



Managing Fiscal Risks and the Fiscal Risk Toolkit

**13TH DEBT MANAGEMENT FACILITY
STAKEHOLDERS' FORUM**

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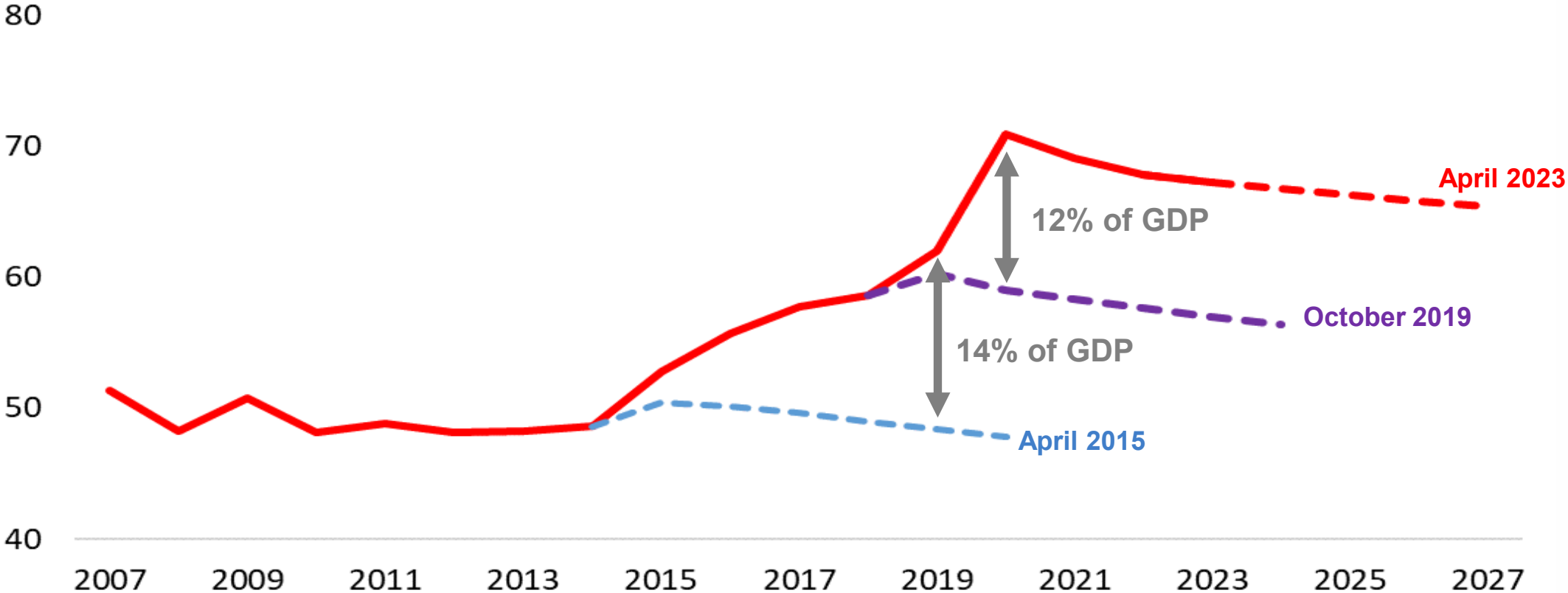
Agenda

- Importance of fiscal risks
- Transparency as a catalyst for better risk management
- The IMF fiscal risk toolkit
- IMF fiscal risk capacity development

Fiscal risk realizations have been key drivers of recent debt increases

General government debt forecasts for selected DMF-eligible countries

In percent of GDP

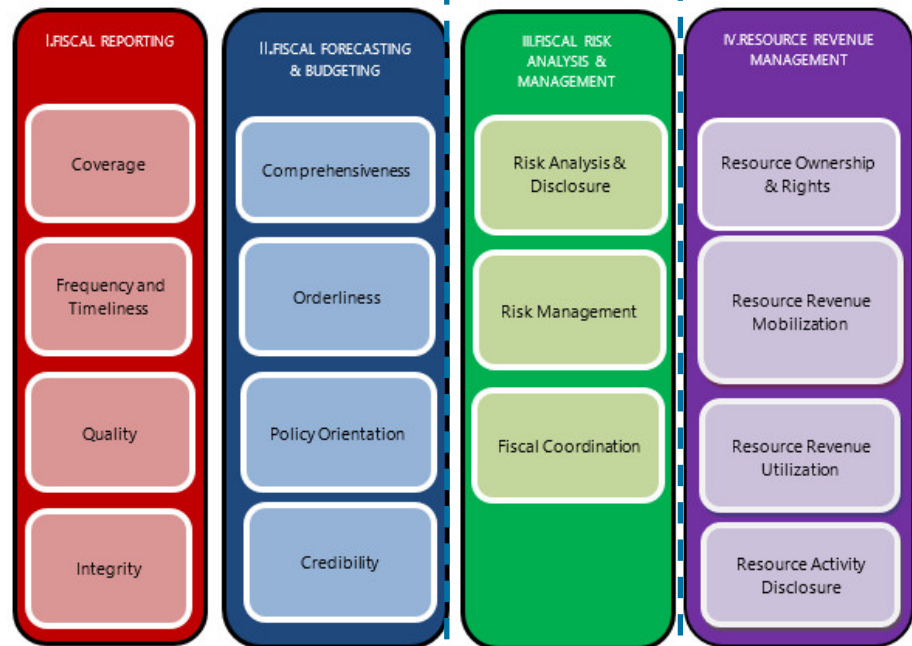


Note: Sample extends to 84 countries for which April 2023 and October 2019 WEO forecasts were available; and extends to 72 countries for which April 2015 WEO forecasts were available (data availability for countries may vary by year)

Source: IMF World Economic Outlook (April 2015, October 2019, April 2023).

