INTOSAI WGPD

Working Group on Public Debt

An Audit Reference on Fiscal Exposures

2024

INTOSAI
Goal Chairs
Collaboration
PSC – CBC – KSC

Quality Assurance Certificate of the
Chair of the INTOSAI Working Group on Public Debt (WGPD)

This is to certify that *An Audit Reference on Fiscal Exposures* which is placed at level 1 of Quality Assurance, as defined in the paper on "Quality Assurance on Public goods developed outside Due Process" approved by the INTOSAI Governing Board in November 2017, has been developed by following the Quality Assurance processes as detailed below:

(i) The project was carried out as per the procedures of Quality Assurance Level 1 for the INTOSAI products developed outside the due process. As per the procedure, the KSC Steering Committee is the approving authority for all stage of the project, i.e. Project Proposal, Exposure Draft and Endorsement Version of the related document.

(ii) The project proposal was developed by the Project Team composed of WGPD member-SAIs, namely Argentina, Brazil, Portugal and led by the Russia Federation, and was approved by the KSC Steering Committee in March 2021;

(iii) The Project Team thereafter commenced development of the Exposure Draft (ED), and alongside updated the working title of the document as *An Audit Reference on Fiscal Exposures.* The ED was approved by the WGPD Chair on 28 June 2022 and was further approved by the KSC Steering Committee for its public exposure;

(iv) In conformity with the 90-day exposure period for QA protocol for projects placed at QA level 1, the ED was posted at the INTOSAI KSC Community Portal for public exposure for the period 5 August 2022 until 2 November 2022; and

(v) This Endorsement Version is the outcome of the revised ED in consideration of the comments received during the exposure period, analysis by the Project Team, review by the WGPD Chair and approval by the KSC SC.

The product developed is consistent with the relevant INTOSAI Principles and Standards. The structure of the product is in line with the drafting convention of non-IFPP documents.

The product is valid until February 2031 and if it is not reviewed and updated by February 2031, it will cease to be a public good of the INTOSAI developed outside the Due Process.

GAMALIEL A. CORDOBA
Chairperson
INTOSAI KSC Working Group on Public Debt

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Quality Assurance Certificate of the Chair of the Knowledge Sharing and Knowledge Services Committee

Based on the assurance provided by the **INTOSAI Working Group on Public Debt (WGPD)** and the assessment by the Goal Chair, it is certified that **An Audit Reference on Fiscal Exposures** which is placed at level **1 (one)** of Quality Assurance as defined in the paper on "Quality Assurance on public goods developed outside Due Process" approved by the INTOSAI Governing Board in November 2017, has been developed by following the Quality Assurance processes as detailed in the Quality Assurance Certificate given by the Working Group Chair.

The product is valid till **February 2031** and if it is not reviewed and updated by **February 2031**, it will cease to be a public good of INTOSAI developed outside the Due Process.

Girish Chandra Murmu
Chair of Knowledge Sharing and Knowledge Services Committee

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1. Introduction

The first two decades of the 21st century have been characterized by a range of factors that can have unpredictable consequences for government finances. This period has seen multiple financial crises striking nations, regions, and – in the case of the Corona Virus Pandemic – the entire global economy.

All these crises led to a gigantic scale of government reactions that either implicitly or explicitly impacted on the public finances and vary widely as to source, extent of the government's legal obligation, likelihood of occurrence, and magnitude, that impact on public debt developments and heightened challenges to debt sustainability.

Supreme Audit Institutions (SAIs), according to their mandates, may have a central role to play in exercising independent external oversight on public debt management in a country and in publicly reporting on the results of their audits. In the case of performance audit and in order to assess the fiscal sustainability, SAIs may be faced with the need to examine a spectrum of public commitments that goes beyond the more common definitions of public debt and represents a source of additional vulnerability. Those other commitments, either implicit or explicit, may not even be disclosed in the financial statements. They will be discussed in this document as fiscal exposures.

The aim is to provide an audit reference on fiscal exposures considering the following topics:

- What is meant by fiscal exposures
- Importance of fiscal exposures to fiscal sustainability
- Identifying and assessing fiscal exposures
- Approaches to risk prevention and mitigation

2. What is meant by Fiscal Exposures

The United States Government Accountability Office[1] uses the term "fiscal exposure" to provide a conceptual framework for considering the wide range of responsibilities, programs, and activities that may explicitly or implicitly expose the federal government to future spending. Accordingly, fiscal exposures include not only liabilities, contingencies, and financial commitments that are identified on the statement of financial position or in the accompanying notes, but also responsibilities and expectations for government spending that do not meet the recognition and disclosure requirements for that statement.

Fiscal exposures extend beyond conventional fiscal analysis. Within the wide range of fiscal exposures, this document approaches the responsibilities, programs and activities undertaken by governments (ranging from explicit legal responsibilities to

[1] US GAO. Fiscal Exposures – Improving the Budgetary Focus on Long-term Costs and Uncertainties. January 2003

implicit promises embedded in current public policy) that may expose the government to future spending. Clearly, fiscal exposures vary significantly in terms of magnitude, likelihood of occurrence, and strength of the government's legal obligation. Therefore, fiscal exposures do not necessarily present deviations from what was expected, instead, such exposures can be predicted in advance with accuracy notwithstanding its demand for future resource use.

The concept of fiscal exposures also includes fiscal risks. According to OECD[2], fiscal risks is closely linked to the more general problem of the accuracy of fiscal forecasts that form the basis of medium-term expenditure frameworks. They are defined as "the probability of significant differences between actual and expected fiscal performance" or "the possibility of deviations of fiscal outcomes from what was expected at the time of the Budget or other forecast". In this sense, any fiscal risk can result in a fiscal exposure but not all fiscal exposure necessarily results from a fiscal risk.

By leveraging the risk of future financing, the said exposures must be monitored, disclosed, and effectively managed by the government.

Fiscal exposure may or may not be budgeted/accounted for in the conventional fiscal analysis as its basic feature. These broader analyses could complement the traditional focus on fiscal and debt level as the primary measure of government indebtedness. Given this breadth, it is useful to think of fiscal exposures as lying on a spectrum extending from explicit legal liabilities to the implicit promises embedded in current policy or public expectations (Table A). Along this spectrum, there is great variation in the strength of a government's legal obligation and the certainty of expected costs. Their ultimate costs may or not be reasonably measurable or reported as liabilities on the statement of financial position, such as deferred employee compensation or environmental clean-up costs. Others, such as pending litigation and undelivered orders, generally are reported in financial statement note disclosures as contingencies or commitments. Others are implied, such as future social insurance benefits, where the government's commitment is not explicitly stated and future costs generally are not accounted for directly in either the budget or the financial statements.

Sovereign contingent liabilities, as an important component of fiscal exposures, are liabilities that materialize only when specific uncertain future events occur, which are generally beyond the control of governments. They can represent a significant burden for public finances and hamper public debt management and sustainability. To prevent or mitigate undesirable effects, contingent liabilities must be identified, measured, monitored, and reported.[3]

[2] OECD Best Practices for Managing Fiscal Risks - Lessons from case studies of selected OECD countries and next steps post COVID-19

[3] Toolkit for the Identification, Measurement, Monitoring, and Risk Management of Contingent Sovereign Liabilities / Edgardo Demaestri, Cynthia Moskovits. p. cm. — Technical Note No. IDB-TN-912, September 2016

Although social insurance is perhaps the most widely cited fiscal exposure viewed as implicit in current policy or the public's perception of the role of government, numerous activities may create expectations for a claim on future spending. Governments are called upon to rescue losses and obligations of banks, including the central bank, sub-national governments or private entities of political or economic significance. Current spending decisions also may be the source of expectations for future spending. For example, the decision to purchase a building or other fixed asset inherently commits the government to the life-cycle costs associated with its future operation and maintenance.

TABLE A – Spectrum of Fiscal exposures

Source	Example
Explicit legal liabilities	• Foreign and domestic sovereign borrowings • Employee benefits payable • Health-related programs • Environmental liabilities
Explicit financial commitments	• Undelivered orders • Long-term leases • Obligations under long-term contracts
Explicit financial contingencies	• Government guarantees to third parties • Insurance and reinsurance claims payable (for flood, war risk, etc.) • Comfort letters and other forms of legally non- binding assurances
Implicit liabilities	• Social security programs (old-age pension) • Future maintenance and operating expenses associated with current decisions (public investments projects, public private partnerships) • Bailout of large institutions • Disaster relief

There may also be an expectation that partially funded capital projects will be completed. Furthermore, the earmarking of taxes or the establishment of trust funds may create an expectation of future spending for the designated purpose. Other government activities, such as privatization, may result in the implicit assumption that the government will take responsibility in the event of pitfalls. Broader interpretations

of fiscal exposures may consider areas where the government has already made a commitment, such as existing infrastructure, creating an expectation of future spending to support the government's initial investment.

