

Transparency and sustainability of the public balance sheet: perspectives from APEC

Tom Dickson and Alva Lim¹

This article is based on the paper prepared for the 2007 APEC Finance Ministers' Process. Good fiscal risk management is identified as a policy priority in the Hanoi Medium Term Agenda, agreed by APEC Finance Ministers in 2006. The article raises issues for discussion and provides an overview of emerging practices in the area of fiscal sustainability. The paper concludes by summarising key principles drawn from these practices.²

Achieving economic and social objectives depends on managing risks to fiscal sustainability. This paper aims to facilitate discussion on appropriate ways to enhance fiscal transparency and sustainability by managing key risks from off-balance sheet government activities.

-
- 1** The authors are members of Macroeconomic Group in the Treasury. This article has benefited from comments and suggestions from Michael Bath, Gordon de Brouwer, Hugh Hartigan, John Hawkins, Jason McDonald, Murray Petrie, Neil Richardson, Kim Salisbury, Allen Schick, Luke Yeaman, and selected APEC economies. The views in this article are those of the authors and not necessarily those of the Australian Treasury or the Australian Government.
 - 2** The APEC fiscal sustainability principles outlined in this paper were elaborated and endorsed in August at the 2007 APEC Finance Ministers' Meeting, Coolum, Queensland. http://www.apec.org/content/apec/ministerial_statements/sectoral_ministerial/finance/2007_finance.html.

Introduction

Fiscal sustainability is recognised as a key requirement for economic development, stability and resilience among APEC economies. Sustainable fiscal policy enhances economies' resilience to shocks, which in turn enables governments to continue focusing on broader economic and social priorities.

Governments are exposed to a number of risks, and it is the interplay of these risks that can magnify the effects of relatively small events. Financial liberalisation and integration and increased trade have encouraged an expansion in private capital flows. Sudden fiscal instability can expose weaknesses in debt management, macroeconomic frameworks, the financial system, regulatory and supervisory systems, as well as damage economic growth, wealth and economic development.

Off-balance sheet activities of governments are receiving greater attention due to their observed effects on fiscal stability and economic activity. Activities such as public-private partnerships, state-owned enterprises, public pensions, sub-national levels of government, and government guarantees (explicit or implicit) can lead to potential claims on the central government. These risks are often not identified in traditional government accounting, and accrual accounting balance sheets may only capture a small proportion of them.

Where governments have significant risk exposures, a range of factors such as an external shock, a change in market sentiment or a business collapse can quickly crystallise these obligations. Depending on the magnitude of these obligations they can have a significant impact on the budget balance, government indebtedness and fiscal sustainability.

By managing fiscal risks appropriately, governments can avoid the need to spend unbudgeted resources or raise debt and taxes unexpectedly to pay for obligations that may have been foreseeable but against which provisions were not made. Good fiscal risk management does not isolate an economy from shocks, but equips governments with the capacity to absorb the consequences of shocks without compromising other economic and social objectives.

Traditional measures of fiscal performance such as low budget deficits and debt levels are not sufficient indicators for fiscal discipline or medium-term sustainability. Increasingly, investors, credit rating agencies, multilateral institutions and commentators are looking behind the public sector balance sheet at the underlying exposures generated by government activities (Polackova 1998, p 3).

Developing new strategies to manage risks to fiscal sustainability is becoming more important as economies are increasingly characterised by greater use of sophisticated

and complex fiscal arrangements and a focus on longer-term fiscal pressures, such as infrastructure, health care and pensions (Brix and Schick 2002).

An underlying pressure contributing to this trend may be the need for governments, especially in developing economies, to present sound public finances. The desire to demonstrate fiscal prudence (such as achieving deficit targets, reducing debts and balancing budgets) combined with structural reform and satisfying infrastructure requirements are encouraging governments to consider financing mechanisms that may entail higher degrees of risk.

There may be serious consequences if off-balance sheet risks are realised, however, even if risks are not realised, off-balance sheet activities of governments can change economic behaviour. This highlights the need to discuss principles that could guide good practice and that are suitable for all APEC economies in light of different stages of development and institutional capacity.

APEC finance ministers identified good fiscal risk management as a priority in the 2006 *Hanoi Medium-Term Agenda*. In particular, finance ministers recognised that further work was needed on managing off-balance sheet risks and this was a focus of discussion at their 14th annual meeting in Coolumb, Queensland.

The theme complements the work undertaken in Viet Nam's host year in 2006 on the importance of fiscal risks arising from revenue management. It also builds on related work done in Chile in 2004 and two APEC fiscal risk management workshops last year on: 'Addressing Fiscal Risks in Public Finance Systems' Hanoi, Viet Nam and 'Fiscal Risk Management' Lombok, Indonesia.

Identifying off-balance sheet risks

Identifying fiscal risks is the first step towards understanding their possible consequences and formulating an appropriate risk management response. Fiscal analysis is moving beyond conventional approaches to identifying risks which only account for direct revenue and expenditure. Economies are developing more holistic approaches to assessing fiscal performance based on concepts of fiscal sustainability, which includes contingent liabilities and longer-term pressures. The matrix below provides a framework for understanding and identifying off-balance sheet risks.

Table 1: Categorisation of fiscal risk

	Direct An obligation in any event	Contingent An obligation if a particular event occurs
Explicit Government liability as recognised by a law or contract	Sovereign debt Budgetary expenditures (including legally binding long-term expenditures such as public/civil servant salaries and pensions)	State guarantees State insurance schemes Guarantees agreed in public-private partnerships Financial system failure
Implicit An obligation of government that reflects public expectations	Future public pensions, if not required by law Social security schemes, if not required by law	Financial system failure Default of non-guaranteed state-owned enterprise or sub-national level of government Disaster relief

Sources: Adapted from Polackova (1998) and Brixi and Irwin (2004).

The matrix illustrates the importance of looking beyond the balance sheet, which typically only reports on direct explicit liabilities (the non-shaded cell). Off-balance sheet risks include explicit and implicit contingent liabilities, as well as implicit direct liabilities (the dark-shaded cells above). Examples where this framework has been applied to examine contingent liabilities include new member states of the European Union (Brixi 2004), East Asia and the Pacific (Brixi and Irwin 2004), and the Czech Republic (Czech Republic 2007).