Demand for transparency can be a catalyst for better risk management ...

IMF Fiscal Transparency Code



Risk Disclosure & Analysis

- Macroeconomic Risks
- Specific Fiscal Risks
- Long-Term Sustainability

Risk Management

- Budgetary Contingencies
- Asset and Liability Management
- Guarantees, PPPs and Financial Sector
- Natural Resources and Environmental

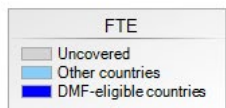
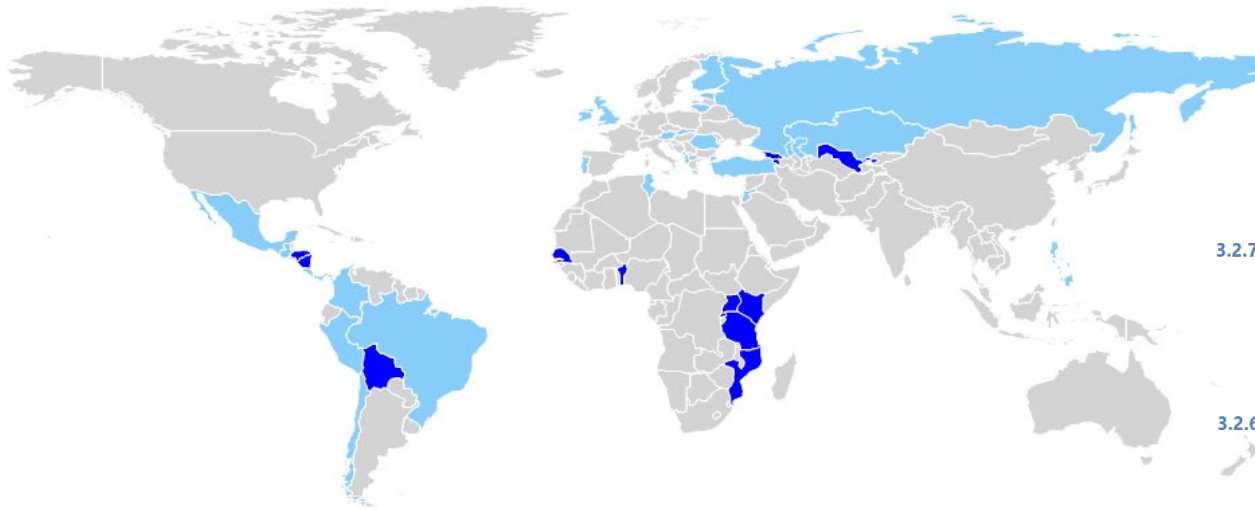
Fiscal Coordination

- Sub-National Governments
- Public Corporations

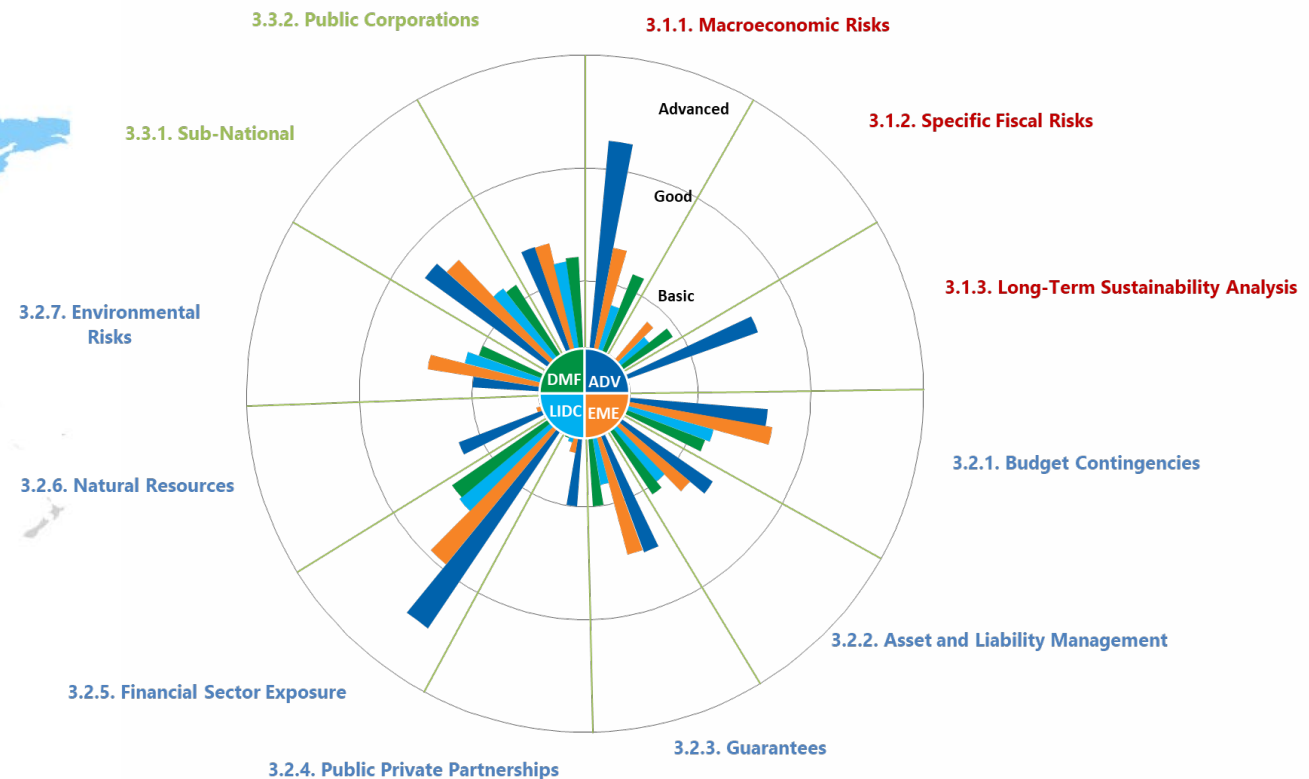
Source: IMF Fiscal Transparency Code

... but DMF-eligible countries have significant room for improvement

Countries in which Fiscal Transparency Evaluations have been conducted (as of June 2023)

