

World Bank Treasury Public Debt Management

# A Look Inside the Mind of Debt Managers

A Survey on Contingent Liabilities Risk Management

*Andrew Lee*  
*Fritz Bachmair*



Financial Advisory and Banking Department  
March 2019

## Abstract

Governments around the world are increasingly exposed to fiscal risks. Debt levels have risen, and debt sustainability has been challenged in many countries. With the potential to further impair debt sustainability, fiscal risks from contingent liabilities have gained attention. This paper sets out to identify how debt managers perceive the importance of contingent liabilities in their countries, their governments' capacity in managing risks, and the risk management practices employed.

The findings in this paper are based on a survey of debt managers the World Bank conducted in 2016. Out of a sample of 43 responding countries, 91 percent indicated that contingent liability risk management was important or very important. However, only 41 percent believe that their government's capacity in managing risks was good or very good. The most common type of contingent liability debt managers identify as important was credit guarantees (70 percent) followed by debt from state-owned enterprises (SOEs) and subnationals (60 percent) and guarantees in public-private partnerships (40 percent). To manage risks, governments were more likely to employ risk monitoring, analysis, and reporting (each used by at least 50 percent of

respondents), than guarantee fees, exposure limits, reserve accounts, or financial hedging instruments (ranging from 9 to 42 percent). Of debt managers from countries that employed two or more risk monitoring or mitigation tool responded, fewer than 50 percent believed that their government's capacity in managing risk were average, limited or very limited. This is compared to 72 percent for countries employing one tool and 100 percent for countries employing no tools.

The results from the survey suggest that: (i) most debt managers recognize that contingent liabilities risk management is important but many perceive that their governments have limited capacity to manage corresponding risks; (ii) most debt managers are primarily concerned with contingent liabilities that are relatively easily monitored; (iii) more governments employ risk monitoring rather than risk mitigation tools and (iv) debt managers' confidence in their governments' capacity to handle contingent liability risks is correlated to the number of risk mitigation and monitoring tools employed. Survey results raise important issues for further research, such as the relative effectiveness of alternative risk management practices.

---

This paper is a product of the Financial Advisory and Banking Department. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world.

# A Look Inside the Mind of Debt Managers – A Survey on Contingent Liabilities Risk Management

Andrew Lee and Fritz Bachmair<sup>1</sup>

JEL classification: E62, G32, H63, H81, L94, N77, O55

Keywords: credit risk, risk management, fiscal risks, contingent liabilities, guarantees, on-lending, public debt management

---

<sup>1</sup> Andrew Lee is a Financial Analyst Financial Advisory and Banking Department at the World Bank Treasury and Fritz Bachmair is an independent consultant. They can be contacted at [alee8@worldbank.org](mailto:alee8@worldbank.org) and [fritz.bachmair@gmail.com](mailto:fritz.bachmair@gmail.com), respectively. The opinions expressed in this paper are the authors' own and do not represent the views of the World Bank Group, its Executive Directors or the countries they represent.

## Contents

Abstract .....	1
Acknowledgements.....	4
Acronyms.....	5
Introduction.....	6
1. Background .....	7
2. Methodology .....	7
Overview of survey.....	7
Sample .....	8
Analysis of data.....	9
Design features of methodology .....	10
3. Summary of Survey Results.....	11
4. Key findings.....	16
5. Conclusion .....	18
References.....	19
Annexes .....	20

## Acknowledgements

The authors are indebted to a number of institutions and individuals who offered them the opportunity to learn about contingent liability and fiscal risk management practices. The support received enabled them to apply insights in writing this paper and in providing advisory services to World Bank clients.

The authors are especially grateful to survey respondents from debt management offices representing 43 countries for providing their views and opinions on this important issue. Their responses are essential in providing insight for debt management practitioners and the institutions that support them.

The authors would also like to acknowledge the valuable input from colleagues at the World Bank Treasury's Financial Advisory and Banking Department, including Coskun Cangoz, Sebastien Boitreaud, Cigdem Aslan, Francois Lefebvre, Rodrigo Cabral, Antonio Velandia, Leandro Secunho and Mats Filipsson. The authors are also thankful to Abha Prasad for co-hosting the webinar, Amira Amat for administering the webinar as well as Florent Antoine and Christopher Dychala who helped gather and analyze the survey results.

## Acronyms

CPIA	Country Policy and Institutional Assessment
EAP	East Asia and Pacific
EEG	Eastern Europe Group
GDRM	Government Debt and Risk Management
HIC	High income country
IMF	International Monetary Fund
LAC	Latin America and the Caribbean
LIC	Low income country
LMIC	Lower-middle income country
MENA	Middle East and North Africa
PFRAM	Public Fiscal Risk Assessment and Management
PPP	Public-private partnership
OECD	Organization for Economic Cooperation and Development
SECO	Swiss State Secretariat for Economic Affairs
SOE	State-owned enterprise
SSA	Sub-Saharan Africa
UMIC	Upper-middle income country
WEOG	Western Europe and Others Group

## Introduction

Governments around the world continue to be exposed to a wide array of fiscal risks, on- and off-balance sheet. Over the past decades, public debt levels have risen, and debt sustainability has been challenged in many emerging markets. To reduce perceived challenges to debt sustainability, governments are increasingly looking towards off-balance sheet financing and entering into risk-sharing arrangements. This has created an environment where important institutions such as public utilities and large banks increasingly rely on explicit or implicit support from the government, thus increasing the fiscal risks entailed by contingent liabilities. As contingent liabilities are uncertain and often unexpected liabilities, their materialization puts a strain on governments' finances, often in times of economic and fiscal distress. There have been notable instances of these risks materializing such as the global financial crisis, the deterioration of the performance of state-owned enterprises (SOEs), and a series of damaging natural disasters (e.g. the 2017 Central Mexico earthquake, Hurricane Irma).