First steps towards identifying risk

Fiscal risks are relevant when they threaten economic and social policy objectives. Risks are easier to identify if policy objectives are clearly articulated and understood. Common objectives include stable, effective and efficient government spending and tax arrangements that: meet stated government policy objectives for particular initiatives; minimise behavioural distortions; generate benefits that are greater than costs; and meet overarching economic and social priorities.

A first step in identifying fiscal risks can involve an explicit commitment to fiscal objectives. Examples include Australia's *Charter of Budget Honesty Act 1998*, New Zealand's *Fiscal Responsibility Act 1994*, the Russian Federation's Budget Code (see Appendix A) and Chile's *Fiscal Responsibility Law 2006* (see Appendix A). In New Zealand's case, the law requires fiscal policy to comply with general principles of responsible fiscal management. Flexibility in the New Zealand model enables governments to temporarily depart from these principles (which are broadly defined in the legislation), provided the public receives an explanation why this is necessary and the path to compliance (New Zealand Treasury 2007).

Building capacity to identify risks

Once fiscal policy objectives have been established, governments are in a position to identify risks. While it is usual for a central government agency such as the Treasury or Ministry of Finance to be responsible for meeting fiscal objectives, implementation is often undertaken by other government departments with responsibilities for service or programme delivery.

This creates a role within the Treasury or Finance Ministry for identifying and managing fiscal risks across all government operations. Allocating the responsibility for actively reporting and managing contingent liabilities to heads of departments can be a useful starting point for identifying fiscal risks across government. However, a lack of appropriate resources, including training and support, can make enforcement problematic and limits the degree to which risk identification and management can be comprehensive and robust.

One way of overcoming these capacity issues is to establish a central unit or agency to assist government departments and enterprises to identify and manage risks. Centralisation has been a path followed by New Zealand, Sweden and the Czech Republic to assist with managing debt, but with an expanded role to cover other forms of risks including contingent liabilities.

Measuring off-balance sheet risks

Supplementing traditional measures of fiscal performance

Government budgets are useful tools for assessing the fiscal position when considering the annual balance between revenues and expenditures. However, the objectives of sustainable fiscal policy also require governments to provide the capacity to meet future obligations, enable sustainable economic growth and foster intergenerational equity.

This medium and longer-term perspective is not fully reflected in traditional budgets or balance sheets. Cash budgets often lack clarity on the distinction between current and capital expenditure, ignore public assets, and do not reflect depreciation from inadequate maintenance of public assets (Brix and Irwin 2004). Many governments have adopted or are in transition towards reporting fiscal performance according to the IMF's Government Financial Statistics Manual 2001 (GFS) or variants of accrual budgeting such as the International Public Sector Accounting Standards; (Irwin 2006b, p 14).

The trend towards accrual budgeting has improved the way liabilities are reflected in measures of fiscal performance, particularly for pension liabilities. Even so, accrual

accounting is neither necessary nor sufficient for managing contingent liabilities (Athukorala 2003). Contingencies such as loan guarantees and long-term purchasing contracts, which can have important economic influences on the general economy, do not result in transactions or other economic flows recorded in accrual budgets until they are realised (IMF GFS Manual, p 10). Generally, provision is only made for recording contingencies as memorandum items, which enhances transparency but only to a limited extent.

This highlights the potential for a 'hidden deficit' which is the difference between the reported budget deficit and the actual budget deficit when estimates of total public debt, including contingent liabilities, are included. Kharas and Mishra (2001) estimate that the average hidden deficit of 15 selected developing countries range from 0.3 per cent of GDP (Tunisia) up to 7.9 per cent of GDP (Czech Republic).

In light of the limitations inherent in traditional fiscal performance measures, standard-setting bodies are looking at developing frameworks for measuring and reporting in order to accurately account for contingent liabilities. Improving and adopting new accounting standards is a lengthy process, but there are measures that enable governments to move beyond the minimum standards to improve measurements of fiscal performance (some at a relatively lower cost). For example, governments can decide that:

- departments must report contingent liabilities to a central agency such as the Treasury or Ministry of Finance;
- as far as is practicable, budgets should, when approving a contingent liability (such as guarantees), reflect the expected costs of those liabilities;
- significant contingent liabilities, defined in terms of the type of liability and/or its potential consequences, should be considered for approval in the same way as other forms of expenditure risk in order to enable governments to weigh the cost of the liability against other competing claims on public resources; and/or
- reserves (either notionally or through real-money funds) might be set aside based on the expected cost of contingent liabilities (Brix and Irwin 2004, p 20).

Methodologies used to measure and prioritise off-balance sheet risks

Information on the probability and consequences of risks enables governments to prioritise actions that may be required to address these risks (Schick 2002).

Subjective approaches are useful for prioritising risks that are not easily quantifiable yet still significant. For example, risks may entail small fiscal costs but generate significant strategic, political or operational consequences that should be accounted for

when formulating an overall risk management strategy. Risks could be rated as high, medium or low to determine priorities for risk mitigation (see Table 2).

Table 2: Evaluating risks

		Probability		
		Low	Medium	High
Consequence	Low	Take the risk	Take risk, but monitor and record	Record, manage and monitor
	Moderate	Take risk, but monitor and record	Management effort worthwhile	Management effort required
	High	Management effort required	Considerable management required	Extensive management essential

Source: Adapted from Australian and New Zealand Standard AS/NZS 4360.

In this framework, risk managers have the flexibility to define what low, moderate and high consequences mean. For example, a low consequence might mean that the risk would not require the involvement of the Minister or executive management in determining a response. A high consequence could mean that the government may be less effective or the economy could enter into a recession.

Risk managers may decide that a low probability could mean that the risk may occur once in 10 years, while a high probability could mean that the event is likely to occur often. By allowing flexibility in how the government defines consequences and probabilities, the framework can match the effort on risk mitigation to a government's risk preference.

Quantifying risks involves estimating the expected or, in some instances, the worst-case impacts³. The value of contingent liabilities can be estimated in various ways including actuarial techniques, econometric and financial models and contingent claims analysis (Currie and Velandia 2002, p 14). Many of these focus on the concept of estimating the future pattern of losses based on historical tendencies. Where historical data are not available, some APEC economies can estimate the value of contingent liabilities using Monte Carlo simulations (Mody 2000; Chilean Ministry of Finance 2007).