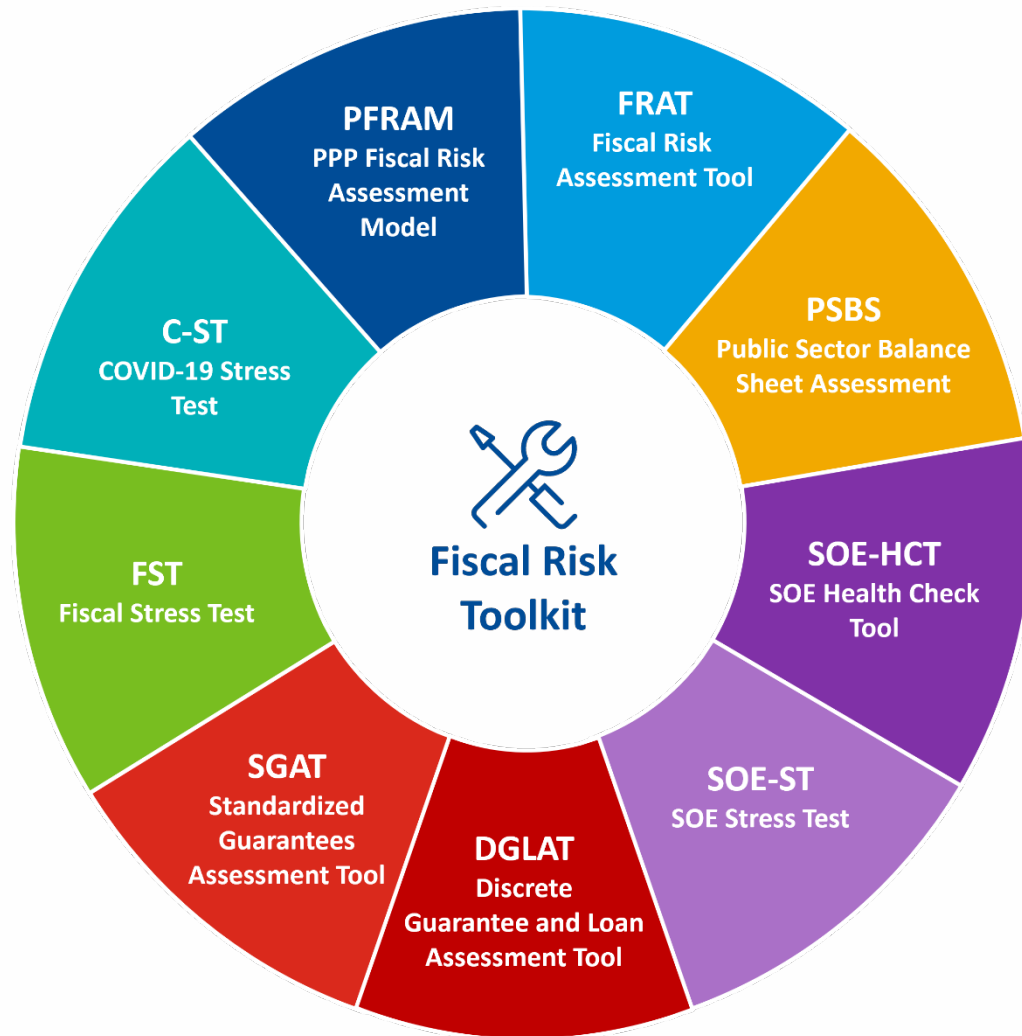


Performance on Pillar III (Fiscal Risks) by Income Group



Note: 17 out of 46 FTEs have been conducted in DMF-eligible countries
Sources: IMF Fiscal Transparency Evaluations

The Fiscal Risk Toolkit supports strengthening risk analysis



Better understand risk exposures



Improve management of fiscal risks



More transparent reporting of risks



More resilient public finances

Additional climate tools under development

- PANDA-T: Pandemic and natural disaster
- QCRAFT: Quantifying climate change fiscal risks

Link to Fiscal Risk Toolkit: [Fiscal-Risks-Toolkit \(imf.org\)](https://www.imf.org/external/links/related/Fiscal-Risks-Toolkit)

SOE HCT assesses financial vulnerabilities of state-owned enterprises

What does the tool do?

- Assesses the financial vulnerability of up to 40 non-financial SOEs
- Computes a set of financial vulnerability indicators based on income and balance sheet information
- Assigns an overall risk rating to each SOE
- Provides ratios, charts, and risk matrix to enable analysis of individual SOEs
- Produces summary outputs of the financial soundness of the SOE sector and supports compilation of aggregate liabilities and balance sheet for sector

Example Cabo Verde

- SOE HCT fully incorporated in MoF performance and risk assessment
- Functionalities embedded in IFMIS for automatization
- Executive order to strengthen SOE reporting requirements



