future, given assets at prices that may be higher than their value. In assets with volatile prices, the margin of fluctuation and, therefore, the net loss, may be large. These options thus may have a high cost.

Public institutions may be engaged in the supply of "put" options, to assure the acquisition, at a predetermined price, of given crops in order to support agricultural production. In this case, the options often are given without cost or with a very low premium. Therefore, these institutions may need a subsidy. And the legal or moral guarantee of the government for them may be risky.

This, however, is not always true. Puts may be supplied at an early period, when the crops are just coming out, and, therefore, market prices are low. Producer A, who is short of credit, may be quite willing to exert
the put at that price. Keeping these assets for enough time, the purchasers may be able to resell them at a higher price, with a margin of gain. Thus, situations exist where those who purchase put options are hedging, and those who sell them are engaged not in risk taking, but in normal trade and finance activities.

Purchasers may take options on future goods called “calls.” Some persons need to have given assets and, therefore, ask for the option of purchasing them at a predetermined price. Thus, those who need regular supplies of oil to run a given production (for example, in petrochemicals) may hedge against future higher prices, buying oil calls at a predetermined price. The supplier of these options may be risk takers who promise to sell assets they do not own “short” at a given price, hoping that the “call” will not be exerted. If it is exerted, because the effective price is higher, they will undergo the loss of purchasing the assets at a price higher than their resale price. That they take this risk, however, does not imply they are “gamblers” with a preference for risk. They may ask premiums for the hedgings provided; buy “calls” for the same assets; or set aside, reserve, and distribute their portfolios of options to compensate for various risks.

On the other hand, call options may be given by the owner and producers of given assets, to increase their liquidity. If the option is exerted, because the market price is higher than the stipulated price, they lose a potential gain, but they have cashed a down payment; and if the option is not exerted, because prices are lower, they keep that premium.

To sum up, there are, from the risk point of view, three kinds of “puts” and “calls”—those where neither parties risk a future net loss, those in which the supplier of the principal asset promising the option of procuring it risks a net loss, and those in which the would-be takers of the principal asset risk a net loss.

Guarantees belong to this third type; they are like put contracts at predetermined prices. The guarantors risk a loss, while those institutions that are guaranteed and their creditors hedge against loss. In a market economy, the guarantors get a premium for their risk taking. In the public economy, guarantees are frequently supplied by governments without a premium, either because they are given, by contract, as a sort of hidden grant to ease the activities guaranteed, or because they are called to respond by a moral obligation.

Accounting for guarantees in a market economy is generally easier than accounting for options of future calls or puts when their risk relates to the patrimonial value of existing “principal assets” and collaterals. It is possible to proceed to a direct valuation of the likely future net patrimonial value of the principal and of the collaterals. Accounting for guarantees given by a government may not be different, provided that their legal basis is specified.
Market economy guarantees are either provided for a given amount or for any amount in relation to a given item, for a given time period. Normally, the option cannot be exerted before the owner of the principal is asked to respond for the considered liabilities. But, under certain conditions, he may have the legal or practical option to call for the guaranty before directly responding. The guarantor, if the option is exerted, although liable for payment of the guarantee, will become owner of the guaranteed asset and collaterals within the limits stipulated, which may exceed the guaranteed liability. If this is the case, the owner of the principal asset normally will not exert his option.

Let us now consider futures. They differ from options in that both parties are committed to a given promise, without an alternative option. In the case of options, there are three possibilities: no risk taking for either party, risk taking by the supplier of the principal asset, and risk taking by its potential purchaser or guarantor. In futures, there are four possibilities: no risk of net loss for both parties, risk of net loss for the giver or the taker of the principal asset, or risk of net loss for both parties. Actually the passage from options to futures basically implies a shift from unilateral risk assumption to risk sharing.