³ Au-Yeung, McDonald and Sayegh (2006b) provide an overview of the economic consequences associated with government risk bearing.

Transparency of off-balance sheet risks

The benefits and costs of transparency

The IMF's Code of Good Practices on Fiscal Transparency was developed in response to a broad consensus that good governance is of central importance in achieving macroeconomic stability and high-quality growth, and that fiscal transparency is a key aspect of good governance. Greater transparency can improve the credibility of fiscal policy and, in turn, create greater public support, more favourable access to domestic and international capital markets, and lower the incidence and severity of crises.

Measures to improve transparency recognise that effective economic management depends on the relationship between the government and its stakeholders (both domestic and international). For example, transparency can foster confidence and credibility in the eyes of financial markets which can generate real economic and financial benefits in the form of greater investment and lower borrowing costs for the government.

The risks that domestic and foreign investors take in providing capital are intensified in markets that are characterised by a limited history and inadequate disclosure of accurate information (Polackova 1998, p 10). In the absence of credible information, more weight may be attached to rumours about the credibility of a government's fiscal position, and these doubts may encourage investors and creditors to question the robustness of other government operations (Dornbusch 2002). These factors can explain a sudden exit of capital from an economy with unsustainable fiscal risk exposures.

Transparency can play a strategic role for governments in galvanising support for changes in policy direction, demonstrating long-term planning, communicating the trade-offs and resource limits that governments face, and empowering the public to assess and plan for risks to which they are exposed through the government's fiscal position. The way risks are reported to the public — for example, through the use of longer-term projections — influences public debate and support for policy action by illustrating the potential long-term benefits from changes in current policy settings or the challenges of sustaining current policy. In New Zealand, long-term projections are credited with empowering individuals to make informed choices about personal financial and saving decisions by raising public awareness of funding limitations and fiscal pressures which the government faces (New Zealand Treasury 2007).

Care should be taken when publicising liabilities as it could encourage moral hazard. In the case of implicit contingent liabilities, a government's exposure increases as a result of moral hazard if publicly released cost estimates are interpreted as a commitment by the government to underwrite these risks or a statement of the

financial resources available to potential claimants. That said, making contingent liabilities explicit could also make it clear that some expectations are poorly founded.

Chile addresses moral hazard issues related to revealing the estimated cost of pending litigation against the state by only publishing the total value of awards and costs incurred from actual disbursements in the case of claims supported by the courts (Chilean Ministry of Finance 2007).

Assessing transparency

Economies can assess their fiscal transparency by applying the fiscal module of the Reports on Observance of Standards and Codes (ROSCs). To date, 86 countries, including Australia, have voluntarily undertaken a fiscal transparency ROSC. ROSCs have been well received by governments from economies at various stages of economic development, and they are an effective tool for communicating areas for improving fiscal transparency (IMF 2007).

The ROSC process helps economies evaluate their practices relative to the Code of Good Practice on Fiscal Transparency. Generally, the assessments include suggestions on ways that fiscal transparency can be improved. It aims at good practice, not necessarily best practice and recognises that countries differ widely. In this context, for example, the code asks that a government's accounting system be capable of generating reports on arrears, rather than advocating accrual basis accounting for all countries (IMF 2007). This flexibility suggests that all economies with an interest in improving fiscal transparency can benefit from assessments. The code is also accompanied by a manual which provides guidance on ways in which good practices can be met.

The IMF code of good practice is built on four principles:

- **Clarity of Roles and Responsibilities** — specifying the structure and functions of government, responsibilities within government, and relations between government and the rest of the economy.
- **Public Availability of Information** — emphasizes the importance of publishing comprehensive fiscal information at clearly specified times.
- **Open Budget Preparation, Execution, and Reporting** — covers the type of information that is made available about the budget process.
- **Assurances of Integrity** — deals with the quality of fiscal data and the need for independent scrutiny of fiscal information.

A summary of low cost, straightforward actions that governments can undertake to improve transparency can be found in Appendix B: An IMF Summary of Fiscal Transparency Assessments.

Measures to enhance transparency of off-balance sheet risks

Fiscal transparency and economic credibility is enhanced through the disclosure of fiscal risks, contingent liabilities and other off-balance sheet commitments and can complement other existing budget-related reports. Examples include: reports such as a statement of fiscal risks that focuses on contingent liabilities; an evaluation of sub-national levels of government and public enterprises; and licence details and contract summaries related to public-private partnerships. The Victorian Government, for example, is required to publish all contracts valued over \$10 million (subject to some information which can be withheld under their Freedom of Information Act for commercial reasons).

The trend towards focusing on fiscal sustainability is leading some governments to publish longer-term projections of their capacity to finance programmes and service debt obligations (OECD 2006).⁴ Long-run projections generally focus on the possible fiscal consequences of key pressures to illustrate the need for changes in policy. The projections are not considered to be forecasts or targets, since the projections are made under explicit assumptions that are designed to exclude the impact of any remedial actions by government (Irwin 2006b). The New Zealand Treasury's projections highlighted the need to either raise taxes or change policies and spending patterns to meet the sustainability challenges raised by population ageing. However, an important conclusion of this analysis is that only very small changes in the near-term are needed in order to generate a very large improvement in the long-term fiscal position (New Zealand Treasury 2007). See Appendix A on long-term projections in relation to China's pension expenditure.

Measures to enhance transparency can be undertaken at varying levels of detail and tailored to suit the capacity of governments to gather, analyse and evaluate risk, produce estimates and produce reports. Where resource constraints limit the quantification of risks, governments could consider providing a list of contingent liabilities and a summary of anticipated future pressures.

4 These include: Australia's Intergenerational Report; New Zealand's Long-Term Fiscal Position; United Kingdom's Economic and Fiscal Strategy Report; the European Union's Projections for Stability and Convergence Programme; and the United States' Long-term Projections of the Congressional Budget Office.