Debt managers play an important role in managing contingent liability risk as part of their broader mandate to manage their country's stock of debt as efficiently as possible. Both explicit contingent liabilities, such as government credit guarantees, as well as implicit contingent liabilities, like those arising from the financial sector or natural disasters, can have a significant impact on a country's debt stock and are important for debt managers to consider.

In 2016, the World Bank conducted a survey to assess debt managers' views on contingent liability issues and related risk management practices in their countries<sup>2</sup>. This note will detail the survey results and subsequent analysis with the goal of providing a view on practitioners' opinions on these issues. This will help build a better understanding of how debt managers perceive contingent liability risks in their countries and how they assess their governments' capacity to manage these risks. This should also help institutions such as the World Bank in providing targeted policy advice and technical assistance to governments.

The following sections of the paper will discuss: (1) background on existing literature on contingent liability risk management, (2) the methodology of the 2016 World Bank survey, (3) the results from this survey, and (4) highlight key findings before concluding.

---

<sup>2</sup> The survey was conducted by the World Bank Treasury's debt management team which assists clients in assessing and quantifying contingent liability risk as well as establishing frameworks for issuing guarantees. For more information about the team, visit: <http://treasury.worldbank.org/en/about/unit/treasury/client-services/public-debt-management-advisory>

## 1. Background

A significant amount of literature has been produced on the topic of fiscal risks and contingent liabilities from various international experts. This literature includes discussions on the nature of contingent liabilities and the issues that they cause as well as conceptual frameworks for measuring and managing these risks. Notable works include the World Bank's book "Government at Risk" (Polackova Brixí and Shick, 2002) which highlights issues and country experiences and the IMF's paper "Contingent Liabilities: Issues and Practice" (Cebotari, 2008). Recent literature has delved further into the subject, such as the IMF's paper on the fiscal costs of contingent liabilities (Bova, Ruiz-Arranz, Toscani and Ture, 2016) which explored the materialization of contingent liabilities and their impact on governments' budget and countries' economic growth and the World Bank's paper on assessing and quantifying risks from contingent liabilities (Bachmair, 2016).

While this literature has been very useful to those working to better understand the issues that contingent liabilities create, there has been relatively little literature capturing the views of practitioners managing risks on behalf of their governments. An OECD paper published in 2017, examined the role of debt managers in managing contingent liabilities (Ülgentürk, 2017). However, the survey conducted as part of this paper primarily consisted of OECD countries (31 out of 33 responding countries) and focused on debt managers' involvement in different areas of contingent liability management with limited focus on their perception of risks and government practices.

The survey and this paper aim to achieve a broader understanding of how country practitioners from a wide mix of countries (in terms of income levels and geography) view the issue of contingent liabilities including: (1) the types of risk countries are exposed to, (2) the level of risk that they pose to countries' finances, (3) the effectiveness of governments in managing risks and (4) the methods and measures used to mitigate risks.

## 2. Methodology

### Overview of survey

Following a webinar<sup>3</sup> hosted by the World Bank Treasury on contingent liabilities, the World Bank conducted an online survey sent to participants, predominantly public debt managers, to obtain their views on contingent liability management capabilities of their governments. The respondents were asked a series of questions (Annex 1) that aimed to assess their views on: (i) their country's contingent liability risk exposure, (ii) the most important types of contingent liabilities their governments are exposed to, (iii) the government's capacity in managing these risks and (iv) the mitigation methods employed by their governments.

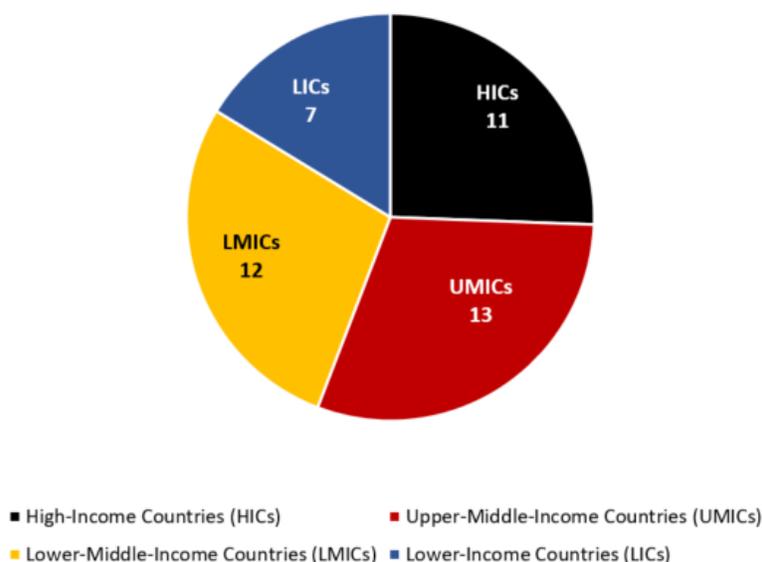
---

<sup>3</sup> <http://www.worldbank.org/en/events/2016/02/24/webinar-on-contingent-liability-risk-management-measuring-and-managing-risks-related-to-sovereign-guarantees-and-on-lending#1>