Aside from this "sharing" aspect, futures are similar to options. In futures, a predetermined amount of a given asset N, or of amounts of N to be specified according to the future magnitude of agreed-upon parameters, must be supplied at a future time T₁, in exchange for a predetermined amount of an asset M, or for amounts of M to be specified according to agreed parameters with unknown future magnitude. The going value of the derivative will be determined by the difference between the assumed market ratio of M and N in T₁, T₂, T₃, and their agreed ratio in the original contract. Futures may relate to real or financial assets supplied in a given currency, or to the trade between different currencies.

If the market price of N in T₂, the period of the end of contract, is higher than its agreed-upon price, in terms of M, the supplier A loses. In the opposite case, it is purchaser B who loses. But we have seen for options, one must distinguish between the case in which A owns N from that in which A has to buy it for delivery to B; and between the case in which B, wanting M for his production or for his portfolio, has the liquidity to pay for it from that in which he has to resell it.

It is likely that futures on public debt will develop in the secondary market. In debt management it is important to avoid the fall in their value, which is a signal of the reduced appreciation of that debt.

"Forward currencies" contracts are futures for the purchase of currencies F, by subjects A, who will pay with D at a "predetermined" rate Uₘ/Uₖ (it may be the rate in T₀ or a rate to be determined according to given
parameters). These contracts are relevant for governments who have to service foreign debts. If government A buys a future for F, and the market rate of F/D is lower than UF/U'D, A will incur a loss. Thus if A wants to hedge on the rate of exchange, he can, rationally, buy a future if, in his belief, it is unlikely that D will improve on F. If A is uncertain whether D will improve or worsen on F, to hedge, he might prefer to buy a “call” on F. But a future may be less expensive than an option, because the risk is shared. As we noted for options, those who supply F by forward contracts need not to be risk takers. If they are bankers, the opposite is usually true. In regulated markets they are obliged to cover their risks with adequate assets and diversified portfolios.

An important future for public debt management is the forward rate agreement, in which one party receives and the other pays, at a given time, the difference between the value of a given sum of money, in a given denomination, assessed by a predetermined rate of interest, and the effective value of a rate of interest chosen by the parties (suppose the average interest rate of the Libor or of the German Bund, in that day or in the month before that day).

Another kind of future relevant for public debt management and for servicing foreign debt, in cases of a temporary lack of liquidity denominated in foreign currency, is the swap on interest rates or on currencies. In the interest rates swap, the parties exchange two interest rates flows, on a given sum, denominated in a given currency, one predetermined and the other to be determined according to the behavior of the chosen rate (for example, the Libor or the Bund) or both to be determined according to the behavior of the chosen rates (for example, for one party the Libor and the other the Bund). In the currencies swap (which may be relevant for servicing public debts denominated in foreign currency) the two parties give each other two given amounts of two different currencies, presumably at the present rate of exchange, and commit themselves to get back their original sums at a rate of exchange that will be fixed according to predetermined criteria relating to the variations in the rate of exchange plus an interest rate on them.

In summary, derivatives may be employed to hedge against risk or to offer protection against risk and to engage in risky operations, hoping to gain through them. A bundle of derivatives, with risks depending on opposite or diversified events may also appear as a way to perform risk-indifferent activities.

**Derivative Strategies for the Public Economy**

In the world of derivatives, strategies may differ greatly according to objectives and to the functions of the players. Those who risk their own wealth may behave very differently from those who merely hazard the
property of others as agents of the public economy. Market economy actors may decide to play risky games because they prefer risk. The same risks with the taxpayers’ money should not be permitted to public economy agents. One cannot assume that taxpayers have a preference for risk. Moreover, it is likely that public economy agents tend to underassess risks, since they play with the wealth of others in an asymmetric informational setting. They may hope to disguise probable losses, while taking the praise for possible gains. In the risky games performed by the agents of the government, utility functions of others may easily be incorporated in the utility function of the community, without cost for these agents.

Actors of real and financial economy, who play in risky markets, may buy options and futures to hedge against risks: either to play a maximax strategy, in face of risky situations, being risk neutral or to play a maximin. They may adopt this strategy, being risk averse at least in some circumstances, because they are unable to assess the risk, that is, because there are important uncertainties that may lead to unpleasant outcomes.