Table 3: Public reports for off-balance sheet risks

Type	Reporting options	Frequency
Public-private partnerships	Contract summaries – particularly for significant contracts (subject to information disclosure laws)	On agreement
	Licensing details	On issue
	Methodologies underpinning cost/benefit estimates	On agreement
State-owned enterprises and sub-national levels of government	Statement of risks for state enterprises and sub-national levels of government	Annual
	Ad hoc reports on matters that have arisen any may affect solvency	Ad hoc
Guarantees	Statement of risks	Annual
Longer-term fiscal pressures (for example, pensions)	Long-term fiscal reports containing 30-40 year projections	Ad hoc or regularly (for example every 4-5 years)

In light of the many methodologies available for estimating fiscal costs arising from contingent liabilities outlined in the previous section, the integrity of the published estimates relies on also publishing the methodologies underpinning the calculations. Independent auditing has a role in this regard, by providing an objective assessment of governments' methodologies and adherence to standards on fiscal reporting. Audits conducted by independent agencies with sufficient authority and resources add credibility to a government's economic management and its measures of fiscal performance.

Managing off-balance sheet risks

General approaches to reducing exposure from fiscal risks

Approaches to managing risk can be general, whereby risks are collectively managed through overall economic management, or targeted, whereby each risk is addressed individually.

General approaches to risk management are based on market-oriented economic policies that foster sustainable economic growth, competition and investment. This approach addresses some of the underlying fiscal pressures — for example through privatisation of state-owned enterprises or by fostering robust financial systems that can insure the private sector against risks.

In economies characterised by well-functioning markets and a strong investment climate, governments experience less need to pursue financing options that may entail higher degrees of risk. For example, well-functioning financial systems can foster private-sector involvement in infrastructure, health insurance, pensions and other social services with less need for fiscal measures such as guarantees (Brix 2004, p 13). Some recent privatisations have been accompanied by guarantees to encourage

private-sector participation (Mody 2000), and this has highlighted the need to support movement towards market-oriented policies with well-developed regulatory and public-disclosure systems (Polackova 1998, p 18).

Creating fiscal space also reduces fiscal pressure by enhancing the government's capacity to maintain socially important programmes and broader economic objectives while accommodating fiscal pressures (World Bank 2007). Financial and debt management plays a key role in providing 'room to move', particularly in relation to contingent liabilities, by limiting the total debt exposure of the government, ensuring there are sufficient funds to meet obligations and maintaining a low cost of borrowing through adherence to fiscal discipline.

Kharas and Mishra (2001) note that many hidden deficits are incurred during financial crises, which means they are often initially paid by domestic and external borrowings, and finally by temporarily raising taxes or shrinking government expenditures, or both. These sudden temporary increases in tax rates and cuts in government expenditures are likely to be associated with large deadweight losses. This has led some governments to improve the efficiency of their budget processes by allocating funds to meet future contingent claims and capital gains and losses (Brixi 2004, p 13).

Soon after taking office in March 2000, the Chilean Government aimed to improve fiscal discipline by committing to maintain an annual surplus of 1 per cent of GDP. The rule was designed to set aside funds for future generations; help the government face future contingent liabilities rather than accounting for losses when they occur; compensate for the central banks operational deficit; and maintain the Government's capacity to save (Chilean Ministry of Finance 2007).

While establishing a contingent liability fund can ensure the government meets its future obligations it may not always be appropriate, especially if retiring debt can provide greater fiscal relief. Contingent liability funds tend to operate effectively when sufficient time is provided to establish the guidelines and accountabilities required. Otherwise, there are risks that the fund may be used for other purposes not originally intended, and may have little impact on a government's credibility.

Targeted approaches to reducing exposure from key off-balance sheet risks

A targeted approach to off-balance sheet risks complements the measures outlined throughout this paper relating to identification, measurement (including accounting treatments) and transparency. A targeted approach to reducing government exposure from off-balance sheet risks involves three complementary tasks: addressing the underlying sources of risk; transferring the risk to parties best able to bear the risk; and

managing and monitoring any residual risk that cannot be mitigated or transferred in case there is a sudden call on government funds.

Measures for key off-balance sheet risks are presented in this framework in Table 5 below. Each measure entails costs and benefits which are important to consider in the context of a government's tolerance for risk. While a government's risk preference may not always be easily identifiable, it can sometimes be revealed through accountability structures, such as requiring ministerial approvals before issuing guarantees.

Requesting ministers to compare alternatives for each guarantee can help identify risk preferences, but this process can be an impost on ministers with other higher priority responsibilities. Therefore, gaining an explicit understanding of risk preferences, through the establishment of departmental objectives, administrative guidelines and accountability structures can be a more effective method of balancing controls with timely and considered decision making (Lewis and Mody 1998, p 3).

Table 5: Risk management approach for key risks

	Addressing the source	Transfer or share risk	Manage residual risk
State-owned enterprises	Privatisation (NB, this entails its own set of risks that would need to be managed) Full accrual reporting (audited)	Risk sharing with creditors Charge commercial prices	Surveillance of authorities' debt and guarantee provisions Strengthen reporting, review subsidies and conduct financial audits Report quasi fiscal activities on the balance sheet SOE deposit mechanism (for on-lending)
Sub-national levels of government	Adjust inter-governmental financing arrangements to balance resources and responsibilities	Controls on borrowing and issuing of guarantees	Surveillance of authorities' debt and guarantee provisions
Pensions and social security systems	Improve regulatory frameworks within the financial system to facilitate private retirement savings and pension funds Encourage participation in the labour force	Move from government supported defined-benefit pensions to private plans based on voluntary or mandatory contributions	Provisioning in the budget or a contingent liability fund Long-term reporting

Table 5: Risk management approach for key risks (continued)

	Addressing the source	Transfer or share risk	Manage residual risk
Guarantees — explicit	Consider other forms of support for projects or entities that are not viable without government assistance. Caps and other controls to limit the issue of guarantees Integrate into the budget process Clear and credible fiscal management	Reinsurance Charge a risk premium Identifying the various risks associated with a guarantee, and wherever possible only accept risks that can be controlled or managed Co-insurance	Contingent liability funds Standby credit arrangements Continual monitoring for default Report approved guarantees in the budget Incorporate fiscal sustainability analysis Budget where appropriate and feasible
Guarantees - implicit	Sound economic and financial management Cap the maximum payout for relief programs Encourage direct access to international insurance Statement of policy to manage expectations	Credible announcements on the limitations of government to minimise expectations of bailout	Insurance (for example, weather risks)
Public-private partnerships	Correcting for market failures that reduce access of investors to adequate risk protection mechanisms. Limits and controls on PPP commitments Improved risk identification and measurement to adequately cost and compare PPPs to public provision.	Improve negotiation capacity to achieve an optimal sharing of risks among investors and creditors Encourage private investors to obtain insurance in the markets	Strengthening procedural controls and disclosure requirements on PPP commitments Continually monitor against key performance indicators (including solvency and quality of output) Place on budget balance sheet, i.e. account PPPs as a government investment

Sources: Schick (2002); Magnusson and Bergström (2000); Brixi and Mody (2000) and (2002); Brixi and Irwin (2004), Brixi (1998); Irwin (2006).