## Sample

The sample consisted of respondents from 43 countries. Countries are relatively evenly distributed across income levels<sup>4</sup> with more representation from middle-income countries (both upper- and lower-middle income countries representing 30 percent of respondents respectively). The sample is composed of respondents from a variety of regions<sup>5</sup>. There is particularly strong representation among the South Asia region (SAR) with 63 percent of countries within that region responding (5 of 8 countries within the region). There is also relatively strong representation from Eastern Europe (EEG) (26 percent), Latin America and the Caribbean (LAC) (21 percent), Western Europe and Others (WEOG) (24 percent) and Sub-Saharan Africa (SSA) (23 percent). Regions in which there are low representation among respondents included East Asia and Pacific (EAP) (11 percent) and Middle East and North Africa (MENA) (5 percent). The following figures show the breakdown of the sample in terms of income and region (Figure 1 and 2). A detailed list of respondents' countries can be found in Annex 2.

Figure 1 – Sample of World Bank survey results: breakdown by level of income (N= 43 countries)

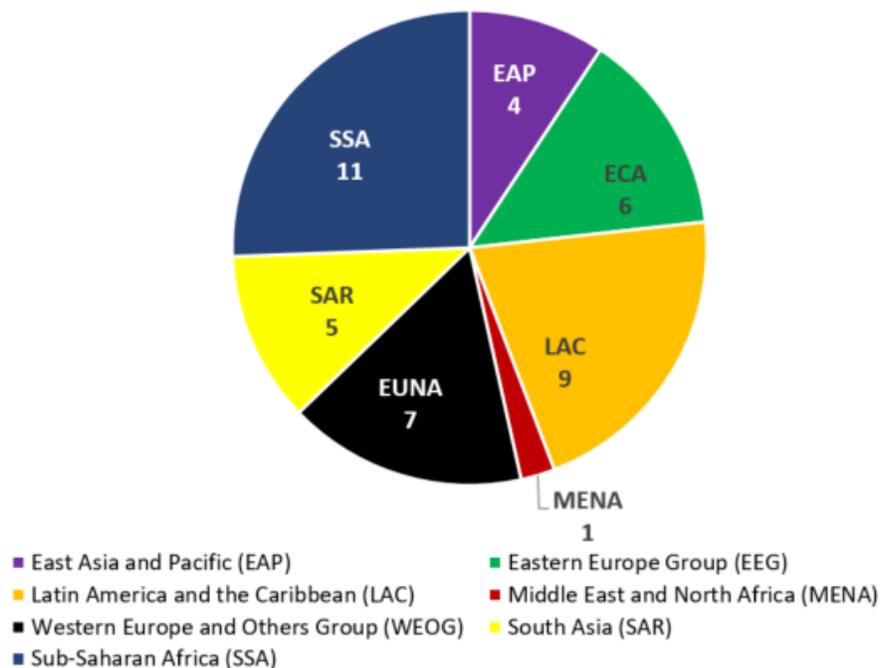


<sup>4</sup> Categorized by the World Bank based on GNI per capita as calculated by the World Bank Atlas method. In 2017, low income is defined as a GNI of \$995 or less, lower-middle income as GNI per capita between \$996 and \$3,895, upper-middle income as GNI per capita of \$3,896 and \$12,055, and high income as GNI per capita of \$12,056 or more. Country classification by income level as of 2017 at the following link:

<https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>. Note that these classifications change on a yearly basis and historical classifications can be found at the same link in an excel file.

<sup>5</sup> Categorized based on World Bank and UN region classifications. The following World Bank Regions were used: East Asia and Pacific (EAP), Latin America and the Caribbean (LAC), Middle East and North Africa (MENA), South Asia (SAR), Sub-Saharan Africa (SSA). The following UN regions were used: Western Europe and Others Group (WEOG) and Eastern Europe Group (EEG). World Bank region classification can be found at the following link: <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups> and the UN region classification can be found at the following link: <http://www.oecd.org/about/membersandpartners/list-oecd-member-countries.htm>.

Figure 2 – Sample of World Bank survey results: breakdown by WB/UN regions (N=43 countries)



### Analysis of data

The analysis of results involves reviewing responses from the survey and analyzing these responses against other survey question results. An example of this is the examination of the correlation between the perceived importance of contingent liability risk management and the perceived capacity of governments to manage these risks. Only aggregated results are made public. All individual responses are kept confidential.

Additional analyses were considered but not included for reasons explained below. These included correlating survey responses with data on the materialization of contingent liabilities, risk of external debt distress for LICs and debt-to-GDP.

### *Actual realizations of contingent liabilities*

A recent IMF paper “The Fiscal Costs of Contingent Liabilities: A New Dataset” (Bova, Ruiz-Arranz, Toscani and Ture, 2016) provides data on contingent liabilities that had been realized over the course of 24 years. We matched the underlying data with results from this survey to examine possible correlations between debt managers’ current risk perceptions and historic realizations of various contingent liabilities. Insufficient overlap between country sets did not allow for any meaningful and statistically significant conclusions.