EMPRESAS	2020						2021						RISCO GLOBAL		
	Rentabilidade ROA ROE		Liquidez Geral Reduzida		Solvabilidade Pas./At. Pas./C.P.		Rentabilidade ROA ROE		Liquidez Geral Reduzida		Solvabilidade Pas./At. Pas./C.P.		2019	2020	2021
ADR	Very High Risk	Very High Risk	Very Low Risk	-	Very Low Risk	Very Low Risk	Very High Risk	-	Very High Risk	-	Very High Risk	Very High Risk	-	Moderate Risk	Very High Risk
ADS	Very High Risk	-	Very High Risk	Very High Risk	Very High Risk	Very High Risk	High Risk	-	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk
APN	Moderate Risk	Low Risk	Very Low Risk	Very Low Risk	High Risk	Very High Risk	Moderate Risk	Low Risk	Very Low Risk	Very Low Risk	High Risk	Very High Risk	High Risk	Moderate Risk	Moderate Risk
ASA	Very High Risk	Very High Risk	High Risk	Moderate Risk	Low Risk	Low Risk	High Risk	High Risk	Moderate Risk	Very Low Risk	Low Risk	Low Risk	Low Risk	High Risk	Moderate Risk
BVC	Very Low Risk	Very Low Risk	Very Low Risk	-	Very Low Risk	Very Low Risk	Low Risk	Moderate Risk	Very Low Risk	-	Very Low Risk	Very Low Risk	Low Risk	Low Risk	Low Risk
CABEÓLICA	Low Risk	Very Low Risk	High Risk	-	High Risk	Very High Risk	Low Risk	Very Low Risk	Moderate Risk	-	Moderate Risk	Very High Risk	High Risk	High Risk	Moderate Risk
CABNAVE	High Risk	High Risk	Very Low Risk	Very Low Risk	Moderate Risk	Moderate Risk	High Risk	High Risk	Very Low Risk	Very Low Risk	Moderate Risk	Moderate Risk	Low Risk	Moderate Risk	Moderate Risk
CVV	Moderate Risk	Moderate Risk	Very High Risk	Moderate Risk	High Risk	Very High Risk	Moderate Risk	Moderate Risk	Very High Risk	Very High Risk	Low Risk	Low Risk	Moderate Risk	High Risk	High Risk
CERMI	High Risk	High Risk	Very High Risk	High Risk	Very Low Risk	Very Low Risk	Moderate Risk	Moderate Risk	Very High Risk	Moderate Risk	Very Low Risk	Very Low Risk	Moderate Risk	High Risk	Moderate Risk
CVB	Moderate Risk	Moderate Risk	Very High Risk	Very High Risk	Low Risk	Low Risk	Moderate Risk	Moderate Risk	Very High Risk	High Risk	Low Risk	Low Risk	Moderate Risk	High Risk	High Risk
CVFF	High Risk	Very High Risk	Very High Risk	-	Very High Risk	Very High Risk	High Risk	-	Very High Risk	-	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk
CVT	Moderate Risk	Moderate Risk	High Risk	Moderate Risk	Moderate Risk	Moderate Risk	Moderate Risk	Moderate Risk	Very Low Risk	Very Low Risk	Moderate Risk	Moderate Risk	High Risk	High Risk	Moderate Risk
ECV	Very High Risk	Very High Risk	High Risk	-	High Risk	Very High Risk	Very High Risk	Very High Risk	High Risk	-	High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk
EHTCV	Very High Risk	High Risk	Very Low Risk	Very Low Risk	Very Low Risk	Very Low Risk	Very High Risk	Very High Risk	Very Low Risk	Very Low Risk	Very Low Risk	Very Low Risk	Low Risk	Moderate Risk	Moderate Risk
ELECTRA	High Risk	Very High Risk	Very High Risk	Moderate Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk	High Risk	Very High Risk	Very High Risk	Very High Risk	Very High Risk	Moderate Risk

DGLAT assesses fiscal risks from one-off debt guarantees – such as loans to SOEs

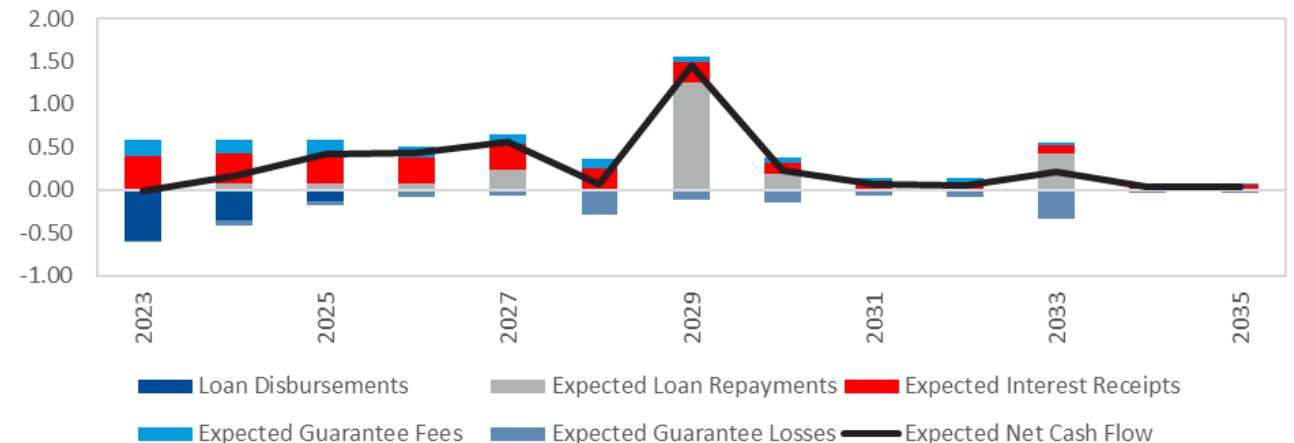
Sample outputs

What does the tool do?