Public economy agents may find themselves in similar situations. The question, then, arises whether they should play a maximax or a maximin strategy. Situations may differ. However, whenever it is difficult to make objective valuations of the risk, maximin should be preferred, because maximax implies a choice made in uncertainty with subjective valuations. And as noted, the agents of the public economy operate with the wealth of others and may incorporate the utility function of others, without cost to themselves. Thus their discretionary choices under risk may be biased. And apparent maximax, pursued with uncertainty, supposedly done in the interest of the community, may actually be shaped by the interest of particular parties.

It may be logical to expect that those who rationally invest in derivatives as normal risk-neutral investors would gain, on average, as would any other investor. But it would be illogical to expect that those who buy derivatives for a hedge should make a net gain by them. What they aim to do, on the contrary, is to pay a small cost to avoid the risk of bigger losses. Thus governments that buy and issue derivatives in order to hedge against risks in their debt policy should not be expected to make gains on them. Rather, the question may be why they have the need to buy derivatives to hedge risk in debt management and to sell them in order to improve their privatization policies.

Diversification of the debt portfolio in order to reduce foreign exchange risks, as far as issues denominated in foreign currencies are concerned, is possible only by choosing currencies that fluctuate among themselves without a systematic bias, a situation that might be true for the Eurocurrencies and the dollar.
The reduction of the risks of exchange for the domestic debt purchased by foreigners, whether in foreign or domestic currency, is only possible if the domestic monetary policy and domestic balance of payments are such that the rate of exchange of the national currency remains stable compared to the foreign denomination, or that the fluctuations below and above parity tend to compensate each other through time. Clearly, this may be likely for debts traded among countries with currencies having similar ratings, as perhaps among some transition countries, but it may not be the case for the currencies of transition countries in relation to the Eurocurrencies and the dollar.

Thus, there remains a need for “weak currency” countries (which most transition and developing countries are) to hedge against exchange risks in public debt management. To raise funds in foreign financial markets, in “strong” currencies, obviously means paying lower interest rates so that the service of the foreign debt appears less costly and, in some cases, much less than that of the domestic debt. The chief reasons for this differential are different rates of inflation and different credit-worthiness. Clearly, these may also be reflected in the risk of exchange among currencies. One may argue that buying derivatives to hedge against the exchange risk is a zero-sum game because the premiums to be paid to get forward contracts or options to cover the risk of a deteriorating rate of exchange for the domestic currency may be equivalent to the risk that causes the differential in the given interest rates. The conclusion might be that it is simply better to avoid issues in foreign currency. There are several reasons why this statement is wrong and employing derivatives to smooth the exchange rates risk on foreign debts is rational policy. The first is that a debt in domestic currency owned by foreigners entails exchange risks while exerting a greater burden on the balance of payments because of the higher interest service; foreign perceivers normally ask their banks to be paid in their own currency. Thus the problem becomes the size of the budget deficit to be financed and the balance of payment situation. In a simple model, with supply of savings and production capacity given, a balance of payment deficit, at full employment, is nothing but the consequence of a budgetary deficit and of a permissive domestic credit policy that accommodates it. An external debt will develop under these conditions, and it is likely that a part of it will be represented by domestic public debt bought by foreigners at a price lower than their face value. If this is true, and the government is unable to reduce the deficit or stimulate a higher level of savings and production, it is better to issue public debt denominated in foreign currency, while hedging by derivatives.

Public economy agents’ decisions should rationally take into account their “external effects” on the overall economic and financial system. The risk of a devaluation that appears of a modest size, if it materializes
in an atmosphere of lack of confidence, may have spiraling potentials. It is rational, then, for those who manage the external public debt to pursue a maximin and not a maximax, by hedging with derivatives, in spite of the current cost of such a policy.