Clearly, fiscal exposures vary significantly in terms of magnitude, likelihood of occurrence, and strength of the government's legal obligation. Table B provides some examples of activities that may be relevant in assessing the long-term sustainability of a country's fiscal condition.

The broad spectrum of items that possibly could be considered fiscal exposures increases the challenge of determining how and to what extent to integrate more comprehensive information on expected future costs into various financial reporting, budgeting and policy processes. Many government responsibilities and activities that may draw on future resources do not meet the criteria for recognition on a country's statement of financial position or inclusion in budgetary totals (deficit/surplus). Nevertheless, the potentially significant effects of these items on a country's future fiscal condition, and hence its debt management strategy, warrant disclosure and oversight.

TABLE B – Examples of Fiscal Exposures

Foreign and domestic borrowings	Borrowings refer to the funds borrowed from bilateral, multilateral, and private creditors of which the borrower is compelled to pay the creditor the principal amount owed plus the interest and other applicable borrowing costs in the term agreed upon. Borrowings are represented by a borrowing instrument which refers to legal agreements concluded between one or several creditors that provide the funds, and a sovereign government, which receives and uses or 'on-lends' the funds. For every borrowing instrument, there is a specific type of agreement. Agreements specify the terms for the release and reimbursement of the funds and often stipulate specific conditions for their use. Two main categories of the borrowing instruments are loans and debt securities. For the purpose of government debt management, 'debt' is simply and commonly defined as financial liabilities created by borrowing, credits accepted under suppliers' credit agreements, issuance of debt securities for any other purpose than borrowing funds (for example, to regularize built- up arrears), and assumption of the payment obligations under a government loan guarantee (i.e., in case of default, the government takes over the loan from

	the borrower). Debt denominated in the domestic currency would be classified as domestic, and debt denominated in other currencies would be foreign or external.
Social security programs	These programs vary significantly across countries but generally refer to programs established by statute that protect individuals against interruption or loss of earning power income. Protection of the insured person and dependents usually is extended through cash payments to replace at least a portion of lost income. Employment-related systems generally base eligibility for pensions and other periodic payments on length of employment or self-employment or in some cases, the employment relationship itself. The amount of pensions and other periodic payments is usually related to the level of earnings before the event causing the earnings to cease occurred loss. Such programs are financed entirely or largely from contributions (usually a percentage of earnings) by employers, workers, or both, and are in most instances compulsory for defined categories of workers and their employers. Such systems are often referred to as *social insurance systems*.
Health-related programs	Governments provide a number of health-related benefits. For example, health-related benefits may be provided as part of government employee compensation or as part of the national social insurance system.
Employee pension benefits	Employee deferred benefits, particularly pension benefits, represent a potentially large government commitment. Pension benefits generally include all retirement, disability, and survivor benefits financed through a pension plan, including unfunded plans. These benefits differ from social insurance benefits in that pension benefits are generally considered to be exchange transactions because the employee performs service in part to receive the deferred compensation provided by the plan.

Environmental liabilities	National governments may take responsibility for the cost of removing, containing, and/or disposing of hazardous waste from property or equipment. Cleanup may include, but is not limited to, decontamination, decommissioning, site restoration, site monitoring, closure costs, and post-closure costs. For example, a national government may operate nuclear facilities, and be required by law to cleanup any hazardous materials upon closing the facilities. In addition, national governments may assume responsibility for cleanup of toxic waste spilled by private sector entities.
Undelivered orders	Undelivered orders refer to the value of goods and services ordered and obligated that have not been received.
Government guarantees to third parties	Government guarantees are a commonly identified form of contingency. These may include guarantees of borrowing, both by other public sector bodies and by private or quasi-public bodies, as well as guarantees for a variety of other purposes such as financing for exports and exchange rates. Public – private partnerships (PPP) projects may also involve some risk for the government when some kind of public guarantee is issued.
Insurance and reinsurance claims payable	National governments may provide insurance to individuals and businesses against a wide variety of risks, ranging from natural disasters to bank and employer company bankruptcies.
Comfort letters and other forms of legally non- binding assurances	Rather than providing an unequivocal guarantee, comfort letters tend to express the government's support of a venture, perhaps even a particular contract. As a result, the legal status and effect of comfort letters can be ambiguous.
Bailout of large institutions	The national government may intervene to reduce losses from a default of the obligations of: systemic banks, sub-national governments, state-owned enterprises, private entities of political/ economic significance. In the case of a financial crisis affecting a large part of the banking system, governments are expected to step in and provide assistance to keep the system working. This may involve different instruments, from guarantees to nationalization, but it always involves large amounts of public money.

Future maintenance and operating expenses associated with current decisions (public investments projects, public private partnerships)	Future maintenance and operating expenses for government- owned facilities and other assets provide another example of costs that may constrain future flexibility. While the acquisition costs traditionally have been the focus of decision-making, the costs of operating, maintaining, and disposing assets can be substantial. Although decisions could be made to discontinue operation and maintenance of assets before the end of their useful lives, it is still reasonable to consider the assets' operation costs and lifetime maintenance costs during their acquisition.
Disaster relief	National governments normally assume responsibility for financial losses that arise from catastrophes and major disasters such as natural and man-made hazards, terrorist attacks, and epidemics. As specific examples, the case of all the expenditure allocated to health policy that each country had to allocate to the acquisition of vaccines against COVID-19, or recently, the effects of climate change such as earthquakes, hurricanes or floods, had resulted in an increase of government spending on disaster relief programs.

3. Importance of Fiscal Exposures to Fiscal Sustainability

Historically, governments have used outstanding debt instruments as the primary measure of indebtedness. Yet, as illustrated above, governments undertake a variety of responsibilities and activities that may establish explicit or implicit claims on future resources. As a result, a budget surplus and/or low debt level does not necessarily signal a positive fiscal outlook. A country's debt management strategy, therefore, should consider not only a country's current financial condition, but also its long-term fiscal outlook, including a comprehensive understanding of the magnitude and nature of potential draws on future budgetary resources.

Failure to understand and address fiscal exposures can have serious consequences. Regardless of whether a government is legally required or simply forced by circumstances to provide funding, exposures can lead to periods of fiscal instability and unexpected changes in financing needs. In New Zealand, the issuance of guarantees during the 1970s to industries engaged in activities such as oil production resulted in high costs to future governments. Although the guarantees cost the issuing government nothing, as oil prices fell and industries withdrew, subsequent governments had to pay the costs of promises made by earlier governments. Similarly,

in the United States, the savings and loan crisis of the late 1980s and early 1990s cost American taxpayers hundreds of billions of dollars**.** In the future, a financial crisis could present similar fiscal issues for taxpayers.

The financial crisis in 2008-2009 originated a huge funding problem to the Portuguese banking system. With limited or no access to markets, the government issued large amounts of guarantees to domestic banks in order to keep the credit to domestic borrowers flowing at adequate levels. Later on, as the financial crisis was followed by a deep national and international recession, the banking system's financial situation deteriorated further and the government was compelled to provide assistance by means of loans and capital instruments. The net cost of this public assistance to banks, during the period 2008-2016, was estimated as 8% of the 2016 gross domestic product.

In Brazil, tens of billions dollars had been subsidized to subnational governments by federal government during 1980s and 1990s. Despite important improvements in fiscal regulation, especially the 2000 Fiscal Responsibility Law that imposed limits on key fiscal indicators (i.e., personnel expenditures, and subnational and national governments public debt limits) the government has been compelled to bail out some states due to the fast and real increase in personnel and retirement expenditures since 2014.

Similarly, over the past ten years, Mexico has been called on to bail out subnational governments when the latter's deficits or arrears became unsustainable. In Colombia, because of continuous increases in the local public debt during the first half of the nineties, the National government started to regulate it imposing administrative limits to local administrations to get new debt, requiring authorization of the Ministry of Finance and Public Credit in order to initiate negotiations, to sign a new contract for debt, to give guarantees and to issue and place domestic public debt.