### *Risk of external debt distress*

We considered assessing whether countries' risk of debt distress ratings had any influence on respondents' perceptions of their governments' capacity in managing contingent liability risk. However, we did not have sufficient data for many respondent countries to draw any statistically significant conclusions.

### *Debt to GDP*

We considered whether countries' debt to GDP impacted respondents' perception of their governments' capacity to manage contingent liability risk. However, we did not observe any statistically significant correlation.

### Design features of methodology

The results from the survey and analysis performed provide valuable insight into the views of debt managers on their countries' contingent liability management. It is however important to note that several design features and limitations impact the data collected.

One such feature is the anonymity of survey respondents. While the list of participants involved in the webinar is known, the survey was conducted with complete anonymity. Therefore, it is not possible to link responses to specific individuals. Given that the virtual training was specifically targeted towards debt managers, the survey provides useful insight into the views of debt managers.

While debt managers hold a key role in the management of contingent liability risk in many countries, they offer only one perspective among different players within government. Therefore, survey results may not capture all the relevant views on the topic. For example, debt managers tend to be more involved with the issuance of credit guarantees to SOEs than in contingent liabilities arising from natural disasters. As such, debt managers prioritization of contingent liabilities may be skewed towards areas within their mandate, that is contingent liabilities entailing some credit risk.

Given that the survey was directed at participants of a webinar concerning contingent liability, it is possible that the results of the survey reflect the views debt managers that were already interested in the topic. We believe the results still provide valuable insight given this context given that debt managers in many countries are responsible for managing and monitoring contingent liabilities.

Several countries were represented by multiple individuals at the World Bank webinar on "Contingent liabilities risk management: Measuring and managing risk related to sovereign guarantees and on-lending"<sup>6</sup> and there are instances when multiple individuals from the same country submitted responses to the survey. The following methodology is used to address multiple responses:

---

<sup>6</sup> <http://www.worldbank.org/en/events/2016/02/24/webinar-on-contingent-liability-risk-management-measuring-and-managing-risks-related-to-sovereign-guarantees-and-on-lending#1>

- All results in which respondents have significantly different responses are discarded and not included in any analysis. For most questions, there are no significant differences in responses.
- Results that are registered as coming from outside the country represented are eliminated. We believe that the most relevant results of the survey come from respondents within the country since they would be more likely to represent officials currently working for their governments than respondents outside the country.
- For questions that require respondents to choose one or more responses, results from all respondents are included to represent the response from the country. An example of this is if one respondent highlights only credit guarantees among the government’s most significant exposure while another respondent from the same country highlights only natural disasters. In that instance, both credit guarantees and natural disasters are included among the government’s most significant exposures.
- For questions that require respondents to choose only one response, the average of the responses is taken and rounded up where applicable (i.e. one response of “important” and one of “very important” would be rounded up to “very important”).

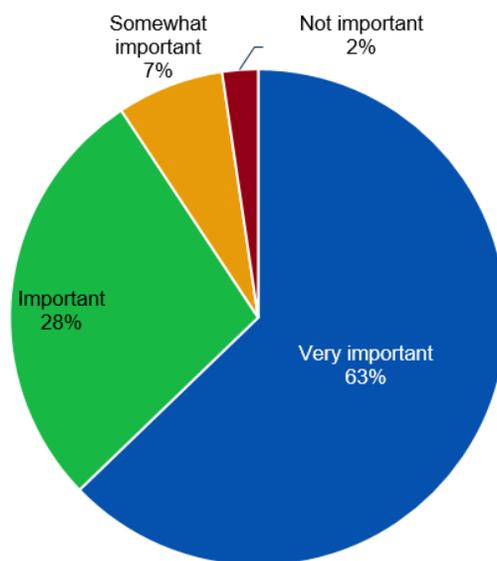
### 3. Summary of Survey Results

The World Bank survey consists of seven questions with six multiple choice questions as well as one open-ended question (see Annex 1 for the full list of questions).

#### Importance of contingent liabilities

A vast majority (91 percent) of respondents answered that contingent liability risk management is important or very important in their country (Figure 3).

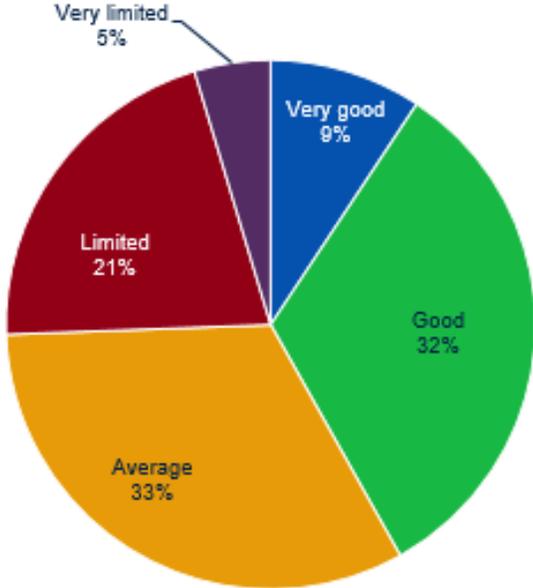
Figure 3 – Question 1 “In your opinion, how important should contingent liability risk management be in your country?” (N=43 countries)