A point in favor of the policy of hedging by currency derivatives while raising foreign debt, is that although the interest rate differential, on medium- and long-term debts of a "weak currency" country vis-à-vis the interest rate of strong currency countries, may reflect a medium- or long-term uncertainty about the government's financial stability and solvency, a premium on shorter term derivatives protecting against domestic currencies' devaluations may reflect a much smaller risk. This may be particularly the case when the financial conditions of the considered country are gradually improving.

The opposite, unfortunately, will be true for hedging on medium- to long-term debt in foreign currency against a devaluation of the currency of a country whose financial conditions are deteriorating. But still, there is room for employing derivatives for a hedge against the risk of exchange devaluation in the service of public debt denominated in foreign currency, considering the risk of spiraling effects of downward adjustments in the rate of exchange. It is true, however, that an excess of foreign public debt, whether in foreign or in domestic currency, may create a strain on the balance of payments, which one can hardly remedy through purchasing derivatives to protect against the risk of exchange. Here, the remedy is to reduce inflation and budgetary deficit, to reduce the public debt and the cost of its service.

In any case, if hedging by use of currency derivatives is to be effective it must be drawn on foreign, not on domestic, financial institutions. Indeed, in case of weakness in the domestic currency, the possibility of drawing foreign currency from abroad for the service of its external debt, helps the government in defending its exchange rate. On the contrary, if this foreign currency is called from domestic credit institutions, the stability of the country's financial system may be further prejudiced.

Should governments of the transition countries issue warrants and other derivatives on the sale of stocks of their enterprises or should they wait until they are ready to be sold on the market? To issue warrants and bonds with options on stocks of public enterprises of uncertain value is not a wise policy, particularly if the government is making the effort to improve them. Under that policy, the benefits of these efforts, instead of profiting taxpayers, go to the purchasers of these options. On the other hand, privatization procedures for public enterprises may take time. And, if the aim is to spread their property out, an issuance of warrants and options linked to public bonds may ease their diffusion among savers.
Contingent Liabilities and Debt Derivatives of Central Governments

Guarantees are common in the business sector, where they are usually supplied by specialized financial institutions whose liabilities, if the principles of a well-ordered market economy are respected, are accurately accounted for and subject to prudential rules. Public economy guarantees are much less regulated and rarely recorded in public account documents, in spite of the fact that they may produce burdensome future liabilities to the taxpayers and to the country as a whole.

In addition to explicit guarantees, governments may have contingent liabilities for debts of other public and private sector institutions. Let us consider a list of guarantees and contingent liabilities that might increase the aggregate central government debt burden.

- Legal or moral responsibility of the central government for the debts of local governments, their enterprises, their nonprofit institutions in the social and cultural area, and their quasi-market corporations performing public services. These services would include water supply, local transportation, ecological services, and regional toll roads.

- The moral (or legal) responsibility of central government for the contingent liabilities of independent social security and social insurance institutions. In particular, this would include social insurance and social security pension institutions—whether officially "funded" or officially unfunded—financed by compulsory contributions that give vested rights to the enrolled. This would automatically produce future liabilities for these institutions.

- The moral (or legal) responsibility for the debts of nonprofit social welfare, social economy, and cultural institutions and cooperatives performing "important" public interest services (hospitals, universities, research institutions, theaters, museums, credit and insurance cooperatives, and agricultural cooperatives). (These institutions are controlled by the central government by its appointment of members of the boards and personnel or by its regulation and licensing of their activities as public services.)

- Legal (or de facto) contingent liability for the liabilities of autonomous public enterprises, whether organized as corporations or in other forms, entirely owned by the central government. (Generally the 100 percent ownership implies automatic legal responsibility of the owner, for debts made by the administrators of the considered asset. Examples may include state railways, the post,)
state export credit insurance, state agricultural storage enterprises, state foreign currency [monopolistic] institutions, state long-term public utility credit corporations, state broadcasting and television companies, state printing offices, and state arsenals.)

- Guarantees given by the treasury or other central government institutions to public economy industrial, commercial, and financial corporations to enable them to raise funds on the market, domestically and abroad, that they otherwise could not obtain or could obtain only at a higher interest rate. (In addition to those mentioned above, typical institutions include state electricity corporations, state telephone companies, state airlines, national oil companies, national maritime corporations, state defense industry corporations, import-export corporations, and national credit and insurance companies.)