- Estimates the expected fiscal costs and risks from one-off government guarantees on borrowing of non-financial entities or government loans to them
- Uses a credit scoring approach to assign a risk rating to each entity based on their financial health and underlying business risk characteristics
- Provides analysis of the government's maximum fiscal exposure and estimates of expected fiscal costs based on input assumptions
- Incorporates analysis under different scenarios

Company	Summary Risk Profile				
	Financial Risk Rating	Business Risk Rating	Notching	Total Upgrade / Downgrade	Overall Rating
Airline	Category 5	Credit Neutral	-1	0	Category 5
Airport	Category 3	Credit Neutral		-1	Category 4
Electricity GridCo	Category 3	Credit Positive		1	Category 2
ElectroGen	Category 3	Credit Negative		-1	Category 4
Oil Producer	Category 1	Credit Positive		1	Category 1
Port Company	Category 2	Credit Neutral		0	Category 2
Post Office	Category 4	Credit Negative		-1	Category 5
Rail Company	Category 4	Credit Negative		-1	Category 5
Road					
Construction	Category 4	Credit Positive		1	Category 3
Water Utility	Category 4	Credit Negative		-1	Category 5

Expected Government Cash Flow (percent of GDP)



SGAT assesses guarantee schemes – such as credit guarantee schemes to SMEs

What does the tool do?

- Quantifies the fiscal costs and risks from standardized guarantees or loan schemes using baseline and stress scenarios
- Uses cash-flow based portfolio analysis modelling aggregate borrowers' behavior
- Focuses on loans to small and medium-sized enterprises
- Is flexible to accommodate various scheme features (e.g., risk coverage, loss sharing, pricing, collateralization)

Sample interface and outputs

SGAT beta

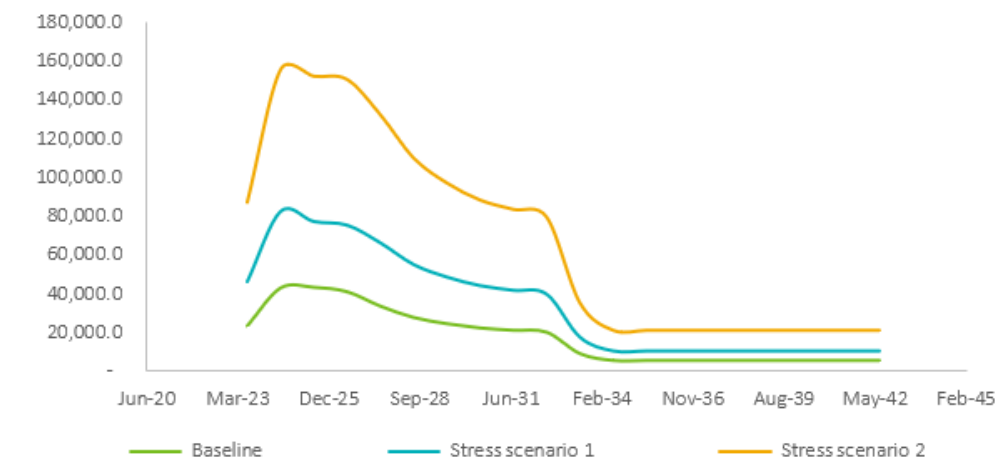
- General information
- Macro and market data
- Guarantee design characteristics
- Risks assumptions
- Stress testing
- Reports
- Charts OFF

Guarantee characteristics

INPUTS PER CASE

	Case 1	Case 2	Case 3
GUARANTEE CHARACTERISTICS			
Loss-sharing arrangement	Pari passu	Pari passu	First loss
Proportion of unrecovered interest paid by the guarantee (percent)	50%	50%	
Proportion of unrecovered principal paid by the guarantee (percent)	50%	50%	
Maximum loss on interest covered by the guarantee (percent)			50.00%
Maximum loss on principal covered by the guarantee (percent)			50.00%
Number of months-late to trigger the initial guarantee payment	3	3	3
Number of months from initial missed payment to resolution and write-off (max of 48)	12	12	12
Are guarantee payments capped?	No	No	No
Total disbursements previous to the analysis date that count towards the cap kk LCU			
Cap on guarantee payments as percent of disbursements			
Net amount of guarantee payments up to the date of the analysis			

[Guarantee payments - Per Period Graph of Sum per Stress Scenario



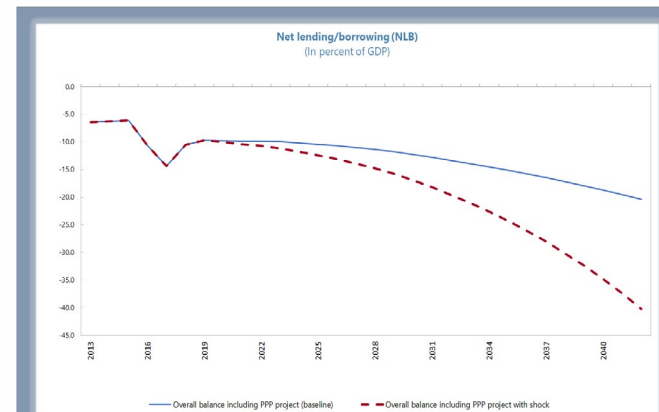
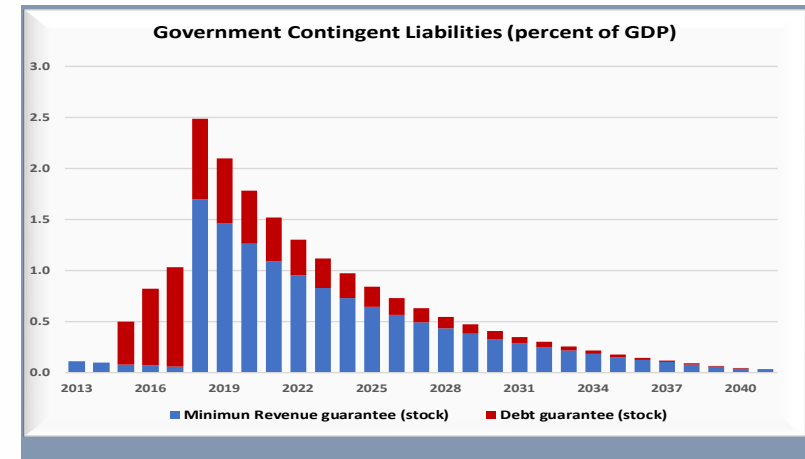
SMEs = small and medium-sized enterprises

PFRAM – a joint IMF and World Bank tool - assesses fiscal costs and risks from PPPs

Sample interface and outputs

What does the tool do?