**Government capacity in managing contingent liability risk**

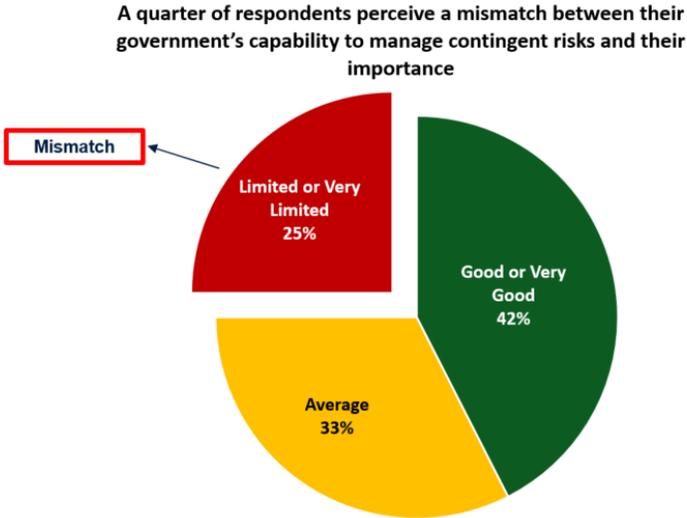
Survey results suggest there is a sizable portion of respondents that view their governments’ capacity to manage contingent liabilities as limited or very limited (26 percent). A breakdown of the results can be seen in Figure 4.

Figure 4 – Question 3 “How would you assess your government’s capacity to manage risks from contingent liabilities” (N=43 countries)



Examining respondents perception of the importance of contingent liabilities in relation to their views on the government’s capacity to handle these risks reveal a notable mismatch. Among respondents that cite contingent liability risk management as “important” or “very important”, a quarter perceive a mismatch between the importance and capacity of the government to manage contingent liability risk. A breakdown of the analysis can be seen in Figure 5.

Figure 5 – Respondents’ perception of governments’ capacity to manage contingent liability risk given that contingent liability risk management is perceived as “important” or “very important” (N=40 countries)



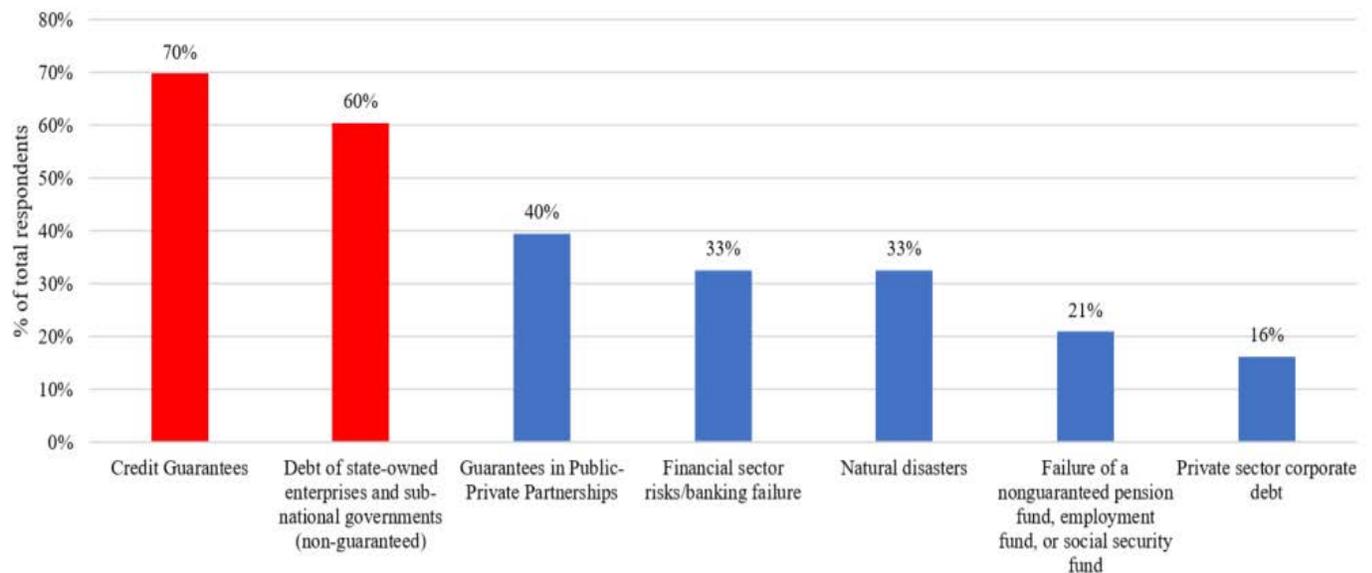
**Related Questions**

- In your opinion how important should contingent liability risk management be in your country?
- How would you assess your government capacity to manage risks from contingent liabilities?

**Types of contingent liabilities to which governments are most exposed to**

A majority of respondents perceive credit guarantees (70 percent) and debt from SOEs and subnationals (60 percent) as the types of contingent liabilities that governments have the greatest exposure to. The survey did not include any question as to whether these credit guarantees to SOEs and subnationals were explicit or implicit guarantees. A breakdown can be seen below in Figure 6.

Figure 6 – Respondents’ views on which contingent liabilities their governments are most exposed to (N=43 countries)



### Related Questions

What type of contingent liabilities is your country most exposed to?