State-owned enterprises and sub-national levels of government

The off-balance sheet risks arising from the borrowing activities of state-owned enterprises (SOEs) and sub-national levels of government can often be attributed to imbalances between their responsibilities and their resources, which creates a preference for off-budget forms of support (Brixi and Irwin 2004, p 24). These forms of support include guarantees, letters of comfort and other commitments to absorb risks.

SOEs and sub-national levels of government are also characterised by the principal-agent problem, which creates difficulties for fiscal surveillance. Building capacity to enhance fiscal surveillance by central agencies would be assisted by greater

transparency in the way sub-national governments report their risk exposures. Selected jurisdictions in Australia, Canada, India and the United Kingdom address some of these issues by requiring agencies to produce a statement of risks (Brix 2004, p 19) and by encouraging consistent accounting practices. Brix (2004, p 20) proposes that these measures can be supplemented with rewards for enhanced transparency and penalties (such as public statements of disappointment) for opacity and excessive risk taking at a relatively low cost.

Measures such as capping the cost of budgetary and off-budgetary support for public enterprises and considering this support among competing expenditures through the budget process can also limit the exposure of governments (Brix 2004, p 19). However, implementing these limits can be complicated by the nature of many public enterprises, since public and political pressures often keep prices below costs, thereby strengthening the call for subsidies in the form of guarantees with a high probability of default to maintain services levels.

Pensions

Future pension obligations already accrued for government employees are direct explicit liabilities, yet cash-based accounting ignores their future cost. This partly explains why some governments may not have realised a growing gap between their pension liabilities and their capacity to pay. Government commitments (either explicit or implicit) to provide public pensions are also challenging economies characterised by aging populations. These fiscal pressures come from projections that suggest pension liabilities and other age-related costs will rise at the same time as revenues are projected to fall because there are fewer people of a working age to contribute to government revenues.

The need to address these imbalances has led governments to reform their pension systems, which in many cases has also lifted national saving, promoted the development of the domestic financial market, and removed significant barriers to growth in the economy (OECD 2004). Reforms can include developing financial markets by improving regulatory framework for pension funds and fostering the development of private insurance markets to provide social insurance, especially for health care and unemployment.

In 2006, the Australian Government established the Future Fund, a dedicated asset fund to offset unfunded public sector superannuation — the largest liability on the Government's balance sheet (Au-Yeung, McDonald and Sayegh 2006a). By building up assets in the Future Fund, the Government aims to increase national savings and ensure that the current generation, rather than future generations, meet these costs. Contributions to the Fund have been made from budget surpluses and proceeds from

asset sales. Currently, the Fund has a balance of over \$50 billion and it is well placed to achieve its target of offsetting the unfunded superannuation liability by 2020.

In the early 1980s, Chile introduced a fully-funded pension system based on individual capital accounts, managed by private companies, to replace a traditional pay-as-you-go regime (IMF 2005). Under the system, individuals are required to deposit 10 per cent of their wages into these accounts, and to make an additional contribution of 2-3 per cent of wages as a premium for disability and term life insurance as well as to cover administrative costs (OECD 2004).

Governments that have recently implemented pension reforms have also provided minimum pension guarantees to ensure that retirees do not outlive their pensions (OECD 2004; Brixi 2004, p 5). To fully harness the efficiency and equity benefits of this approach, it is necessary to treat these guarantees as risks and manage them accordingly. Appendix A provides an overview of Chile's Pension Reserve Fund which was introduced in 2006 to address these risks.

Explicit guarantees

Explicit government guarantees include obligations to pay outstanding debts (that is, the government acts as a loan guarantor) or amounts to maintain the solvency of other public or private entities (for example, development banks or sub-national levels of government and exchange rate guarantees) (Magnasson and Bergström 2000, p 19; Polackova 1998, p 5).

Experience suggests guarantees are more likely to support government priorities if there is: a framework for judging when a guarantee is likely to improve a project; the capacity to estimate the costs of guarantees; and rules that require the careful consideration of a guarantee's costs and benefits (Irwin 2006, p 11).

Governments can limit their risk exposures by avoiding obligations that are contingent on factors outside their control, and instead bear the risks associated with changes to, and the implementation of, its own laws and regulations (such as with most private infrastructure projects). For example, governments are more likely to experience sudden fiscal pressures when they agree to cover other risks, such as uncertainty over construction costs, future demand for the project's services, whether the firm will repay its debt, and currency risks (Brixi 2004, p 11).

There is high uncertainty about outcomes. For example, the New South Wales Government provided guarantees to a private company for a privately constructed, owned and operated tollway to improve traffic flows through central Sydney. The guarantees were based on estimates of traffic volumes which did not eventuate (even when the toll was halved, traffic volumes only increased to approximately one third of their originally estimated values) (NSW 2006). Malaysia also experienced a lower than

expected demand for light rail projects which triggered payments to project sponsors under contractual guarantee clauses (Mody 2000).

While there are difficulties in monitoring and controlling guarantees due to their balance sheet treatment, governments can ensure they have sufficient cash on hand to make guarantee payments when they fall due through a combination of:

- provisioning in the budget (for example, Sweden notionally transfers funds via the ministry issuing the guarantee to the government's main account);
- reserving in a contingent liability fund — for example, the United States (Currie and Velandia 2002, p 23), New Zealand's Natural Disaster Fund and superannuation funds (New Zealand Treasury 2007), Chile's pension fund (Chilean Ministry of Finance 2007) and Australia's Future Fund;
- placing limits on the total expected value of all guarantees (for example the Netherlands) (Currie and Velandia 2002, p 24);
- reducing debt based on the expectation of funding liabilities from future borrowing or other sources such as tax revenue (this can be a by-product of provisioning in the budget); and/or
- entering a standby credit arrangement to borrow funds if required (Brix and Irwin 2004).