- Analytical tool to assess the potential fiscal costs and risks arising from public–private partnership projects
- Structured process for gathering information for a portfolio of PPP projects in a simple, user-friendly, Excel-based platform
- Generates project cash flows, fiscal tables/charts on a cash and accrual basis, and debt sustainability analysis, with and without the PPPs



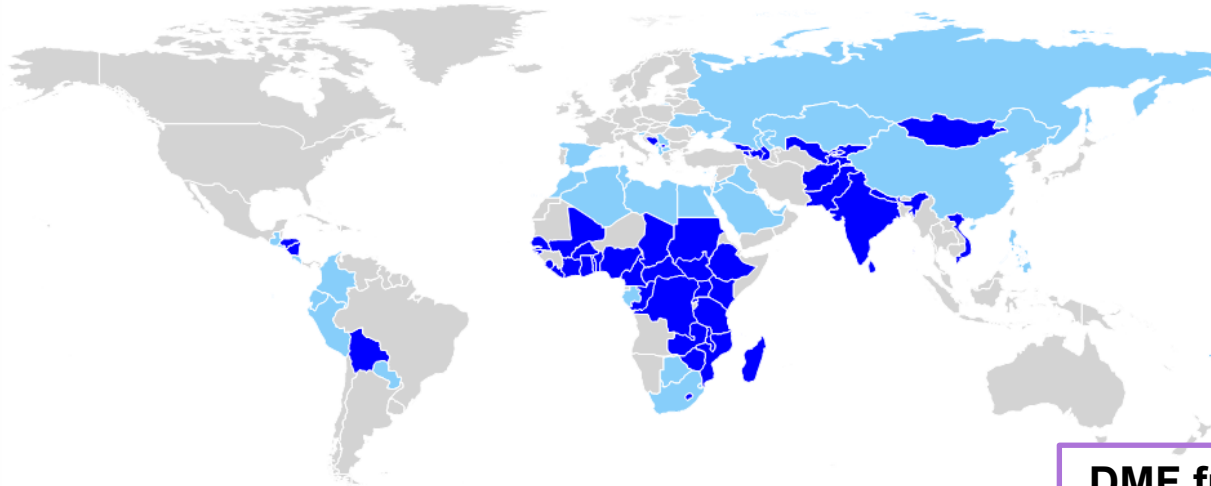
Risk identification	Likelihood	Fiscal impact	Risk rating likelihood*impact	Mitigation strategy is it in place?	Priority actions
Governance risks	Low	Medium	Low	No	Medium priority
Construction risks	Medium	High	High	Yes	Medium priority
Demand risks	Medium	Low	Low	No	Medium priority
Operational and performance risks	Low	Low	Irrelevant	Yes	No action
Financial risks	Medium	Medium	Medium	No	High priority
Force majeure	Low	Low	Irrelevant	Yes	No action
Material adverse government actions	Medium	Medium	Medium	No	High priority
Change in law	Medium	High	High	No	Critical
Rebalancing of financial equilibrium	High	Medium	High	Yes	High priority
Renegotiation	High	Low	Medium	Yes	Medium priority
Contract termination	Medium	Medium	Medium	Yes	Medium

Consider removing slide

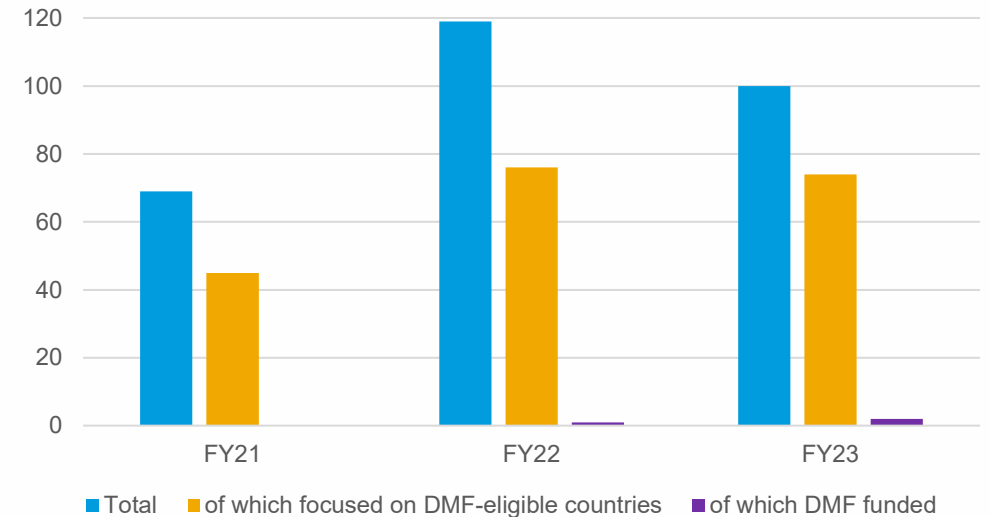
Large share of growing IMF fiscal risk capacity development goes to DMF-eligible countries

IMF fiscal risk capacity development in last 3 years

By country



By number of activities¹



DMF funded activities:

- Anglophone Sub-Saharan Africa: workshop introducing DGLAT plus analytical work on DGLAT
- Uzbekistan: SOEs and PPPs – SOE HCT and PFRAM
- Honduras: strengthening the management of fiscal risks from SOEs
- Kenya: setting up a fiscal risk committee and risk register

¹ Includes remote and in-person missions, including missions delivered from headquarters, regional capacity development centers, in-country and regional advisors, short-term experts, as well as desk reviews, trainings, workshops, peer-learning events, and analytical projects

Georgia has embarked on an impressive journey to strengthen fiscal transparency and risk management – supported by IMF

2016

FTE

Action plan to improve fiscal transparency and risk management

2017

SOE HCT

Identify and quantify fiscal risks from SOEs, and reform needs

2019

PSBS

Looking at short and long-term sources of fiscal risks

2018

PIMA-PFRAM

Identify and manage fiscal risks from large infrastructure projects

2021

SOE Reform

Initiate discussion on reform needs to manage fiscal risks from SOE sector

2022

SOE Strategy

Climate Change PIMA

QCRAFT

Approval of SOE strategy
Identify and quantify climate change fiscal risks

2023

Update FTE

Take stock and consolidate fiscal risk management function

#1 position in budget transparency in Open Budget Survey 2021

Key lessons from our fiscal risk capacity development – including the application of the fiscal risk toolkit

- **High demand** for capacity development is **testament to relevance** of topic to governments
- Strengthening fiscal risk management capacity requires **long-term, programmatic approach** – and **senior leadership buy-in**
- Managing individual risks is best paired with **holistic macro-fiscal perspective**
- A **fiscal risk report** can be a **catalyst** for strengthening risk management – **but** good risk management is **more** than reporting
- **Analytical tools** can **provide structure** for risk management
- Country **ownership of tools** is challenging – best **integrated in country practices**

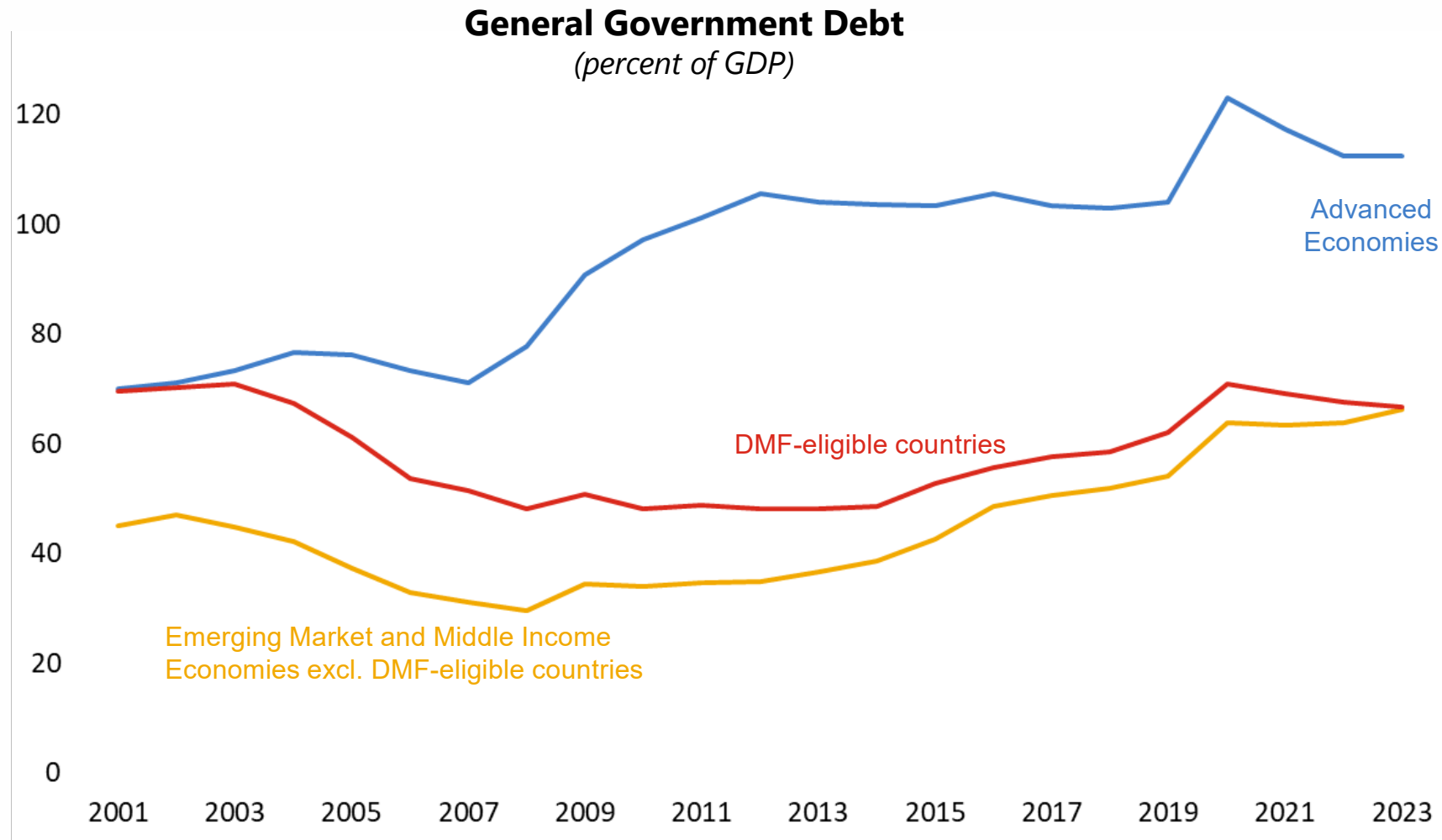
[IMF.org/FiscalRisk](https://www.imf.org/FiscalRisk)