The massive public debt crisis that broke out in Argentina at the end of 2001, whose cost was estimated at 10% of its GDP, led the country to default bringing about severe consequences for the country and for fiscal public accounts. This situation was triggered by high levels of unsustainable accumulated public debt in foreign currency (97% of total debt) and a sharp foreign currency appreciation that followed the Convertibilidad Monetary Policy. This currency mismatch prevailing in the domestic economy caused a huge fiscal gap that affected Argentine Public Debt reimbursement capacity. Debt to GDP (D/GDP) in 2001 amounted to 53.7%. After the inevitable post convertibility money devaluation in 2002, the fiscal crisis increased the D/GDP up to 167%.

The privatization of infrastructure projects has also become a significant source of fiscal exposure, particularly for developing countries. After the economic crisis of December 1994 in Mexico, the availability of financial resources for public investment was scarce. Due to this necessity in the energy sector, new funding schemes based on

a public-private partnership framework were considered for Petróleos Mexicanos (PEMEX)[4] and Comisión Federal de Electricidad (CFE)[5] to develop infrastructure projects related to electric energy generation and oil extraction. However, this became a growing financial liability for the Mexican government. This element amounted to USD 176.34 billion in 2004.[6] In Thailand, the government was required to rescue a toll road project when the authorities declined to raise tolls in line with earlier agreements.

In periods of fiscal constraint, policymakers may favor off-budget and off-statement of financial position activities that do not require immediate cash outlays. In Italy, the railways have used government guarantees to raise money from the financial markets to cover deficits. In response to the global financial shocks in 2008-2009, the Brazilian government implemented a round of stimulus policies, including a huge credit expansion via transfers of proceeds of public debt issuance to the National Development Bank (Banco Nacional de Desenvolvimento Econômico e Social). Due to the structural weaknesses, these set of measures led to only a temporary and moderate pick-up in GDP growth after 2010, while the weight of subsidies on federal budget exceeds BRL 271.1 billion[7].

Even countries with a strong current position may be at risk due to increasing costs in large programs that are not fully measured in the national budget. For example, a number of countries face major challenges associated with an aging population that will result in significant spending pressures for public pension and health-related programs. In the United States, Congressional Budget Office (CBO) simulations show that the combination of an aging population and rising health care costs per beneficiary are projected to lead to an unsustainable increase in the deficit and debt. CBO estimates that spending on Social Security, Medicare, Medicaid, and other health-related programs would create pressure on other government spending over the next several decades.

Many countries face current fiscal imbalances on top of pressures placed on public pension and health systems by aging populations. According to OECD publication[8], in Japan, achieving fiscal sustainability requires measures to durably strengthen economic growth and a consolidation path, including measures to control the growth of social spending in the face of rapid population ageing, given that labour shortages are likely to intensify as Japan's population is projected to fall by one-fifth to around 100 million by 2050, while the share of elderly rises from 28% to 38%. If labour market

[4] The Mexican oil state-owned enterprise
[5] The Mexican electricity state-owned enterprise
[6] "Pidiregas, a General Study", in Centro de Estudios de las Finanzas Públicas de la H. Cámara de Diputados de los Estados Unidos Mexicanos (http://www.cefp.gob.mx/intr/edocumentos/pdf/cefp/cefp0722007.pdf). The amount in Mexican pesos reached USD 1,990,423,935,003, the equivalent in dollars was estimated taking into consideration the average exchange rate in 2004 (11.2871 Mexican pesos per US dollar according to Centro de Estudios de las Finanzas Públicas).
[7] Brazilian Treasure Subsidies Report 2020. Amount estimated in USD 52.2 billion (exchange rate = BRL 5.1964)
[8] OECD Labour market reform in japan to cope with a shrinking and ageing population", September 2019

entry and exit by age and gender remain constant at 2017 levels, the labour force would contract by 4.5 million by 2030 and by 16.1 million (24%) by 2050.

In 2020, the world was stunned by the COVID-19 pandemic and its impacts on people's lives and countries' economies. The governments' responses to minimize these effects were unprecedented. Fiscal support raised average deficits worldwide in percentage of GDP, from 3.6% in 2019 to 10.8% in 2020. From 2019 to 2021, according to IMF[9], average public debt rose from 103.8% of GDP to 121.6% in advanced economies, from 54.7% to 64.3% in emerging and middle income economies, and from 44.2% to 50.2% in low income developing countries. It is expected to stabilize or diminish by 2026, except for emerging market and middle-income economies, whose public debt should reach 69.8% in 2026.

As these events illustrate, whether governments have adequate information and incentives to address the future cost implications associated with current policy choices is an important question. Some activities undertaken by a government, such as loans and guarantees, require a long-time horizon to understand the future implications of the government's commitment. In addition, since potential claims on resources may be derived not only from commitments of a strictly legal nature but also from moral and social responsibilities, some exposures may only be noticeable when the analysis is extended beyond the conventional statement of financial position, budget, and debt measures.

For these reasons, the understanding of the fiscal condition and its implications for debt management must extend beyond an assessment of current financial position to include an assessment of the long-term sustainability of the country's fiscal policies. Complete and highly visible reporting of potential draws on a country's future resources can help decision makers to address future costs and thus, help prevent unexpected changes in financing needs. Also, early warnings of potential costs (when these costs can best be controlled) may increase the policy options available. For example, changes to programs, such as social insurance, which affect large portions of the population may require time for individual beneficiaries to adjust to policy changes without undue disruption.

Within their constitutional structure, governments should look for credible strategies, both within and outside the national budget, to provide adequate information about potential claims on future resources. SAIs, within the bounds of their authority, can provide leadership and oversight with respect to these issues.

[9] IMF Fiscal Monitor, October 2021 (Table 1.2. General Government Debt, 2016-2026)

4. Identifying and Assessing Fiscal Exposures

The diversity of potential claims on a country's resources raises a variety of challenges. While financial reporting standards are useful for considering some claims, a government's responsibilities and policy commitments are much broader than those reported on the statement of financial position. As such, the identification and assessment of fiscal exposures should not be restricted to financial statement reporting. There is not, however, universal agreement on which, and to what extent, specific fiscal exposures should be considered. In addition, the complexity and uncertainty underneath these exposures may create significant cost measurement issues, which in turn, raise concerns about using these estimates as the basis of budget and other policy decisions.

It is imperative that entities that constitute the public sector[10] are correctly identified and completely captured to assess inter-dependencies and relationships between entities and their relationship with government. Accordingly, apart from government departments etc. entities like statutory autonomous bodies, corporations, trusts, co-operatives, public sector entities (PSEs), special purpose vehicles (SPVs), social security funds etc. need to be comprehensively identified and listed. Fiscal exposures also arise out of financing arrangements being finalized with local bodies and financial corporations for infrastructure spending, which need to be comprehensively captured. Absence of a conceptual framework to identify all such entities constrains identification of fiscal risks and exposures.

4.1 Identifying and classifying fiscal exposures

A first and important step is for a government to identify, classify, and understand the full range of exposures that may create claims on future resources. Because of the breadth of exposures, it may be useful to use a framework that considers (1) the nature of the commitment i.e. whether an exposure is explicit or implicit and (2) the certainty of the event creating the exposure – whether the claim stems from an event that has already occurred or is contingent on some future event.

The following are the different natures of commitments/fiscal exposures:

Explicit: reflects payment commitments stipulated in a contract or by law. The most important are often guarantees for borrowing and obligations of the state-owned enterprises (SOEs) which convey moral hazard. Although SOEs pose typically the greatest risk, other forms of public guarantees, e.g., contract performance of certain infrastructure projects, entail similar contingent liabilities risks. In this sense, there are explicit liabilities considered from legal claims, private sector guarantees, and intra

[10] The public sector consists of all resident institutional units controlled directly, or indirectly, by resident government units—that is, all units of the general government sector and resident public corporations. (Ref. 2.63, IMF Government Finance Statistics Manual 2014).

public sector guarantees, Public Private Partnerships to finance infrastructure projects, public deposit guarantees to national financial system, and those linked to sovereign funds.

Implicit: arises from possible default on non-guaranteed obligations, as well as from systemic shocks. In such cases, contractual or statutory obligations are nonexistent, but the government faces a high cost for not providing financial support, whether it is done for financial, "moral," or "political" reasons. These include disaster relief, defaults on non-guaranteed debt of SOEs, local government units, and financial or corporate sector bailouts. It comprises a broad category which encompasses the guarantees/counter guarantees/sureties that the State provides to the private sector. Largely, these are guarantees on loans that the financial sector provides to a wide range of borrowers, ranging from small and medium-sized enterprises to students taking out loans for higher education, according to the policies implemented in each country. Other guarantees include those for foreign trade or exchange rate coverage or for backing private investment.