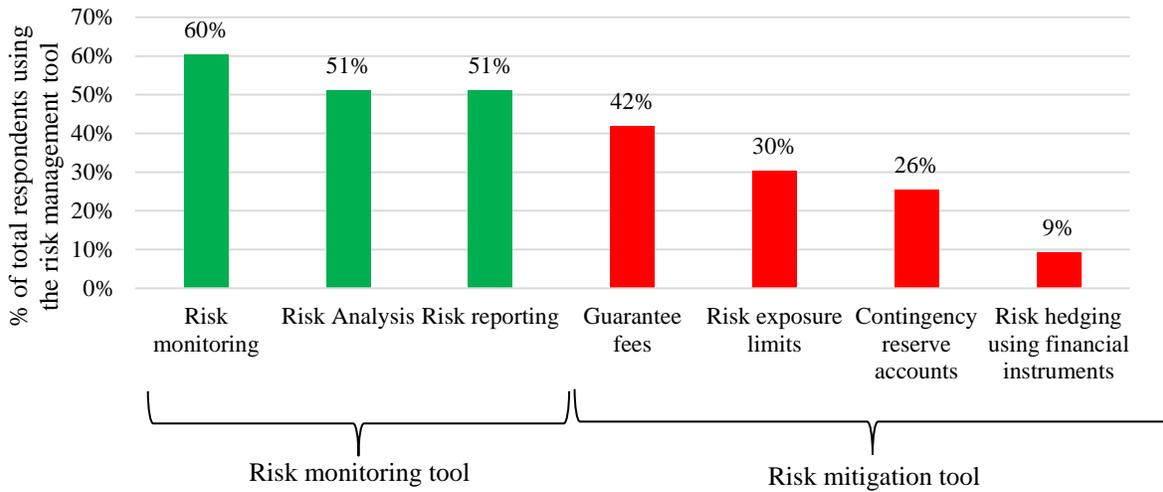
### **Risk management tools used to manage contingent liability risk**

Respondents also note that there are certain types of risk management tools that are more widely applied than others. Figure 7 shows a divide between risk monitoring tools<sup>7</sup> (risk monitoring, risk analysis and risk reporting) and risk mitigation tools<sup>8</sup> (guarantee fees, risk exposure limits, contingency reserve accounts and risk hedging using financial instruments). In Figure 7, the risk monitoring tools are highlighted in green and risk mitigation tools are highlighted in red. Each of the risk monitoring tools are identified by more than half of respondents as among tools employed by government whereas risk mitigation tools range between 42 percent for guarantee fees and 9 percent for risk hedging using financial instruments. Examples of tools being used by some governments are highlighted in Box 1. Definitions for these tools are included in Annex 4.

<sup>7</sup> Risk monitoring tools are tools which focus on recognizing, monitoring and reporting risks.

<sup>8</sup> Risk mitigation tools are used to reduce the potential impact of a materialization of risk

Figure 7 – Risk management tools employed by governments (N=43 countries)

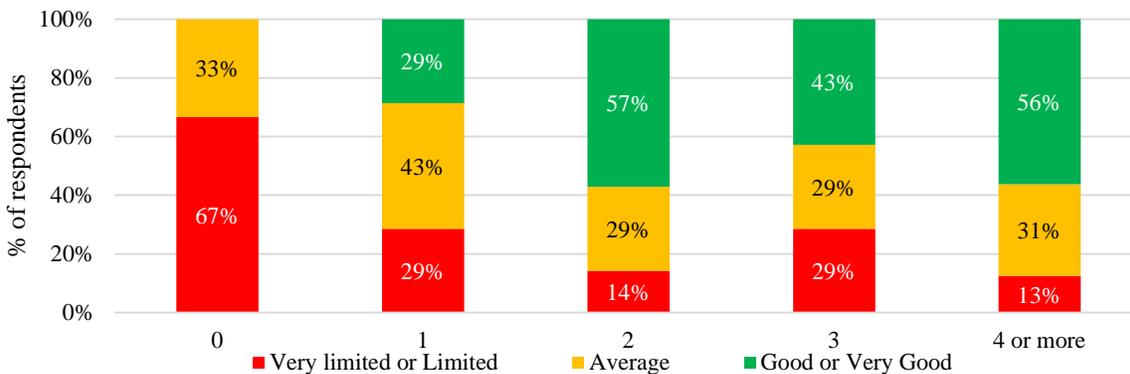


**Related Questions**

- What risk management tools are you currently employing to manage risks from contingent liabilities?

The results also show a correlation between respondents’ views on the government’s capacity to manage contingent liability risks and the number of tools employed. Figure 8 illustrates that respondents are more confident when they are aware of at least 2 tools being used. It is notable that all respondents from governments that employ no tools view their governments’ capacity to handle contingent liability risk as average (33 percent), or limited or very limited (67 percent).

Figure 8 – Confidence in contingent liabilities risk management based on number of tools used



**Related Questions**

- How would you assess your government capacity to manage risks from contingent liabilities?
- What risk management tools are you currently employing to manage risks from contingent liabilities?