The Swedish Government makes provisions for contingent liabilities using a notional fund. In Sweden, the National Debt Office assesses the risks involved in issuing guarantees on behalf of the Swedish Government and charges an annual premium for these guarantees; Magnasson (1999). This charge is reflected in their budget and facilitates the same kind of scrutiny that is applied to direct grants or other form of government expenditure; Bath (2007). In Sweden, guarantee premia are pooled in a notional accounting reserve fund as opposed to a 'real money' fund. It is created to provide transparency of outcomes when contingent liabilities are triggered. In other words, if the notional reserve fund were consistently in deficit, it would signal that the premium setting process was consistently underestimating the risk associated with contingent liabilities (Magnasson 1999). This delivers many of the transparency benefits associated with contingent liability funds, with reserving opportunities in the form of lower debt until such time a claim is made.

Once a guarantee is issued, prudent management involves monitoring for circumstances that will create a call on government. To assist with this process, governments can oblige creditors to provide information through regular annual and

interim reports, and exceptions based reporting or meetings on matters that may precipitate a default.

The Swedish example illustrates how some countries are using debt management offices to monitor and manage contingent liabilities such as guarantees. This is partly due to similarities in the skills and techniques applied to debt management and risk management — for example, in relation to calculating market and credit risks and knowledge of financial markets. Therefore, countries tend to leverage from the competence of the staff in these roles. In addition, some debt management offices have a direct role in granting guarantees to sub-national governments and other government entities, and so debt management agencies can obtain a holistic perspective on the entire debt portfolio, including contingent liabilities (Magnasson and Bergström 2000).

Implicit guarantees

Provisioning for implicit guarantees through contingency funds or other forms of reserving can create the moral hazard problems discussed earlier. Provisioning for certain types of implicit guarantees will generate behaviour changes by the public that may exacerbate the risks and subsequent costs to government. However, natural disaster contingency funds, such as New Zealand's, or Chinese Taipei's Residential Earthquake Insurance Pool (Chinese Taipei Ministry of Finance 2007) are examples where this moral hazard effect is not likely to be an issue.

Public-private partnerships

A growing number of infrastructure projects are now undertaken as public-private partnerships (PPPs). Under PPP arrangements, governments contract the private sector to finance, build and operate a project over a substantial period of the infrastructure's economic life (Katz 2006).

In some cases, PPPs may not represent value for money, bypass expenditure controls that enable the government to track its fiscal position, and grow to a point where they jeopardise the government's fiscal stability (Irwin 2006, p 6). Despite these concerns, there are solid grounds for entering into PPP arrangements, and in many cases the risks are not from the nature of PPP obligations, but whether they are undertaken for the right reasons and are well managed.

Governments may find that market-based pricing for infrastructure has more public support if it delivered through a PPP arrangement. However, a poor public perception of PPPs as a result of past experiences may constrain a government's ability to use this mechanism in future. A track record of success can be built by engaging in PPP projects characterised by value for money and public benefits.

Economies can benefit from experience which suggests that the fiscal savings from PPPs come from efficiency gains from how the businesses are run — not from up-front investment costs or from replacing explicit subsidies with off-balance sheet support (Brixi 2004, p 9).

PPPs are more likely to deliver longer-term benefits when there is a framework for comparing the cost of public and private financing options, a system for incorporating PPP commitments into fiscal monitoring, standards for reporting these obligations to the public, and rules that create incentives to make good decisions (Irwin 2006, p 18).

Measures such as a ‘public sector comparator’ help make judgements about whether a PPP project will delivery value for money, but overall outcomes depend on higher quality and better maintained infrastructure over the longer term. Factors including price, quality of service delivery to the community, design amenity and the sustainability of the financial arrangements are all important considerations (VDTF 2007, p 2).

As a short-run precaution for governments that make extensive use of PPPs, limits on the total volume of outstanding PPP commitments as a percentage of: total expenditure (for example, Hungary), total revenue (for example, Brazil) or GDP may help control and discipline the growth of PPPs. Where the conditions for making PPP decisions provide value for money compared to other forms of delivery, these limits can be replaced with rules and incentive structures that safeguard the public interest. For example, the Victorian Government, ensures PPPs compete for budget funding with all other capital projects. Full capital budget funding is set aside for non-self funding projects before seeking expressions of interest from the market, allowing projects to proceed by traditional delivery should private bidders not offer value for money (VDTF 2007, p 3).

Governments can establish rules that only allow PPPs when the circumstances are likely to generate long-term fiscal benefits and are in the public interest (Katz 2006). These circumstances are likely to arise when the government can:

- specify project outcomes in service level terms (for example, defining the outcomes and performance standards the government is seeking rather than the inputs to be used), thereby leaving scope for the service providers to innovate and optimise;
- specify outcomes in a way that performance can be measured objectively and with rewards and penalties being applied;
- decide on objectives that will be long lasting, given the length of the contract;

Transparency and sustainability of the public balance sheet

- **match the private sector's negotiating skill; and**
- **limit the risks it bears wherever possible to those directly associated with its own policies.**

Governments have strengthened their capacity to manage PPPs by establishing specialised agencies or units. Examples include Partnerships Victoria, established by the Victorian Government in 2000 and Indonesia's Risk Management Unit established in 2006. These entities could examine the merits of using PPPs for infrastructure and other services and tend to operate most effectively when there are clear objectives, well-defined accountabilities, comprehensive guidelines and public disclosure to enable robust evaluations that are not impaired by conflicts of interest.