Unlike explicit guarantees, implicit ones do not imply the obligation of the guarantor to provide for the guarantee, and they are not charged for, although the guarantee has value and creates economic costs[11].

Contingencies share many of the characteristics of government debt, and if triggered, they will directly raise the Direct Public Debt. In the case of loan guarantees, the obligation of the guarantor is to honor payment obligations in the event the borrower defaults and thus it constitutes a credit risk. The probability and magnitude of a contingency may depend on some exogenous conditions or may occur when some endogenous condition change substantially.

As governments are the natural managers of public resources, present and future public commitments should be monitored by SAIs to enhance confidence for third parties that need to use fiscal public information. Off budget liabilities: public agencies in charge of financing quasi-fiscal activities for the national government make such agencies' liabilities define themselves from contingent to direct for the government.

So, fiscal exposures include contingencies that may be public liabilities.

[11] OECD Journal: Financial Market Trends volume 2014/2, Why implicit bank debt guarantees matter: Some empirical evidence, to provide distinction of explicit vs implicit guarantees.

TABLE C – Matrix for Liabilities

Liabilities	Direct (Claim based on current events or continuation of current policy)	Contingent (Claim contingent on a future event)
Explicit: Government liability is recognized by law or contract	• Foreign and domestic sovereign borrowings • Employee benefits payable • Undelivered orders • Long-term leases • Obligations under long-term contracts	• Government guarantees to third parties • Insurance and reinsurance claims payable (for floods, war risk, etc.) • Environmental liabilities • Comfort letters and other forms of legally non- binding assurances
Implicit: Expectations for spending stemming from potential "moral" or "social" claims based on current policies and/or the public perceptions about the role of government	• Future maintenance and operating expenses associated with current decisions (public investments projects, public private partnerships) • Social security programs (old-age pension) • Future public pensions (as opposed to civil service pensions) if not required by law • Future health care if not required by law	• Bailout of large institutions, that includes: - Default of a subnational government or public or private entity on non-guaranteed debt - Cleanup of the liabilities of privatized entities - Bank failure (beyond coverage provided by insurance program) - Investment failure of a non-guaranteed

Liabilities	Direct (Claim based on current events or continuation of current policy)	Contingent (Claim contingent on a future event)
		pension fund, employment fund, or social security fund - Default of the central bank on its obligations (foreign exchange contracts, currency defense, balance of payments stability) · Disaster relief

Note: *Edited from the Fiscal Risk Matrix developed by Hana Polackova-Brixi of the World Bank*

The matrix shown in Table C, which draws heavily on the "fiscal risk matrix" developed by Hana Polackova-Brixi of the World Bank, is a useful tool to provide a snapshot of a country's fiscal exposures. Even if estimates of the associated costs are not available, filling out the matrix should provide a valuable first step in understanding the range and nature of the government's exposures.

Clearly, the range of the items that potentially may draw on future resources raises conceptual issues. Financial reporting definitions provide a starting point in identifying fiscal exposures, but are not sufficient for a complete analysis. This is because Financial Reporting Standards are established based on the concept of contractual duties, which represent only one source of potential draws on future government resources.

Canada's public sector accounting and auditing board defines financial commitments as obligations that become liabilities if terms of existing contracts, agreements, or legislation are met. Although a liability generally is not recognized when a contract is signed because the contracted goods or services have not been delivered, this transaction may be recognized as a commitment. Considerable room for interpretation exists within these conceptual criteria, and it is often difficult to clearly distinguish among various types of obligations that may be recognized by financial reporting standards.

These issues expand when the concept of fiscal exposures is used to extend beyond what is traditionally captured for financial reporting purposes. Once exposures stemming from potential claims not based on legal obligations are considered, it becomes difficult to determine where to draw the boundaries for what should be considered a fiscal exposure. It is important to be comprehensive so as to provide a complete picture of the

country's fiscal future. However, simply projecting the long-term costs of all current policies may be too broad to be useful in addressing specific policy decisions. Such a broad construction also may imply that all current policies are immutable.

By providing a framework for distinguishing among various exposures, a matrix (like the one shown in Table C) is a useful starting point not only for identifying a country's fiscal exposures, but for considering the appropriate approach for reporting, budgeting, and oversight. For example, direct explicit obligations (liabilities) often are adequately captured in financial reporting systems because they are certain and can be measured. However, they may not be fully integrated into the budget and other policy processes. At the other extreme, because exposures stemming from implicit contingent claims are uncertain, they generally are not reflected directly in either the financial or budgetary processes, and may warrant the development of new approaches.

4.2 Assessing the expected costs of fiscal exposures

In addition to preparing a comprehensive list of a government's fiscal exposures as a useful starting point, conducting an assessment of the expected costs can be beneficial. Valuing the expected cost of exposures, rather than just reporting the maximum amount, provides policymakers with a better indication of the level of losses a government needs to anticipate. In addition, valuing the government's exposure, rather than simply reporting the maximum amount, allows for better comparison to cash subsidies.

Therefore, it would be beneficial if SAIs positioned themselves to help assess and monitor the potential costs associated with fiscal exposures. In some cases, this may require the development of technical skills necessary to support sophisticated methodologies such as econometrics and option pricing. In order to give a sense of the issues at hand, the following section summarizes some key aspects and open questions surrounding cost assessment for a few common exposures.

Social security programs (old-age pension programs): Assessing future claims for social security programs raises a number of conceptual and technical obstacles. The future costs for these programs may be greatly affected by (1) ability of the government to change the rules of eligibility and (2) the uncertainty surrounding key cost assumptions. Due to the uncertainty surrounding future costs, accounting standards generally do not recognize future social insurance benefits as a liability. First, there is significant debate about whether future social security benefits constitute a claim on government resources. Some argue that the costs associated with future social insurance benefits should not be recognized because governments have the authority to change these rules of eligibility. They draw attention to the fact that governments may change the underlying laws establishing a claim to payment over time (and have done so in the past). Conversely, others argue that because social insurance benefits represent a social responsibility of the government and/or that there is high public expectation for future benefits, these future costs

warrant consideration in the policymaking process.

In addition to disagreements about whether a claim exists, cost estimates of future benefits are uncertain. Estimates involve assumptions about numerous factors such as economic growth, inflation, unemployment, fertility rates, immigration, and mortality. Such assumptions may greatly affect estimated costs. For example, assumptions about future death rates have significant impact on the cost projections for the U.S. Social Security program. The estimated expenditures in excess of income for the valuation period from 2017 to 2091 varied from USD 12,976 billion to USD 17,942 billion based on which death rate assumption is used.[12]

As an example, the United States estimates both short-range (10 year) and long-range (75-year) actuarial projections for social insurance programs. These projections serve to highlight the financing gap between anticipated contributions and scheduled benefits. Because of the inherent uncertainty of estimates for 75 years in the future, three alternative projections are provided using different sets of economic and demographic assumptions to show a range of possibilities. These different assumptions can result in significantly different estimates of future costs. For example, the cost of benefits in 2095 under the "high cost" assumptions are projected to be about two times the cost under the "low cost" assumptions. Projections based on "intermediate assumptions," which are considered the best estimates of expected future experience under current law are provided to help guide policymakers.

Employee pension benefits: Various actuarial cost methods, which estimate future costs based on prior experience, can be used to calculate the liability for government employee pension benefits. While all acceptable actuarial methods recognize the cost of an employee's pension benefits during the employee's years of service, such methods recognize the cost in different patterns over time. For example, the "aggregate entry age normal cost" method is intended to produce a periodic pension cost that is a level percent of payroll.

Consistent assumptions with guidance provided by an independent body is desirable. For example, in the United States, federal accounting standards state that the board that sets professional standards of actuarial practice should guide the selection of assumptions for federal pension programs. To the extent possible, it is also considered useful if assumptions are consistent among financial reporting, budgeting, and actuarial statements.

Health-related programs: Assessing future health care benefits presents several unique measurement challenges. In general, these costs are more uncertain than pension costs since they depend on 1) changing patterns of health care delivery and utilization and 2) medical care price trends. In addition, future costs will be

[12] Fiscal Year 2017 Financial Report of the United States Government

affected by the interaction between government employee health coverage and health benefits provided by social insurance programs. Assumptions about these factors can have significant implications for estimates of future program costs.