### **Box 1. Examples of risk management tools employed**

In World Bank's paper on assessing and quantifying risks from contingent liabilities (Bachmair, 2016), the author cites examples of different risk management tools employed by various countries. These include:

- Colombia: Risk management tools include the requirement of collateral from beneficiaries, guarantee fees, a contingency reserve account, and risk monitoring and reporting.
- Sweden: Risk management tools include guarantee fees, partial guarantee coverage, appropriations to a notional reserve account and risk reporting.
- Turkey: Risk management tools include guarantee and on-lending limits, guarantee fees, partial guarantees, appropriations to the risk account, and risk monitoring and reporting.
- Indonesia: Risk management tools include a guarantee limit, risk analysis, provisioning for financial losses, risk monitoring and risk reporting.

## **4. Key findings**

**There is near unanimity among responding debt managers that contingent liabilities risk management is important. However, a significant portion see a mismatch between the importance of risks and their government's capacity to manage them effectively.** Debt managers are acutely aware of the risks contingent liabilities pose (91 percent of respondents). At the same time, there are still many who perceive that their government is ill-equipped to deal with these risks (26 percent of respondents). Some possible factors may be due to a lack of resources or technical capacity to sufficiently assess and manage risk arising from contingent liabilities among debt management units. Another possible reason is the difficulty in implementing certain risk management measures. For example, charging SOEs a risk-based guarantee fee may be difficult given that SOEs often have limited commercial viability. All these factors may point to the need for tailored assistance to governments to build capacity in a constrained environment.

**Debt managers are primarily concerned with a small number of relatively easily observable contingent liabilities.** The only types of contingent liabilities that a majority of participants identify as among the most important are credit guarantees (70 percent) and debt from SOEs and subnationals (60 percent). This could be due to the fact that debt managers are more likely to have a mandate for the management of risks from guarantees which are often issued to SOEs. Another possible reason is that debt managers may be most aware of risks that are easy to observe and relatively easily quantifiable. Finally, debt managers may have in-house expertise on credit risk whereas analyzing risks such as natural disasters or banking failures entail different competences. Exposure to guarantees, and explicit contingent liabilities based on contractual obligations, and SOE and subnational debt are more apparent than other risks such as the fiscal implication of natural disasters or financial sector imbalances.

**Governments are much more likely to employ risk monitoring rather than risk mitigating tools.** Debt managers note that there is distinctly more use of risk monitoring tools (e.g. risk monitoring, analysis and reporting) compared with risk mitigation tools (e.g. guarantee fees, risk exposure limits, contingency reserve accounts, and financial instruments). Over 50 percent of debt managers indicate that their governments use at least one of these risk monitoring tools while no other tools are employed by more than 50 percent of respondents' governments. This could be explained by a variety of factors. One possible reason may be the difficulty of implementing a risk mitigation instrument without having set up a risk monitoring tool beforehand. Given the difficulty of reaching consensus on the design of risk mitigation tools (see below), it might be necessary for the risks to have been monitored over a period, and thus appropriated by the relevant authorities, for a mitigation tool to be considered and implemented.

Another reason might be the overriding economic policy considerations that drive exposure to contingent liabilities. Implementing risk mitigation tools may impede entities' ability to provide certain services. For example, charging an electricity company a guarantee fee and at the same time mandating electricity tariffs at levels below cost recovery may reduce entities' ability to supply sufficient electricity, particularly to more remote, less profitable customers.

The lack of consensus over the ability to design sound risk mitigation tools within the government may be another possible explanation. This may be due to the perception that teams lack the resources or technical skills to implement risk mitigation tools such as limits, fees or risk hedging instruments as compared to risk monitoring tools. Some tools may require a relatively high level of analytical capacity that may not be adequate in some debt management offices.

Risk mitigation tools generally also require increased financial resources. Risk mitigation measures may require that governments set aside their limited financial resources to address these contingent liability risk. Governments may be less willing to commit financial resources to address risks that may not materialize especially given the resource constrained environment in which many of them operate. An example of this is funding a reserve account which requires the government to either appropriate the necessary resources from their budgets or remove a potential source of income to the government via guarantee fees.

**Debt managers from countries using more tools are more confident in their government's capacity to handle contingent liability risk. The level of confidence, however, does not seem to be correlated to any specific type of tool.** Respondents who employ fewer risk management tools had significantly less confidence in their governments' capacity to effectively manage contingent liability risk. For respondents who indicated that no tools are employed, 67 percent answered that their government's capacity in handling contingent liability risk is limited or very limited. This is compared with only 13 percent of respondent from countries whose government employ four or more tools. However, there appears to be no link between debt managers' confidence and the use of any specific risk mitigation or monitoring tool. It is possible that respondents are generally more confident in risk management capability given the implementation of a greater number of tools. However, it is also possible that respondents are confident because of their governments' strong risk management practices and these governments could be able to implement more tools due to those strong practices.

## 5. Conclusion

The survey results and subsequent analysis have shown that a clear majority of debt managers agree on the importance of managing contingent liability risk. The survey also shows that despite this perceived importance, many debt managers observe that their governments' practices are insufficient to deal with this critical issue. To manage these risks, respondents from most countries indicate that their governments more frequently employ risk monitoring tools than risk mitigation tools. However, the type of tool is not as important as the number of tools in terms of generating greater confidence among respondents. While this survey gives us insight on debt managers' perception on a variety of risks, it also raises important questions that may merit further work.

**It may be useful to further research how effective certain tools are in mitigating specific types of contingent liability risk.** An example of this would be to examine different countries which have experienced recent macroeconomic shocks and see how effective risk management tools were at mitigating the materialization of contingent liabilities. It may also be useful to get a more global view of what risk assessment methodologies governments are using (i.e. credit ratings, statistical modeling, financial modeling).