Concluding remarks: The APEC fiscal sustainability principles

While the preceding discussion has identified a number of challenges and issues in relation to addressing off-balance sheet risks, several principles have emerged which economies may find useful in addressing key off-balance sheet risks. The APEC fiscal sustainability principles include:

- **fostering well-functioning markets to reduce fiscal pressures on governments;**
- **establishing a clear framework of accountability and responsibility for addressing fiscal risks;**
- **collecting and reporting information about on and off-balance sheet risks across the whole of government;**
- **assessing the potential consequences of current and emerging fiscal risks or long-term pressures to determine the best ways to manage these risks;**
- **including risk in government measures of fiscal performance to help governments understand the true nature of their fiscal position;**
- **improving transparency and accountability to the public through appropriate means; and**
- **creating fiscal space or provisioning — even notionally — for expected future payments, especially for liabilities with a high probability of realisation in the near to medium-term.**

At the 14th APEC Finance Ministers' Meeting, ministers highlighted the importance of these principles to guide further progress, recognising that the form of implementation was dependent on the individual needs of each economy. Ministers also identified a need for further guidance to support continued fiscal sustainability. In this context, they noted that the IMF and World Bank may provide further practical insights into best practices in managing fiscal risks.

Overall, ministers welcomed the steps being taken by APEC economies, agreeing that small changes made now can generate large improvements in the long-term fiscal position (APEC 2007).

References

APEC 2002, Leaders' Declaration: Leaders' Statement to Implement APEC Transparency Standards, Mexico.

APEC 2007, 14th APEC Finance Ministers' Meeting Joint Ministerial Statement, http://www.apecsec.org.sg/apec/ministerial_statements/sectoral_ministerial/finance/2007_finance.html.

Au-Yeung, Wilson; McDonald, J and Sayegh A 2006a, 'Future Fund and Fiscal Policy', *Economic Roundup*, Winter 2006, <http://www.treasury.gov.au/contentitem.asp?NavId=&ContentID=1156>

Au-Yeung, Wilson; McDonald, J and Sayegh A 2006b, 'Budget policy and risk expenditures', *Economic Roundup*, Spring 2006, <http://www.treasury.gov.au/contentitem.asp?NavId=&ContentID=1190>

Asian Development Bank 2003, 'Overview of fiscal policy in developing Asia', *Asian Development Outlook 2003*, Asian Development Bank, Manila.

Athukorala, S L 2003, *Accrual Budgeting and Accounting in Government and its Relevance for Developing Member Countries*, Asian Development Bank, Manila.

Bath, M 2007, Speech presented at the 2007 APEC Future Leaders Think Tank, Sydney.

Brix, H P 2004, 'Contingent liabilities in new member states', Paper for a Workshop on Fiscal Surveillance in EMU: New Issues and Challenges, Brussels, November.

Brix, H P and Irwin, T 2004, 'Fiscal support for infrastructure in East Asia and the Pacific: Toward a more effective and transparent approach', Background paper for a report by the Asian Development Bank, Japan Bank for International Cooperation and World Bank on Infrastructure in East Asia and the Pacific.

Brix, H P and Mody, A 2000, 'Priorities for the management of contingent liabilities', in *Government at Risk*, H Polackova-Brix and A Schick (2002).

Brix, H P and Mody, A 2002, 'Dealing with government fiscal risk: An overview', in *Government at Risk*, H Polackova-Brix and A Schick (2002).

Brix, H P and Schick, A 2002, 'Introduction', in *Government at Risk*, H Polackova-Brix and A Schick (2002).

Czech Republic Ministry of Finance, 'Managing public finance and dealing with fiscal risk: Recent improvements in the Czech Republic'

http://www.mfcr.cz/cps/rde/xchg/mfcr/hs.xsl/wb_idf_grant_13513.html (accessed on 5 April 2007).

Chilean Ministry of Finance 2007, 'Identifying and measuring contingent liabilities in Chile', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

Chinese Ministry of Finance 2007, 'Pension reform and implicit pension debt in China', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

Chinese Taipei Ministry of Finance 2007, 'The experience in relation to explicit and implicit guarantees', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

Currie, E and Velandia, A 2002, 'Risk management of contingent liabilities within a sovereign asset-liability framework', World Bank, http://treasury.worldbank.org/web/pdf/currie_velandia_cl.pdf.

Dornbusch, R 2002, 'A primer on emerging-market crisis' in Edwards, S and Frankel, J. A eds, *Preventing Currency Crises in Emerging Markets*, University of Chicago Press, London.

International Monetary Fund 2001a, *Government Finance Statistics Manual*, <http://www.imf.org/external/pubs/ft/gfs/manual/>.

International Monetary Fund 2001b, 'Chile: Selected Issues', *Country Report*, no. 05/316.

International Monetary Fund 2007, 'The participation of the economies of APEC in the Code of Good Practices in Fiscal Transparency', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

Irwin, T 2006a, 'Public risk in private infrastructure' Paper presented at the high-level seminar: Realizing the Potential for Profitable Investment in Africa, Tunisia, February <http://imf.org/external/np/seminars/eng/2006/rppia/pdf/irwin.pdf>.

Irwin, T 2006b, 'Five ways governments can control spending commitments in public-private partnerships', Paper presented at a seminar on Strengthening Public Investment and Managing Fiscal Risks from Public-Private Partnerships, Hungary, http://www.imf.org/external/np/seminars/eng/2007/ppp/pdf/ti_p.pdf.

Transparency and sustainability of the public balance sheet

Katz, D 2006, *Financing Infrastructure Projects: Public Private Partnerships*, New Zealand Treasury, <http://www.treasury.govt.nz/workingpapers/2006/pp06-02.asp>

Kharas, H and Mishra, D 2001, 'Fiscal policy, hidden deficits, and currency crises in World Bank Economists' Forum, pp 31-48.

Lewis, C M and Mody, A 1998, 'Contingent liabilities for infrastructure projects', *Public Policy for the Private Sector*, no. 148, World Bank.

Magnusson, T 1999, 'Sovereign financial guarantees', Swedish National Debt Office, Paper prepared for the UNCTAD, UNDP, UNITAR workshop on Management of a Debt Office, Tbilisi, April.

Magnusson, T and Bergström, P 2000, 'State debt and contingent liability management: strategies for the Czech Republic', http://www.mfcr.cz/cps/rde/xchg/mfcr/hs.xsl/wb_idf_grant_13514.html.

Mody, A 2000, 'Contingent liabilities in infrastructure: Lessons of the East Asian crisis', www.amody.com/pdf/infrastructure_liabilities.pdf.