Loans and guarantees to third parties: Countries differ in their approach to measuring costs associated with loans and guarantees. Several countries, including the United States, the Netherlands, Sweden, and Italy, have adopted approaches aimed at more clearly reporting the cost of loans and guarantees. The United States, for example, has adopted a more prospective form of accrual measurement for both accounting and budgeting. Federal accounting standards for direct loans and loan guarantees require an estimate of the present value of costs to the government for loans or guarantees. This is based on a comprehensive evaluation of future cash flows over the life of direct loans or guaranteed loans, including payments of interest, principal, fees, prepayments, defaults, delinquencies, and recoveries. The Federal Accounting Standards require an estimate of the present value of costs to the government for direct loans and loan guarantees.

Insurance and reinsurance: Like loans and guarantees, insurance programs involve a number of estimation challenges and are handled differently across countries. Financial reporting standards generally require a liability be recorded for an estimate of claims payable based on events that have occurred, including an estimate of claims that have been incurred, but not yet reported. However, although not certain enough to record as a liability under accounting standards, the government's risk exposure may be significantly greater than the claims payable at the end of a period.

Some countries have begun work to comprehensively assess the risk undertaken by insurance programs. In broad terms, the "risk taking" by a government for an insurance program can be thought of as the difference between the actual premiums paid by the insured and the premiums necessary to fully cover losses inherent in the coverage provided. This difference between the full risk premium and the actual premium charged – "the missing premium" – represents a government's subsidy cost.

The ability to generate complete and reasonable cost estimates of the "risk assumed" varies greatly across different types of insurance programs, such as life insurance programs which are well grounded in actuarial science. The modeling for others, such as deposit insurance, is much more complex. In most cases, historical experience is an important factor in determining risk and, in some cases, more sophisticated methodologies such as econometrics and options pricing may be useful.

As with loans and guarantees, the options pricing framework has been used to analyze the cost of government insurance programs. For example, deposit insurance can be thought of as a put option that gives a financial institution the

right, though not an obligation. This option is purchased from the government in exchange for payment of insurance premiums, and gives a bank or thrift the right to sell its deposit insurance liabilities to the government when the value of its assets falls below the value of its liabilities. Similar work has been done to extend the use of the options pricing framework to estimates of the government's liabilities resulting from pension insurance.

Environmental clean-up costs: Clean-up costs are affected by several factors, such as inflation and changes in laws and technology. These estimates, therefore, can be expected to change over time. In some countries, accounting standards require estimates of clean-up costs associated with government property, plant or equipment. For example, in the United States, federal accounting standards define environmental clean-up costs as the cost of removing, containing, and/or disposing of (1) hazardous waste from property or (2) material and/or property that consists of hazardous waste at permanent or temporary closure or shutdown of associated property, plant, and equipment. Cleanup may include, but is not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, and post-closure costs. Estimates of clean-up costs are to be based on the current cost to perform the cleanup assuming existing laws, technology, and management plans.

Future maintenance and operating expenses: The purchase of an asset may create an expectation that funding will be provided to maintain and operate the asset over time. An estimate of the total life-cycle cost of an asset includes not only all initial direct and indirect acquisition costs, but all periodic or continuing costs of operations and maintenance over the asset's expected useful life and any costs to decommission or dispose of the asset.

Backlogs of maintenance critical to effective operations also may result in draws on future resources. In the United States, deferred maintenance and repairs are measured for financial reporting purposes. Under the Generally Accepted Accounting Principles (GAAP), deferred maintenance and repairs are defined as maintenance and repairs that were not performed when they should have been or were scheduled to be, and which are put off or delayed for a future period. It includes the estimated cost to bring government-owned property, plant, and equipment to an acceptable condition, but specifically excludes the cost of expanding the capacity of assets or upgrading them to serve needs different from those originally intended. An assessment of deferred maintenance is to be based on management's determination of an acceptable level of service and condition for assets. The GAAP recognizes that determining maintenance needs is a management function and accordingly allows for management flexibility and judgement within broadly defined requirements.[13]

[13] Methods used to estimate deferred maintenance and repair costs include (1) condition assessment surveys—periodic visual (i.e., physical) inspection of government-owned property, plant and equipment to determine their current condition and estimated cost to correct any deficiencies; (2) life-cycle cost forecasts--an acquisition or procurement technique that considers operating, maintenance, and other costs in

Disaster relief: For governments, disaster risk exposure arises from a variety of sources. Losses may arise from damages to public property and infrastructure, pre-arranged financial assistance and guarantee or reinsurance schemes, post-disaster financial aid and changes in macroeconomic conditions, including possible lower economic growth or loss in tax revenues that may affect the fiscal position. These government contingent liabilities, which need to be assessed by Finance Ministries, may be explicit or implicit: expenditures that might arise from reconstruction of public assets and infrastructure or from prearranged financial commitments as a result of a disaster are explicit; by contrast, those expenditures that do not reflect any type of commitment or responsibility but which can nonetheless be expected to occur due to a perceived obligation are implicit. An assessment of the government's contingent liabilities could be one of the outcomes of a country-level risk assessment.[14]

An approach to measure contingent liabilities has been developed by the Inter-American Development Bank, a toolkit using specific estimation methodologies for different categories of sovereign contingent liabilities like legal claims, intra-public sector guarantees, guarantees to PPPs for infrastructure provision, natural disasters, and others.[15]

5. Approaches to Risk Prevention and Mitigation

Even when estimates of expected costs are available, the challenge of how to best integrate this information into various policy processes remains. Some countries report that despite improvements in financial statement reporting, it has been difficult to integrate financial statements into budgetary decision-making – the center of the policy process. For example, the United States has experienced challenges in determining the most appropriate ways to effectively integrate financial statement and other cost and performance information into the budget and policy process. World Bank economist, Hana Polackva-Brixi notes that "an accrual-based accounting system without accrual budgeting is neither necessary or sufficient to ensure adequate policy consideration for contingent liabilities and other fiscal risks." In Australia, with the adoption of accrual accounting principles into the System of National Accounts (SNA) 2008 and the subsequent adoption of SNA 2008 by the Australian Bureau of Statistics (ABS) into the ABS Government Finance Statistics Manual, both budget reporting and financial reporting are accrual based. While both budget reporting and financial reporting are accrual based, as with any large organization, cash requirements and cash

addition to the acquisition cost of assets; and (3) other methods that are similar to the condition assessment survey or life-cycle costing methods.

[14] OECD article, Disaster Risk Assessment and Risk Financing – A G20/OECD Methodological Framework, may be a good reference for this purpose

[15] Toolkit for the Identification, Measurement, Monitoring, and Risk Management of Contingent Sovereign Liabilities / Edgardo Demaestri, Cynthia Moskovits. p. cm. — Technical Note No. IDB-TN-912, September 2016

management, of which appropriations is a key component, remain an important consideration in all decision-making. The following section looks at some steps taken by various countries to improve the reporting, budgeting, and monitoring of various fiscal exposures.

5.1 Reporting of Fiscal Exposures

Reporting of liabilities on financial statements: An increasing number of governments are now preparing accrual-based financial statements, which report liabilities. The liability section of the statement of financial position captures items such as future employee pension benefits, environmental clean-up costs, and insurance claims payable. Contingent liabilities are recognized on the statement of financial position through a provision for expected losses only when it is deemed the amount of the loss is probable and can be reasonably estimated. Some contingencies, which do not meet these criteria, are not recognized directly in the body of the financial statements but rather, are disclosed in the notes to the statements. These disclosures generally include contingencies if the future confirming event is more than remote, but less probable. These disclosures do not, however, include contingencies that are considered remote.

Financial disclosure of contingencies and commitments: Some countries have taken steps to improve the disclosure of contingencies and other commitments. For example:

The New Zealand government's financial statements include disclosures of the government's commitments, and contingent liabilities and contingent assets. The contingency disclosures include both quantifiable and non-quantifiable contingencies. Quantifiable contingencies, such as guarantees, indemnities, and uncalled capital, are reported at the maximum possible amount of repayment. A description of all contingencies as well as a discussion of changes in contingencies is provided.

Likewise, Australian budget documents for 2017-2018 include a statement of fiscal risks that outlines general fiscal risks and quantifiable and unquantifiable contingent liabilities that may affect the budget balances. Details of contingent liabilities and other fiscal risks are separately discussed.