- Explicit and implicit guarantees for the liabilities of private or mixed economy enterprises operating for the government in the quasi-market activities of “privatized” public investments and services. This includes BOT (build, operate, and transfer), with or without leasing; BTO (build, transfer, operate), with or without leasing-back; “build and operate as a franchise,” or “build and operate as a public service concession,”—whether within or outside a legal or de facto monopoly. (The state’s different kinds of legal relations with these quasi-market activities determine the extent of its liability as guarantor.)

- Guarantees by the government on (concessional) public policy loans given—on the basis of state incentives and funding—by the banking system to various sectors of economic activity or areas that seem to deserve public incentives. (Some examples include low-cost housing, small business, cooperatives, trade modernization, technological investments, agricultural improvements, energy-saving, environmental protection, cultural and tourist industries, exports, and less developed and declining areas and sectors.)

- Moral liabilities of the central government for the contingent liabilities of credit institutions considered to be in the public interest. (The United States’ federal government bail-out of saving banks to cover their liabilities with depositors is the textbook example of this kind of “put” liability.)

- Moral responsibility of the central government (supported for international institutions) for the contingent liabilities of “important” financial institutions whose failure would create a chain of “atmosphere external diseconomies,” with perverse effects on the rate of
exchange, on the stock market, and on the solvency of the private economic system. (The 1997 Korean case is a textbook example.)

- Moral responsibility of the central government for the contingent liabilities of the central bank in relation to a great domestic banking crisis owing to excessive, hazardous lending (Japan is the textbook example.)

In light of the Maastricht Treaty, accounting for these guarantees and contingent liabilities is needed if there is to be a comprehensive picture of the possible future debt burden—to be added to the standing liabilities for public debts and the budgetary debts of the considered government.

To assess their value, however, implies a delicate analysis of the solvency of the underlying principal assets. Their value also depends on the degree to which the considered government becomes liable and on the ways in which it is possible for the considered government to put a limit on these contingent liabilities by making use of its sovereign power.

Social security institutions deficits may be covered by increasing the social security contribution or by reducing pension rights: by cutting "privileges" or by prolonging the retirement age and by fiscal illusions—devices such as applying additional taxes and relenting, and filing and halting escalator clauses protecting their purchasing power. But before these remedies are adopted, it seems prudent to make a truthful accounting of these likely future net liabilities, as they appear, without interventions, assuming a 100 percent "put" on the government.

Prudent recording of these liabilities should not be conceived as a mere exercise in comprehensive public accounting. It is both a means to ascertain what the hidden costs of chosen policies are and a means to focus on measures to be undertaken to prevent undesired moral and quasi-legal government responsibilities for liabilities of other public and private concerns.

Private initiative in public investments and in the supply of public and quasi-public goods, in principle, particularly if pursued by competitive devices, must be welcomed—it broadens the scope of market operations in public economy activities and reduces the need for public indebtedness. The standard objection that interest rates for public debt are normally lower than those paid by market operators, so that a privatization of public investments makes their financing more expensive, rests on a confusion between the interest rates on public debt, with or without the financing of these investments. The bigger the public debt, the higher the interest rates, so the government will pay a lower interest rate by reducing the public borrowing requirement. These rates might be lower than those paid by the private initiatives replacing the public sector. This, however, does not mean that these last rates should
be as high as those that the government would have paid if its yearly borrowing requirements had been bigger because of bigger financing needs. Moreover, if public investments are financed by private initiative, presumably the time period to complete them will be shorter, and financial costs, accordingly, reduced. Public investments may be accomplished more efficiently if their ownership remains with their market economy producers.

But one must not overlook the public costs of guarantees by governments for the contingent liabilities that may arise from these initiatives in the course of time. Transparent accounting is needed to assess the effective costs of these ways of supplying public goods, to compare them with their benefits and with other alternatives. This accounting will help officials understand the extent of a government's implicit liabilities so that contracts might be better specified and prices revised.