New South Wales Parliament 2006, 'Second report: the Cross City Tunnel and public-private partnerships', Joint Select Committee on the Cross City Tunnel, Sydney.

New Zealand Treasury 2007, 'Transparency and sustainability on the public balance sheet: Long term fiscal risks', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

OECD 2004, 'Budgeting in Chile', Paper prepared for the 25th Annual Meeting of Senior Budget Officials, Madrid.

OECD 2006, 'Assessing fiscal risks through long-term budget projections', *OECD Journal of Budgeting*, vol. 6, no. 1.

Polackova, H 1998, 'Contingent government liabilities: A hidden risk for fiscal stability', *World Bank Policy Research Working Paper*, no. 1989.

Polackova-Brix, H & Schick, A 2002, *Government at Risk*, World Bank and Oxford University Press, Washington DC.

Russian Ministry of Finance 2007, 'Transparency and sustainability of budgetary system of the Russian Federation', Background paper prepared for the second APEC Senior Finance Officials Meeting, Melbourne.

Schick, A 2002, 'Toward a Code of Good Practice on Managing Fiscal Risk' in *Government at Risk*, H Polackova-Bixi and A Schick (2002).

Victorian Department of Treasury and Finance (VDTF) 2007, *Partnerships Victoria Mythbusters*,

[http://www.partnerships.vic.gov.au/CA25708500035EB6/WebObj/PVMythbustersMarch07/\\$File/PV%20Mythbusters%20March%2007.pdf](http://www.partnerships.vic.gov.au/CA25708500035EB6/WebObj/PVMythbustersMarch07/$File/PV%20Mythbusters%20March%2007.pdf).

World Bank 2007, 'Fiscal policy for growth and development: An interim report', Background paper for World Bank Development Committee meeting.

APPENDIX A

Selected economies' experience in fiscal transparency and sustainability

Chile's contingent liabilities

Chile's Ministry of Finance and Budget Office has emphasised the growing importance of contingent liabilities as a potential source of financial instability. As the government gradually changed from direct financing and provision of services to private provision with minimum revenue guarantees in some contracts, the size of contingent liabilities has grown. Such liabilities are not adequately accounted for in the budget and balance sheet, so measures have been introduced to reduce their risk to the sustainability of public finances in the medium and long-term.

Since 2000, the budget report to Congress has included a section on contingent liabilities and Chile's budget office (DIPRES) is developing instruments that allow for determining and quantifying contingent liabilities. The Fiscal Responsibility Law of 2006 represents a major milestone regarding the conduct of fiscal policy and management of fiscal finances in Chile. Under this law, the Budget Office must provide information annually on the commitments it has taken through the granting of fiscal guarantees, including an estimate of the legal and contractual financial commitments that lead to contingent liabilities.

The law also provides for the management of the minimum pension guarantee (a guarantee to cover private pensions that fall below a guaranteed minimum amount) and the payment of assistance pensions. Specifically, the law creates the Pension Reserve Fund, in which the effective fiscal surplus of the previous year must be deposited but without exceeding the equivalent of 0.5 per cent of GDP and a floor of 0.2 per cent. During the first ten years, the fund only accumulates resources, and there are no withdrawals. The funds can be accumulated in domestic or foreign currency and can be invested domestically or abroad. The management of the portfolio will be allocated on the basis of public bidding.

Source: Chilean Ministry of Finance, 2007.

China's long-term projections for pensions

China's long-term projections show that its ageing population is creating fiscal pressure in the form of higher pension expenditure. Government spending on pensions is forecast to increase from approximately 24 billion yuan in 2007 to over 40 billion yuan in 2030. While these projections highlight the potential consequences of maintaining current policies, the projections also demonstrate the benefits of potential solutions. For example, increasing the retirement age could reduce total estimated pension expenditure by over 24 billion Yuan between 2007 and 2030.

The key findings of China's analysis can be applied to other longer-term fiscal risks and include the importance of: addressing long-term fiscal risks, such as pension liabilities; identifying risks to financial stability early in order to investigate and implement appropriate solutions before any problems emerge; and ensuring sufficient funds are available to meet significant liabilities.

Source: Chinese Ministry of Finance, 2007.

Fiscal transparency and sustainability in the Russian Federation

The Russian Federation adopted a number of measures to improve fiscal sustainability following the 1998 financial crisis. These include the introduction of controls on new government borrowing in foreign capital markets. The Russian Federation also adopted a number of budget rules which were incorporated into the Russian Budget Code. These rules regulated the preparation and execution of budgets at all levels of government, established controls for budget deficits and borrowing, and provided contingency plans in case budget revenues were lower or higher than planned. More recently, the Russian Federation is transitioning towards medium-term budget planning.

Russia also recently introduced a Register of Expenditure Commitments to enhance transparency and improve reporting. This register reflects budget obligations approved by laws and regulatory and legislative Acts, and may be used in the future to include the full value of obligations related to approved long-term programmes and investment projects. These measures, including favourable oil prices have helped reduce public debt from over 100 per cent of GDP in 1999 to around 9 per cent of GDP at the end of 2006.

Source: Russian Ministry of Finance, 2007.

APPENDIX B

IMF summary of fiscal transparency assessments

Although substantial improvements in transparency may require further capacity building, some possible quick and straightforward actions include:

- clearly specifying in the budget presentation any new policies and how they fit into existing policies, together with appropriate costing information;
- presenting at least annually — to the legislature and public — a statement regarding the results achieved for major budget programmes.
- making available information on government activities financed through extra-budgetary funds, and how these activities are consistent with broader policy objectives and ensuring that these accounts are audited;
- including information in the budget documentation on new and outstanding loan guarantees, including their purpose and likelihood of being called;
- enhancing budget documentation to include outturn data from past years and realistic projections, and including functional and economic classifications;
- including a discussion of fiscal risks as part of the budget documentation;
- explaining the policy purpose, incidence and costs related to tax expenditures and quasi-fiscal activities, as part of budget documentation;
- clarifying legislation related to taxation with the specification of appropriate implementing regulations that curtail the room for discretion;
- strengthening internal and external audit functions; and
- implementing a medium-term framework (which may start in a fairly modest way with macroeconomic and fiscal policy projections).

Source: IMF (2007, p 12-13).