In monthly reports concerning public debt, Sweden's National Debt Office accounts for guarantees and risks exposed by loans issued by the central government. Furthermore, in order to shield the central government's budget from guarantee risks, the Swedish National Debt Office uses fees collected from guarantee beneficiaries to build a reserve fund. In the United States, the notes to

the consolidated financial statements of the federal government include information on loss contingencies that are assessed to be at least reasonably possible and commitments that require the future use of resources, such as undelivered orders and long-term lease obligations. The Bulgarian government has developed a comprehensive register of guarantees and has introduced the regular publishing of the aggregate amounts of guarantees outstanding along with the government debt figures. The register covers all external and domestic guarantees, indicating the beneficiary, creditor, project title, amount, currency, and debt repayment schedule.

Disclosure of future social insurance costs: As noted above, the financial reporting of social insurance commitments has been the subject of debate. Some of the costs associated with social security - benefits currently due and payable to or on behalf of beneficiaries at the end of the period - generally are reported as a liability in the financial statements. However, this treatment does not capture the potential future costs associated with social insurance programs.

Some countries also include long-term actuarial estimates of future contributions and expenditures within financial or trustee reports. In the United Kingdom, the Government Actuary must report to parliament every five years on the National Insurance program's outlook for about the next 50 years. These reports consider the effects of changes in the demographic structure of the population and provide calculations of the contribution rate necessary to maintain certain benefit levels for each future year. Reports also are required by Parliament whenever there are changes to the program's benefit rates or contribution structures. In the United States, federal accounting standards require the presentation of estimates, based on actuarial present values, of the status of the social insurance programs as a basic financial statement. The underlying significant assumptions are to be disclosed in notes that are presented as an integral part of the basic financial statement. Such disclosure describes the social insurance programs, reports long-range estimates that can be used to assess the financial condition of the programs, and explains some of the factors that impact the various programs.

In Australia, the Charter of Budget Honesty of 1996 requires that a document be prepared every five years assessing the long-term sustainability of current government policies over 40 years, including taking account of financial implications of demographic change.

Publishing sensitivity analysis can be helpful in increasing understanding of the uncertainty surrounding estimates of the future costs of social insurance programs. For example, the U.S. government's financial report includes a table that demonstrates the sensitivity of cost estimates to various assumptions such as the future reductions in death rates, fertility rates, the real-wage differential, etc.

Other Disclosures: Some countries have worked to disclose the range and nature of

fiscal exposures. The "fiscal risk matrix" described earlier has also been prepared for South Africa, Hungary, and Bulgaria.

New Zealand's Public Finance Act 1989 requires a Statement of Specific Fiscal Risks that sets out all government decisions, contingent liabilities or contractual obligations known to the government and subject to specific requirements that may have a material effect on the economic or fiscal outlook. Matters are disclosed as specific fiscal risks if:

- the likely impact is more than NZD 100 million over five years, and either
- a decision has not yet been taken but it is reasonably possible (but not probable) that the matter will be approved or the situation will occur, or
- it is reasonably probable that the matter will be approved or the situation will occur, but the matter cannot be quantified or assigned to particular years with reasonable certainty.

Additionally, any other matters may be disclosed as specific fiscal risks if the Secretary to the Treasury considers, using best professional judgement, that the matters may have a material effect (more than NZD 100 million over five years) on the fiscal and economic outlook but are not certain enough to include in the fiscal forecasts.

Matters are excluded from disclosure as specific fiscal risks if they fail to meet the materiality criterion (i.e., are less than NZD 100 million over five years) or if they are unlikely to be approved or occur within the forecasting period.

Additionally, the Minister of Finance may determine that a matter be included in the fiscal forecasts or a specific fiscal risk not be disclosed, if such disclosure would be likely to:

- impair the substantial economic interests of New Zealand
- jeopardize the security or defense of New Zealand or international relations of the government
- jeopardize the Crown in a material way in negotiation, litigation or commercial activity, or
- result in a material loss of value to the Crown.

The extent to which implicit claims should be reported is a subject of debate. Some argue that transparency of all exposures is an important and necessary step toward understanding and mitigating risk. Conversely, others argue that the public disclosure of implicit exposures could greatly increase moral hazard.

Preparation and disclosure of the long-term fiscal outlook: A number of countries are now preparing and publishing longer-range fiscal and budgetary outlooks. For example, in the United States, the Congressional Budget Office prepares long-range estimates of the budgetary and economic outlook. Also, the Department of

the Treasury and Office of Management and Budget prepare long-range fiscal outlook estimates, presented as a basic financial statement, as part of the U.S. government's financial report. In New Zealand, the Public Finance Act of 1989 requires the publication of a statement on the long-term fiscal position of the government that is aimed, in part, at increasing attention to the long-term fiscal implications of policy. The report must relate to a period of at least 40 consecutive years, and state all significant assumptions underlying any projections.

Reporting on the long-term sustainability of a public sector entity's finances: In determining whether to report long-term fiscal sustainability information, an entity needs to assess whether potential users exist for prospective financial information.

The International Public Sector Accounting Standards Board (IPSASB) has issued the Recommended Practice Guideline - Reporting on the Long-Term Sustainability of an Entity's Finances (RPG 1)[16] in their view that financial statements cannot satisfy all the needs of users in assessing the future viability of programs providing social benefits. The RPG 1 provides non-mandatory guidance on the long-term sustainability of a public sector entity's finances, including the nature and extent of financial risks that the entity face. The guidance recognizes that long-term fiscal sustainability information is broader in scope than information in financial statements, and focuses on the three dimensions of service, revenue and debt.

The relevance of reporting long-term fiscal sustainability information should be considered in the context of that entity's funding and capacity to determine service delivery levels. There are likely to be users for long-term fiscal sustainability information for entities with one or more of the following characteristics:

(a) Significant tax and/or other revenue raising powers;
(b) Powers to incur significant debt; or
(c) The power and ability to determine the nature, level and method of service delivery including the introduction of new services.

When an entity reports on its long-term fiscal sustainability, it discusses three inter-related dimensions, by reference to their capacity and vulnerabilities, which are summarised below: [17]

Dimension	Capacity focus	Vulnerabilities
Services Can current services be maintained given	Capacity to maintain or vary the volume and quality of services	Willingness of recipients and beneficiaries to accept reductions in

[16] https://www.ipsasb.org/publications/recommended-practice-guideline-1
[17] https://www.iasplus.com/en/news/2013/07/ipsasb-rpg

Dimension	Capacity focus	Vulnerabilities
current revenue policies and debt constraints?	provided or the entitlement programs delivered	services and entitlements Not having the ability to determine or vary service levels, for example where another level of government determines the level of services to be provided
Revenue Can entities collect sufficient revenue to maintain service levels given debt constraints?	Capacity to vary existing taxation levels or other revenue sources or introduce new revenue sources	Unwillingness of taxpayers to accept increases in taxation levels Extent of dependence upon revenue sources outside the entity's control or influence
Debt How sustainable is projected debt, given current service and revenue policies?	Capacity to meet its financial commitments as they come due or to refinance or increase debt as necessary	Market lender confidence Interest rate risk

As a non-mandatory guide, RPG 1 does not have a stated effective date, but long-term fiscal sustainability information should not be described as complying with the RPG unless it complies with all of its requirements.

Although compliance with the RPG 1 is not required in order for an entity to assert that its financial statements comply with International Public Sector Accounting Standards (IPSASs), an entity reporting long-term fiscal sustainability information is encouraged to follow the RPG 1.

5.2 Budgeting of Fiscal Exposures

Some countries have taken steps, such as the use of accrual estimates, to increase the recognition of the expected costs of fiscal exposures directly in the budget and, in some cases, to establish reserves. Budgeting for the potential costs of fiscal exposures represents a trade-off between the opportunity cost associated with forgoing using these resources to increase spending (or to cut taxes) and the benefits of promoting fiscal stability and government credibility by more directly recognizing the potential costs of these exposures. For illustrative purposes, the following provides examples of

ways countries have begun to incorporate information on fiscal exposures into the budgetary process.

Budgeting for loans and guarantees: Several countries, including Italy, Sweden, the Netherlands, and the United States, have taken steps to improve the budgeting for the future costs of issued loan guarantees and direct loans. In the United States, an explosion of loan guarantees during the 1980s and the recognized biases associated with cash-based reporting prompted a change in budgetary treatment of direct loans and guarantees in 1992. The Federal Credit Reform Act of 1990 addressed the shortfalls of cash-based reporting for credit programs by requiring that the budget include the estimated cost to the federal government over the entire life of the loan or guarantee, calculated on a net present value basis. The estimated cost of a direct loan or loan guarantee is now the sum of all expected costs – including interest rate subsidies and estimated default losses – and all expected payments received by the government over the life of the commitment, discounted by the interest rate on Treasury securities of similar maturity to the loan or guarantee. Similarly, the Netherlands now treats the net present value of guarantees as actual expenditures. In Sweden, income from guarantee fees and cash received from previously non-performing guarantees are to be put into a guarantee reserve. This reserve is intended for the long-term coverage of credit losses and other costs associated with guarantees. Italy also has developed a mechanism (under recent export credits legislation) which requires a provision to be established for every loan guarantee extended since October 1999. The funds for provisioning -based on the risk associated with each specific recipient country - are supplied through the government's budget.