Guarantees by governments' institutions on loans of other institutions should be made transparent by their proper recording in annexes to the annual budgets. Otherwise, they continue to constitute hidden transfers, with unknown costs and unknown beneficiaries. The first step in this accounting is to record the face value of the guarantee, which is often (but not always) specified in the legal instrument conceding it. A conversion in domestic currency, at a likely rate of exchange, may be needed if the guarantee is given in a foreign denomination. The second step is to evaluate the derivative, as such. Sometimes, in the case of guarantees on risks on exchange rates on export credits to foreign countries, for instance, it may be possible to find a market price for these derivatives if they have reliable counterparts on the market.

A market reference does not exist for other public economy guarantees. In these cases, governments should try to provide estimates by independent official bodies and private rating institutions. At the end, in that appendix to the budget, the first column should have the face value of a given public guarantee and the second column the estimated value of its derivative and its standing at the beginning of the fiscal year.

A central government may have an extensive variety of legal, quasi-legal and moral liabilities for the debts and deficits of other public and private institutions. Among them are lower level governments, public enterprises, and quasi-public nonprofit institutions and cooperatives. The systematic recording of the legal and moral "derivatives" of these liabilities, even if the work is laborious and the valuations difficult, gives the central government a way to recognize the lack of constraints on its finances and the related hidden costs and risks.

For governments, the surest way to avoid responsibilities for the excessive liabilities of its public enterprises is to make an extensive privatization of them as soon as possible. This is true even if the gov-
ernment has no legal obligation to take care of their debts, and they, theoretically, could be declared bankrupt. Indeed, governments can hardly resist the blame for not intervening. If the failure affects important economic and financial concerns, and particularly if they have important foreign debts, lack of action by the government damages the general creditworthiness of the country.

However, if the government decides to privatize its public enterprise, it must be prepared to undergo the costs of making them saleable—in other words, it must courageously face the costs of avoiding future greater losses.

As for the responsibility of the central government for the liabilities of lower level governments, similar problems arise. In principle, these governments, if insolvent, might go bankrupt. But the central government cannot afford to let this happen. On the other hand, it cannot accept systematic liability for debts irresponsibly made by other governments. What is needed is the adoption of restrictive regulations that hinder lower level governments from making debts for current expenditures and limiting their debts for investments to given aggregate levels—with the further requirement that these debts should be serviced through earmarked revenues.

As for the nonprofit institutions, those cooperatives and concerns of dubious legal nature in which the government has a substantial involvement, it is important to decide whether they are really a part of the government or not. If not, the government should leave them entirely in private hands. If they are part of the government, they should be recognized as off-budget government units, with all the responsibilities of government units. And their net debts should be consolidated in the government debt—this being the value of these “derivatives” for it. Transparent accounting of all standing liabilities increases the efficacy of public debt management and the creditworthiness of the government.
Appendixes
Profile of Speakers

**MARIO I. BLEJER**

Mr. Blejer is a Senior Advisor in the Monetary and Exchange Affairs Department of the International Monetary Fund. He holds a Ph.D. in economics from the University of Chicago. He has held senior positions at the IMF and the World Bank, and has taught at Boston University, the Hebrew University of Jerusalem, and New York University. He has published extensively on fiscal issues, trade and balance of payments problems, and economic stabilization and liberalization in Latin America and economies in transition. He has broad experience of economic reform in previously centrally planned economies, and he has been involved in research, economic advice, and technical assistance to China, Eastern Europe, and countries of the former Soviet Union. He was team leader for the Task Force for the Study of the Soviet Economy in 1990.