Thank you

Annex

Public debt levels have risen significantly – increasing the vulnerability of public finances



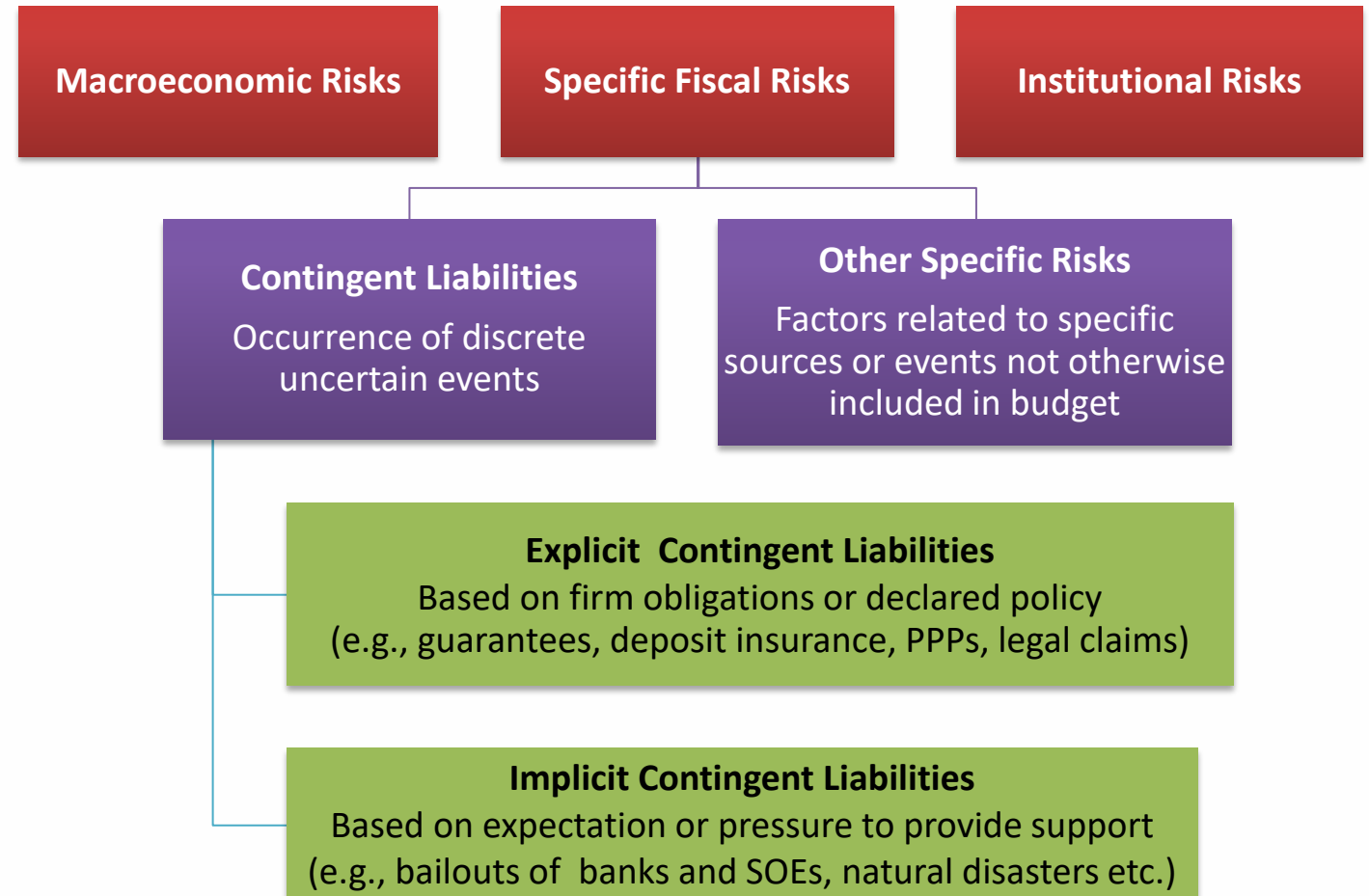
Advanced Economies include 40 countries; DMF-eligible countries include 84 countries; and Emerging Market and Middle Income Economies include 71 countries

DMF = Debt Management Facility

Source: World Economic Outlook, IMF Staff Calculations

Fiscal risks stem from a variety of sources – including explicit and implicit contingent liabilities

- Factors that may cause fiscal outcomes to differ from forecasts or expectations. Can arise from:
 - Incomplete understanding of the government’s fiscal position
 - Endogenous changes in fiscal policy settings
 - Exogenous shocks to the public finances
- Risks tend to be
 - Large
 - Asymmetric
 - Highly correlated with each other
 - “when it rains, it pours!”
 - Non-linear



A sound and comprehensive framework is critical to manage fiscal risks

STEP 1: IDENTIFY AND ANALYZE

- **Identify** sources of risks
- **Collect and analyze** relevant information (including interlinkages)
- **Assess** the magnitude of exposure and likelihood of materialization

STEP 2: MITIGATE

- **Avoid** taking on risks through policy decisions
- **Direct controls** to limit exposure
- **Regulation** to reduce risky activities
- **Risk sharing and transfer instruments** to reduce costs

STEP 3: MANAGE AND ACCOMODATE

- **Incorporate into budget** through provisions or contingencies
- **Accommodate** risks that cannot be mitigated (prudent debt levels, buffer funds)

STEP 4: DISCLOSURE

- **Accounting** : Include disclosures in notes to financial statements
- **Fiscal Risk Statements**: Report on magnitude, potential for realization and steps to manage risks