The Philippines has adopted a portfolio-level assessment of its public private partnerships (PPPs) exposure which estimates its contingent liability exposure in PPPs, even capturing potential risks under the Build-Own Transfer Independent Power Plant (BOT IPP) projects contracted in the 1990s, and other "legacy" projects. The valuation methodology factors in project cost and implementation status to estimate a project's cost of failure. The PPP project implementation status are classified as (i) awarded projects, (ii) projects under construction and (iii) operational projects. The project status gives a rough estimate of a project's contingent liabilities value. A base contingent liabilities valuation is determined using formulas according to a project's implementation status. The contingent liabilities value is adjusted by the probability of failure using a localized failure rate and the presence of risk metrics to classify the project as low, medium, high or very high risk.[18]

To manage the National government's fiscal risks arising from PPP projects, the Risk Management Program (RMP) under the Unprogrammed Appropriations of the General Appropriations Act (GAA) was included starting in 2014. For the RMP,

[18] Fiscal Risk Statement 2018, p. 35

a certain amount is provided each year to cover commitments by, and obligations of the National government in the agreements covering PPP projects subject to, among others, the condition that the PPP project has been approved by the National Economic Development Authority (NEDA) Board or the Investment Coordination Committee in accordance with the applicable laws. For obligations assumed by government-owned and controlled corporations (GOCCs), the appropriation under the RMP could be used if there is an issuance or execution of a performance undertaking or other similar instrument by the agency concerned confirming that the National government will assume said obligations in case of default by the GOCC.[19]

The National government also guarantees loans contracted by GOCCs through their respective charters or the Foreign Borrowings Act, as amended. The National government had also provided performance undertakings on GOCCs' obligations under BOT schemes.

The Department of Finance issued Department Circular No. 001-2016 dated April 21, 2016 on the adoption of a risk-based policy framework on the issuance and pricing of guarantee and foreign exchange risk cover (FXRC) fees. It aims to improve the management of guaranteed debt, recognize the real cost of guarantees and FXRC to the National government as it relates to the financial condition of GOCCs, and align the guarantee framework to internationally recognized principles.

A net lending program (NLP) for GOCCs extends advances for the debt servicing of guaranteed GOCCs' obligations to preclude default on guaranteed commitments. Repayments on loans are advanced only if there is clear indication of the insufficiency of funds to pay maturing obligations after evaluation.

In addition, Colombia has worked on establishing ways of valuing their exposure from guarantees and creating fiscal reserves against it. The Law 819/2003 established the use of the Medium Term Fiscal Framework, which is a mechanism for programming and planning the government finances. According to this framework, each government have to value their contingent debt, specifically, the Central National government must include the guaranteed loans, and its impact on finances in case of no payment. Currently, the methodological guidelines for the estimation of contingent liabilities in public credit operations are based on three (3) variables: the amount in exposure, the probability of no payment, and the estimation of recovery of losses through the pledged counter-guarantees by the public entity. These three (3) variables represent the possibility of estimate the amount owed and credit worthiness of local entities guaranteed. There are two sources to compensate the contingent liability: i) set up the counter-guarantees and ii) the Contingency Fund of the State Entities. For the former, the

[19] General Appropriations Act FY 2014-2018

policy of the General Direction of Public Credit and National Treasury of the Ministry of Finance and Public Credit, establishes that guaranteed entities must have sufficient, liquid funds and easily realizable counter-guarantees. For the last one, the Contingency Fund of the State Entities, (Law 448 /1998), represents a mechanism to have liquid funds in case the contingent obligations become effective.

Some countries have developed budgetary controls aimed at mitigating the amount of risk assumed by the government. For example, the government of Hungary has established a set of budgetary controls for guarantees that include setting a limit in the budget law on the volume of guarantees for each year. For each explicit contingent liability, the annual budget is required to show the probabilities of default and the expected payments due.

The Netherlands also has established a budget limit on the total permitted amount of outstanding guarantees.

Budgeting for pensions: Some countries, including Iceland and New Zealand, have used accrual budgeting to highlight the long-term consequences associated with public sector employee pension programs. In Iceland, accrual budgeting showed the consequences of wage negotiations on future public sector employee pension costs. Officials noted that the full costs of these agreements were not fully realized by the public until the adoption of accrual budgeting led to recognition of the liability in the budget estimates. Similarly, during the 1990s, New Zealand officials cited accrual budgeting as a factor in the discontinuance of defined benefit public employee pensions noting that under accrual budgeting pension liabilities were recognized on the statement of financial position and the expense incurred was included in the budget.

Canada's main measure of budgetary position (deficit or surplus) - called the budgetary balance - is calculated on a modified accrual basis that includes the accrued costs of public sector pensions.

The United States uses cash-based accounting in the budget for defined benefit pensions of federal employees, meaning that the cost of retirement benefits is not recognized as the benefits are earned, but only later as they are paid. However, for financial reporting at the agency or program level, these costs are recognized on an accrual basis, which recognizes the cost of pension benefits as they are earned by the active employee, and not when the pension payment is made to the retired employee.

Budgeting for insurance: Accrual budgeting also has been cited as beneficial for addressing costs of insurance programs. New Zealand officials cited the recognition of the accruing cost of providing accident coverage as key to efforts to reform its Accident Compensation program.

Budgeting for Social Security: Despite concerns about the uncertainty surrounding cost estimates, some have suggested the use of accrual measurement in the budget for social security programs. However, to date none of the countries reviewed for this paper budgets for the costs of future social insurance benefits.

Budgeting contingency reserves: Some countries provide in the budget, as a separate item, annual amounts to cover any urgent or unforeseen expenditures, including contingent liabilities. In general, criteria are established which must be met before obtaining these funds.

For example, to prepare for possible fiscal risks, the Hungarian government has created multiple reserve funds, such as a country protection fund, a reserve for extraordinary government measures and provision for sectoral career programs, wage compensation for public sector's employees and other individual payments.

In Colombia, the Contingency Fund for State Entities is a fiscal mitigation mechanism, which pays the contingent obligations of the state entities, regulated by the National government. This Fund was created by Law 448/1998, and managed by the also public fiduciary called La Previsora. This Fund for contingent liabilities in public credit started to operate in 2005 and was possible when Decree 3800 was into force and regulates the contributions coming from government institutions due to their contingent obligations from public credit operations". Similarly, some countries establish a reserve fund to meet major contingencies such as a major natural disaster.

Canada has established a "contingency reserve" within the annual budget. The intent of the reserve is to cover risks arising from unavoidable inaccuracies in the models used to translate economic assumptions into budget forecasts and risks arising from completely unpredictable events such as earthquakes. It is not intended to be a source of funding for new government initiatives. If the funds are not needed, they are used to pay down the public debt. The government determines the amount of the contingency reserve after consultation with private sector economists

Budgeting for future operating and maintenance costs: Some countries have cited accrual budgeting as a useful mechanism for increasing the attention given to the future costs associated with asset purchases. Under some forms of accrual budgeting, annual budgets include depreciation and cost of capital charges over the life of the asset. Some accrual budgeting proponents expressed the view that because depreciation and the capital charges will be included in future budgets, an asset no longer appears as a "free good" after the initial purchase. Other countries, such as South Africa, have developed a medium-term expenditure framework that automatically includes the financing requirements for operations and maintenance in the fiscal outlook and future budgets.

5.3 Other Risk Prevention and Mitigation

Approaches for mitigating risk may range from improved transparency (to help support informed decision-making) to the establishment of direct controls over the amount of risk assumed by the government. The following provides some examples of steps taken by governments to better understand and mitigate risks assumed.

Improved transparency: Several countries have taken steps to increase the transparency of fiscal exposures facing their governments. For example,

Preparation of a matrix of fiscal exposures: As mentioned earlier, an important first step is to identify and improve the understanding of a country's fiscal exposures. The Fiscal Risk Matrix developed by Hana Polackova-Brixi has been prepared for a number of governments, including South Africa, Hungary, and Bulgaria, to identify risks as well as possible policy remedies that might be applied. In some cases, filling out the Matrix has been credited with making governments aware of some significant risks that were previously unknown.