**FRANCESCO FORTE**

Mr. Forte is a Professor of Public Economics in the Faculty of Economics and Business, University of Rome. From 1982 to 1983 he was Italy’s Minister of Finance, and from 1983 to 1985 he served as Minister of European Affairs. During his distinguished career he was High Commissioner for Aid to Underdeveloped Countries, and from 1992 to 1994 he was Chairman of the Finance and Treasury Committee in the Italian Senate. Currently, Mr. Forte’s main areas of research include fiscal and monetary constitution, budgetary rules, public economy accounting, and national income accounting.
Hafez Ghanem

Mr. Ghanem is currently Sector Leader at the Poverty Reduction and Economic Management Unit, Europe and Central Asia Region. He joined the Bank in 1983 as a Young Professional. He then worked on public economics issues in the Bank's Country Policy Department. He held several country economist positions, including those for Côte d'Ivoire, the regional mission in West Africa, and the resident mission in Dhaka, Bangladesh. Upon return to the Washington office, he became a member of the core team who prepared the 1995 World Development Report on Labor Markets. After this assignment, he became the principal economist covering Armenia, Georgia, Moldova, and Ukraine. Mr. Ghanem holds a Ph.D. in economics from the University of California, Davis. His publications include papers on foreign borrowing strategies and on labor market policies.

Dieter Glatzel

Mr. Glatzel is Head of Unit, Financial Accounts, Eurostat in Luxembourg. Between 1973 and 1983, he was Administrator of Financial Accounts, first in Eurostat Brussels and then in the Luxembourg office. Before joining Eurostat, Mr. Glatzel was a financial analyst at the Union Bank of Switzerland, Geneva. His activities have included serving as chairman of the working party for Financial Accounts, Eurostat, member of the Working Group on Statistics at the European Monetary Institute, member of the Group of European Financial Statisticians at the OECD, and member of the group of experts for the revision of the SNA financial accounts in 1988. Mr. Glatzel holds an economics degree from the University of Berlin and a Ph.D. from the Geneva Institute of Graduate Studies.

Homi Kharas

Mr. Kharas is currently Director of Economic Policy, Poverty Reduction and Economic Management (PREM) Network of the World Bank. In this capacity, he manages economic policy work, including broad-based growth, fiscal sustainability, macrofinancial integration, aid effectiveness, and trade and competitiveness. Before his current assignment, he was Lead Economist and Country Operations Chief for Brazil in the Bank, and, prior to that, Lead Economist, Latin America and the Caribbean Region. He was also a Senior Partner, Jeffrey D. Sachs and Associates. Mr. Kharas completed his Ph.D. in economics at
Harvard University and his undergraduate studies at the University of Cambridge.

**Louis de Montpellier**

Since August 1995, Mr. de Montpellier has been General Advisor of the Treasury of Belgium. As a member of the Treasury management team, his focus is on the development of Belgium's funding strategy and debt management in the domestic and international markets. He was Director of Funding of the EBRD in London for four years, and joined the EBRD from CS First Boston in London, where he was a capital market covering officer for Belgian and French institutional clients. Previously, he worked as an institutional portfolio manager for central banks with the Bank for International Settlements in Basel. Mr. de Montpellier holds a master's degree in law from the Catholic University of Leuven, a master's in economics from the Catholic University of Louvain, and an M.B.A. from the Johnson Graduate School of Management, Cornell University.

**Hana Polackova**

Ms. Polackova is Public Sector Management Specialist in the Europe and Central Asia Region of the World Bank. She has worked primarily in central European countries, assisting in public finance management reforms. Her focus is on the management of public expenditures, debt, contingent liabilities, and fiscal risks. In 1996, she was a Visiting Fellow at the New Zealand Treasury. Prior to joining the World Bank, Ms. Polackova worked on the strategy for accession to the European Union at the Ministry of Foreign Affairs in the Czech Republic, and during 1990–92 she was Special Advisor to President Havel. Ms. Polackova holds a master's in economics and public affairs from the Woodrow Wilson School, Princeton University, and a Ph.D. in physics from Masaryk University, the Czech Republic.