**Additional study into ways to improve debt manager confidence in contingent liability risk management would be useful.** The survey focuses on debt managers' concerns and ways that contingent liability risk is being managed. However, the survey did not cover what actions governments could take to raise confidence in their capacity to manage risks. This could be a useful area to further explore to highlight areas of potential reform to improve contingent liability risk management, and how partners may support governments.

**The survey did not cover the institutional setup for contingent liability risk management.** Further study could be conducted on how responsibility for different types of contingent liabilities are divided among different units within the finance ministries and beyond. It should also determine how this affects the capacity of the government to manage risks. This may help governments in implementing institutional and organizational reforms.

**Research on the impact of sound governance structures to manage contingent liability risk would also be useful in complementing the findings from this survey.** The survey did not explore the impact of the legal and institutional frameworks in managing contingent liability risk. A sound governance structure, both from an organizational and legal framework perspective, forms an important basis for managing contingent liability risk.

**Additional surveys reflecting the perspectives of other relevant parties involved in contingent liability risk management would provide a more complete view.** This survey is designed to capture debt managers' views and represents one outlook on contingent liability risk management. However, to get a broader and more comprehensive understanding, it may be useful to obtain viewpoints from other parties involved in the management of contingent liabilities risk, such as fiscal policymakers.

## References

Bachmair, F. F. (2016), “Contingent Liabilities Risk Management: A Credit Risk Analysis Framework for Sovereign Guarantees and On-Lending”, World Bank Policy Research Working Paper Series.

Bova, E., Ruiz-Arranz, M., Toscani, F. and Ture, H.E. (2016), “The Fiscal Costs of Contingent Liabilities: A New Dataset”, IMF Working Paper Series.

Cebotari, A. (2008), “Contingent Liabilities: Issues and Practice”, IMF Working Paper Series.

Polackova Brixi, H., and Shick, A. (2002), “Governments at Risk: Contingent Liabilities and Fiscal Risks”, The World Bank and Oxford University Press Co-publication.

Ülgentürk, L. (2017), “The role of public debt managers in contingent liability management”, OECD Working Papers on Sovereign Borrowing and Public Debt Management.

## Annexes

### Annex 1 – 2016 World Bank Survey Questions

1. In your opinion how important should contingent liability risk management be in your country?
  - a) Very important
  - b) Important
  - c) Somewhat important
  - d) Not important
2. Approximately, what percentage of GDP do you think contingent liabilities represents?
3. What type of contingent liabilities is your country most exposed to?
  - a) Credit guarantees
  - b) Debt of state-owned enterprises and subnational governments (non-guaranteed)
  - c) Private sector corporate debt
  - d) Guarantees in public-private partnerships
  - e) Financial sector risks/banking failure
  - f) Natural disasters
  - g) Failure of a nonguaranteed pension fund, employment fund, or social security fund
  - h) Other
4. How would you assess your government capacity to manage risks from contingent liabilities?
  - a) Very good
  - b) Good
  - c) Average
  - d) Limited
  - e) Very limited
5. Which entity manages risks from contingent liabilities in your country?
  - a) Debt management office
  - b) Fiscal risk management unit
  - c) Somebody else
  - d) Other
6. What risk management tools are you currently employing to manage risks from contingent liabilities?
  - a) Risk analysis and measurement
  - b) Risk hedging using financial instruments
  - c) Guarantee fees
  - d) Risk monitoring
  - e) Risk reporting
  - f) Risk exposure limits
  - g) Contingency reserve accounts
  - h) None
  - i) Other
7. About which areas of contingent liabilities are you most interested in learning more?

## Annex 2 – The World Bank Treasury Stylized Risk Framework for Contingent Liabilities



## Annex 3 – 2016 World Bank Survey Respondent Countries

- Albania
- Antigua and Barbuda
- Austria
- Bangladesh
- Bhutan
- Brazil
- Bulgaria
- Cameroon
- Costa Rica
- Czech Republic
- Denmark
- Ethiopia
- Ghana
- Guatemala
- Iceland
- Indonesia
- Jamaica
- Kenya
- Lithuania
- Madagascar
- Maldives
- Mexico
- Moldova
- Morocco
- Mozambique

- Nepal
- Nigeria
- Pakistan
- Panama
- Philippines
- Romania
- South Africa
- Suriname
- Sweden
- Tanzania
- Thailand
- The Gambia
- Trinidad and Tobago
- Turkey
- United Kingdom
- United States of America
- Vietnam
- Zimbabwe

#### Annex 4 – Risk monitoring tool definitions

- Risk monitoring – A process which tracks and evaluates levels of risks to a government
- Risk analysis – A process of identifying and analyzing potential risks to a government
- Risk reporting – A process of producing reports that summarizes and conveys risks that a government is exposed to
- Guarantee fees – Fees charged by a government to entities receiving a guarantee from that government
- Risk exposure limits – A limit on the exposure a government has to the credit risk of entities
- Contingency reserve accounts – An account set up to hold funds that have been set aside to guard against possible future losses
- Risk hedging using financial instruments – Using financial instruments (such as derivatives) to hedge against certain types of risks (i.e. foreign exchange, interest rate)