Publishing supplemental information on fiscal exposures: Publishing supplemental information on fiscal exposures facing the government can be used to increase awareness and understanding of these issues. Although not providing any form of direct control, for most countries, including a supplemental listing of fiscal exposures with budget documents, even if cost estimates are not available, would improve the transparency and perhaps the incentives to address these issues.

Establishment of direct control mechanisms: In addition to making fiscal exposures more transparent, some countries have taken specific steps or established procedures to limit government exposure. For example,

Canada has introduced a set of principles to regulate its risk associated with loan and loan guarantees. One aspect of this framework is that before a loan or guarantee is tendered, the department must analyze the project and demonstrate that it could not be financed without government assistance. In addition, any new loan or loan guarantee program must be approved by the Minister of Finance and authorized by the Parliament.

The Arab Republic of Egypt has undertaken a set of procedures and measures in order to limit the financial risks associated with the loans pertaining to internal and external loans, and provide the guarantees associated with them. The company or the entity requests the approval of the Ministry of Finance regarding the loan, which in turn coordinates with the Central Bank of Egypt to determine the required guarantees. Then, the Ministry of Planning includes this loan in its investment plan, and in case there is a request for external loans, all necessary

approvals must be fulfilled from the Egyptian Presidency, the Ministry of Foreign Affairs, the Egyptian Cabinet, the Parliament, and the Ministry of Justice and an authorization is issued to the Minister of International Cooperation to sign the external loan agreement.

Another approach may be to develop a control mechanism over the aggregate level of risk assumed by the government. Under such an approach, policymakers could be required to vote on any action that would increase the cost of the government's aggregate fiscal exposure. While this approach has the advantage of providing a mechanism for control over the aggregate exposures facing a government, issues such as estimation difficulties, the susceptibility to manipulation, and other tracking problems, raise important, perhaps insurmountable, implementation concerns.

Development of Risk Management Systems: Government can benefit from the development of risk management systems and improved techniques for assessing specific risks. Establishing risk-focused processes can help governments better understand fiscal exposures and thus, help prevent them from unknowingly accepting risks that may jeopardize future budgets. For example:

The Colombian government conducted a risk-focused assessment for a toll road project that determined that the greatest exposures were from the market risk associated with traffic volume and construction overruns. Early recognition of these risks was credited with allowing the government to improve its risk management techniques and contract specifications.

The Philippine Financial Management Reform Road Map Toward Improved Accountability and Transparency crafted by the Government Integrated Financial Management Information System (GIFMIS) Committee has completed a project on the management of contingent liabilities specifically for the PPP program in 2016. One of the major outputs of this project is the valuation of contingent liabilities on PPPs.

The Philippines deems it necessary to put in place a system for managing its exposure to contingent liabilities. Current efforts are focused on the determination of the level of exposure through the development of a policy on valuation, and risk assessment and management. It also involves the establishment of a database of GOCCs to facilitate a centralized monitoring and management of guaranteed loans.

The aim is to have a complete list of contingent liabilities which will be useful to policymakers to identify and address concerns about legal limitations on

government action to define or delimit the scope of certain types of contingent liabilities.[20]

6. Possible Roles for the SAI

The Working Group on Public Debt (WGPD) believes that ensuring proper understanding and monitoring of the range of fiscal exposures clarify a country's long-term fiscal sustainability and the implications for public debt. Therefore, SAIs may wish, within the limits of their powers and responsibilities, to encourage their governments to adopt sound practices for the assessment, financial reporting, budgeting, and oversight of a country's fiscal exposures. SAIs also may wish to be aware of and support the adoption of "best practices" for dealing with risk.

The WGPD recognizes that SAIs' work in the area of fiscal exposures must be conducted in accordance within the institutional structure and implementation constraints of their countries. The WGPD acknowledges that undertaking programs and other responsibilities is generally matter of policy determined through the normal constitutional or policymaking processes within the country concerned. Furthermore, in most countries, there is some limitation on the right of the SAI to examine or question such policy judgements. Thus, the nature and extent of the SAI's powers and responsibilities in this regard will depend on the political and constitutional circumstances in the country concerned.

SAIs, therefore, will need to exercise their own judgement when considering the nature and extent of the examinations that they can undertake and the reports they can prepare on fiscal exposures. In addition, the task of identifying and understanding the implications of fiscal exposures on long-term fiscal condition opens a new field of oversight for SAIs. Given the complex technical and conceptual issues associated with fiscal exposures SAIs may need to develop necessary skills both internally and across their governments.

Some actions a SAI may wish to take with respect to fiscal exposures include:

Audit and help improve understanding of exposures reported in financial reports: Most SAIs have the primary responsibility for the audit of information disclosed in the government's financial statements. These statements provide a foundation for considering a country's long-term financial condition. Within their legal authority, SAIs may wish to work to ensure the quality of the information on exposures provided in these statements and to improve understanding of how these reports can be useful in assessing a country's long-term fiscal sustainability.

[20] Current Institutional Framework for Public-Private Partnership Contingent Liabilities, Philippines: Management of Contingent Liabilities Arising from Public-Private Partnership Projects, Asian Development Bank, pp.23-24

Encourage sound reporting practices for fiscal exposures, including those not captured by conventional financial and budget reports: By assessing and providing information on fiscal exposures, SAIs may play an important role in increasing awareness among policymakers, the markets, and the public of these issues. Doing so, may also help create incentives to address the financing of these exposures or to avert them entirely. Within their legal authority, SAIs may wish to take an active role in considering: (1) the appropriate treatment and oversight for exposures that extend beyond financial reporting requirements for liabilities and note disclosures and (2) ways to effectively integrate financial and other cost information for fiscal exposures into the budget and other policy processes.

Encourage "best practices" for dealing with risk: Within their legal authority, SAIs also may wish to work to help support the understanding and implementation of appropriate risk mitigation techniques. SAIs may wish to consider whether programs are effectively designed to mitigate the level of risk assumed by the government. Doing so may require SAIs to position themselves to offer insights on mechanisms such as risk sharing, the use of re-insurance and the establishment of risk-based premiums. For example, SAIs may wish to play a role in improving the understanding and use of:

- Risk assessment techniques;
- Risk mitigation approaches; and
- Risk management approaches.

Some SAIs have conducted reviews of potential exposures on future resources beyond that required as part of their financial audit responsibilities. Some oversight activities could be undertaken by SAIs with respect to various types of fiscal exposures:

- Oversight of loans, guarantees, and insurance
- Review of the long-term budgetary implications associated with environmental clean-up costs
- Review of other potential exposures
- Analysis of long-term fiscal pressures

These activities could involve both helping to improve the understanding of the country's long-term fiscal condition on an aggregate basis and analyzing and monitoring individual fiscal exposures. For example, where appropriate, SAIs may wish to play a role in:

- the development a single portfolio of a country's fiscal exposures;
- the use of frameworks such as the "fiscal risk matrix" to help improve understanding of the scope and nature of a country's exposures;
- the assessment of the expected costs and risks associated with specific fiscal exposures; and
- the use of multidisciplinary tools, such as simulations, to illustrate and increase understanding of a country's long-term fiscal outlook.

According to the OECD's best practices[21], the ministry of finance (MoF) generally has a centralization and oversight role in the fiscal risks framework, monitoring and managing macroeconomic risks, while line ministries and agencies often have the responsibility to monitor and manage fiscal risks associated with their own activities. A success factor for comprehensive identification and management of fiscal risks is therefore to enhance co-ordination of actors involved in the fiscal risks framework.

An important SAI's role to play in the fiscal risks management framework might be to carry out a performance audit to examine whether the MoF, ministries, and departments are effectively and efficiently doing their activities with coordination in order to achieve their objectives.

As a limitation of the SAI's work, auditors should consider the reluctance of the government concerned to report/disclose future fiscal risks which may be detrimental to their financial position. In some cases, "executive privilege" may be invoked by the government in concealing information related to possible fiscal exposures as a result of negotiations between governments and/or individuals. Auditors must deal carefully with such a situation in order to not ignore an eventual embedded fiscal risk nor to inappropriately expose the government's fragilities.

[21] OECD Best Practices for Managing Fiscal Risks – Lessons from case studies of selected OECD countries and next steps post COVID-19

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