**Marcelo Selowsky**

Mr. Selowsky is the Chief Economist of the Europe and Central Asia Region of the World Bank. From 1988 to 1992, he held the same position in the Latin American and Caribbean Region. Before 1988 he was Division Chief in the Trade and Macroeconomic Policy Division. Earlier in his career Mr. Selowsky was Economic Advisor in the Development
Economics Department and Operational Policy Staff and Economist in the Development Research Center at the Bank. He was Assistant Professor of Economics at Harvard University and Visiting Professor at the Woodrow Wilson School, Princeton University and, more recently, in the Economics Department at UCLA. Mr. Selowsky holds a Ph.D. from the University of Chicago.

GRAEME WHEELER

Mr. Wheeler is the Director of the Financial Products and Services Department in the Treasury of the World Bank. For the four years before joining the Bank, he was the Treasurer of the New Zealand Debt Management Office (NZDMO) and Deputy Secretary to the New Zealand Treasury. Before this, he was Director of Macroeconomic Policy and Forecasting in the New Zealand Treasury. In the second half of the 1980s, Mr. Wheeler was the Economic Counselor for the New Zealand Delegation to the OECD in Paris, and he headed the New Zealand delegation in meetings that led to the establishment of the EBRD. He holds a bachelor’s degree in commerce and administration with double majors in economics and applied economics from Victoria University of Wellington and a master’s degree in commerce in economics from Auckland University.
Participants from Central European Countries

**Bulgaria**

Ms. Nikolina Micheva, Director, Fiscal Services Department, National Bank of Bulgaria
Mr. Latchesar Stefanov, Head, General Department, External Finance, Ministry of Finance

**Czech Republic**

Mr. Renata Cechova, Deputy Head, Treasury Division, Ministry of Finance
Mr. Jiri Franta, Head, Treasury Division, Ministry of Finance
Ms. Miroslava Dostalova, Monetary Operation M. and Financial Markets Section, Banking Transactions Department, Czech National Bank
Mr. Milan Riha, Chief, Dealer of Money Market Operations, Banking Transactions Department, Czech National Bank

**Estonia**

Mr. Agate Dalton, Director, External Department, Ministry of Finance
Mr. Agu Lellep, Secretary General, Ministry of Finance
Mr. Martin Poder, Deputy Secretary General, International Affairs, Ministry of Finance
Hungary

Ms. Maria Dunavolgyi, Managing Director, Debt Management Agency, State Treasury
Mr. Attila Nadi, Portfolio Manager, Debt Management Agency, State Treasury
Mr. Jozsef Thuma, President, State Treasury

Latvia

Ms. Agita Birka, Head of External Debt Management Division, Foreign Exchange Department, Bank of Latvia
Ms. Dace Brencena, Director, Department of Domestic Financial Resources, Ministry of Finance
Mr. Nilnis Lindemanis, Deputy State Treasurer, Ministry of Finance
Mr. Aivars Veiss, State Treasurer, Ministry of Finance

Lithuania

Mr. Gintautas Galvanauskas, Deputy Director, International Relations Department, Bank of Lithuania
Mr. Ramunes Lygis, Head, Market Operations Division, International Department, Ministry of Finance
Ms. Ruta Skyriene, Director, State Debt Department, Ministry of Finance

Poland

Ms. Anna Suszynska, Economist and Debt Management Specialist, Public Debt Department, Ministry of Finance
Mr. Jacek Tomorowicz, Director, Foreign Department, Ministry of Finance
Ms. Anna Trzecinska, Deputy Director, Money and Credit Policy Department, Ministry of Finance
ROMANIA

Ms. Aura Gereanu, Director, Balance of Payments Department, National Bank of Romania

Ms. Lia Tace, Balance of Payments Department, National Bank of Romania

SLOVAK REPUBLIC

Mr. Jozef Trojak, Chief of the Treasury and Financial Policy, Ministry of Finance of the Slovak Republic

Mr. Jurac Macejka, Director, Department of State Final Account, Ministry of Finance of the Slovak Republic

SLOVENIA

Mr. Branko Greganovic, Undersecretary of State, Head of Department, Ministry of Finance

Mr. Valter Rescic, State Secretary, Ministry of Finance