



# Making DRF Solutions Sustainable: the role of public financial management

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Disaster Risk Finance Academy

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April 7 (Afternoon session)

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Photo credit: Dorinser/ World Bank



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# Framing the afternoon

The DRF Academy is focused on private sector insurance solutions, however, the role of Governments in designing, facilitating, and overseeing such solutions is critical



Where DRF instruments are not sufficiently embedded in Public Financial Management systems, their effectiveness and sustainability is limited

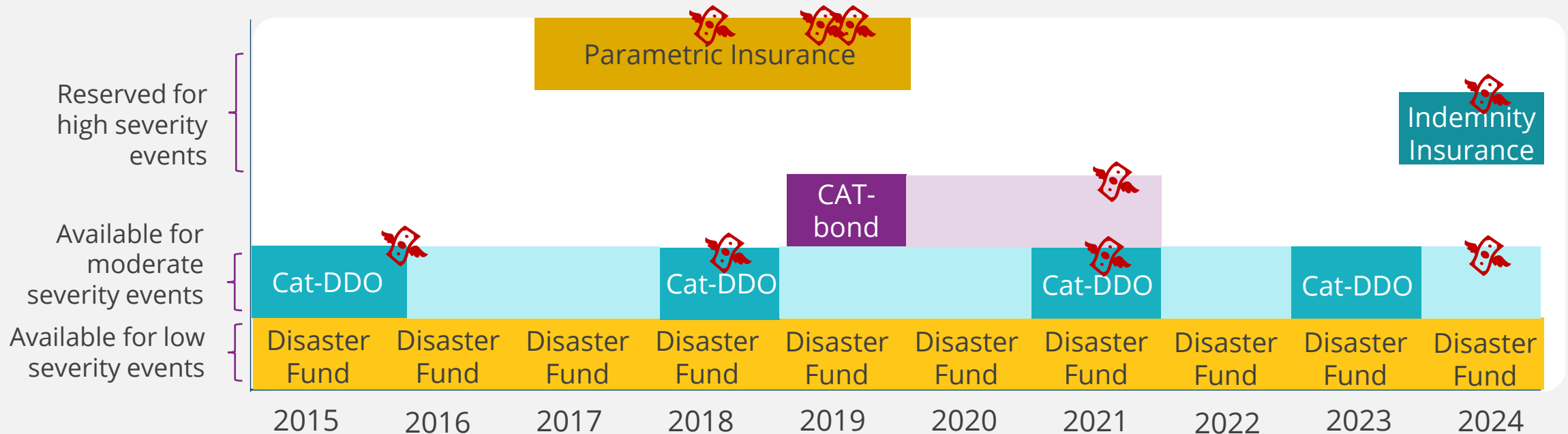


Photo credit: Simone D. McCourtie / World Bank

# Example: challenges sustaining DRFI in country x

For the last decade, the government sought financial protection against more severe events in place only **intermittently**, despite positive experience with frequent payouts 📄

This is because DRF was not part of the mandate of the finance ministry.



# Framing the afternoon



1

Where DRF instruments are not sufficiently embedded in Public Financial Management systems, their effectiveness and sustainability is limited



2

PFM systems do not pay adequate attention to disaster risk, despite the negative impacts on fiscal deficit, public finances



Why? Some binding constraints:

- Disasters considered “acts of God” (cannot be predicted)
- Preference to allocate scarce resources to known expenditures over contingent liabilities
- Complexity of DRF solution, vs. ex-post borrowing or reallocations
- Greater visibility and political kudos for response vs. risk reduction / preparedness
- Challenges with coordination, financial tracking and accountability for cross-sectoral issues

**Disaster Risk-Based Budgeting has emerged as a response to these constraints**



# Embedding DRF in the budget cycle

**Stephanie Allan**

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Disaster Risk Finance  
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Photo credit: Dorinser/ World Bank

# Overview

Photo credit: Dennison Uy/ World Bank



Integrating DRF  
into Public Financial  
Management



Implementation  
options



Taking this  
agenda forward –  
with interactive  
discussion



# Integrating DRF into Public Financial Management

# Disaster Risk-based Budgeting

DRBB is about making *proactive* financial management of disaster risks part of the **regular business of central finance agencies** by linking it to the **annual budget cycle**

At its heart, it is a set of public financial management (PFM) practices to enhance general government expenditure on disasters

It also encompasses efforts to increase the frequency and regularity with which DRF instruments are reviewed, redesigned or renewed, in line with the budget cycle.



Photo credit: Altgott/ World Bank

DRBB is “the consideration of disaster risk throughout the government budget cycle”





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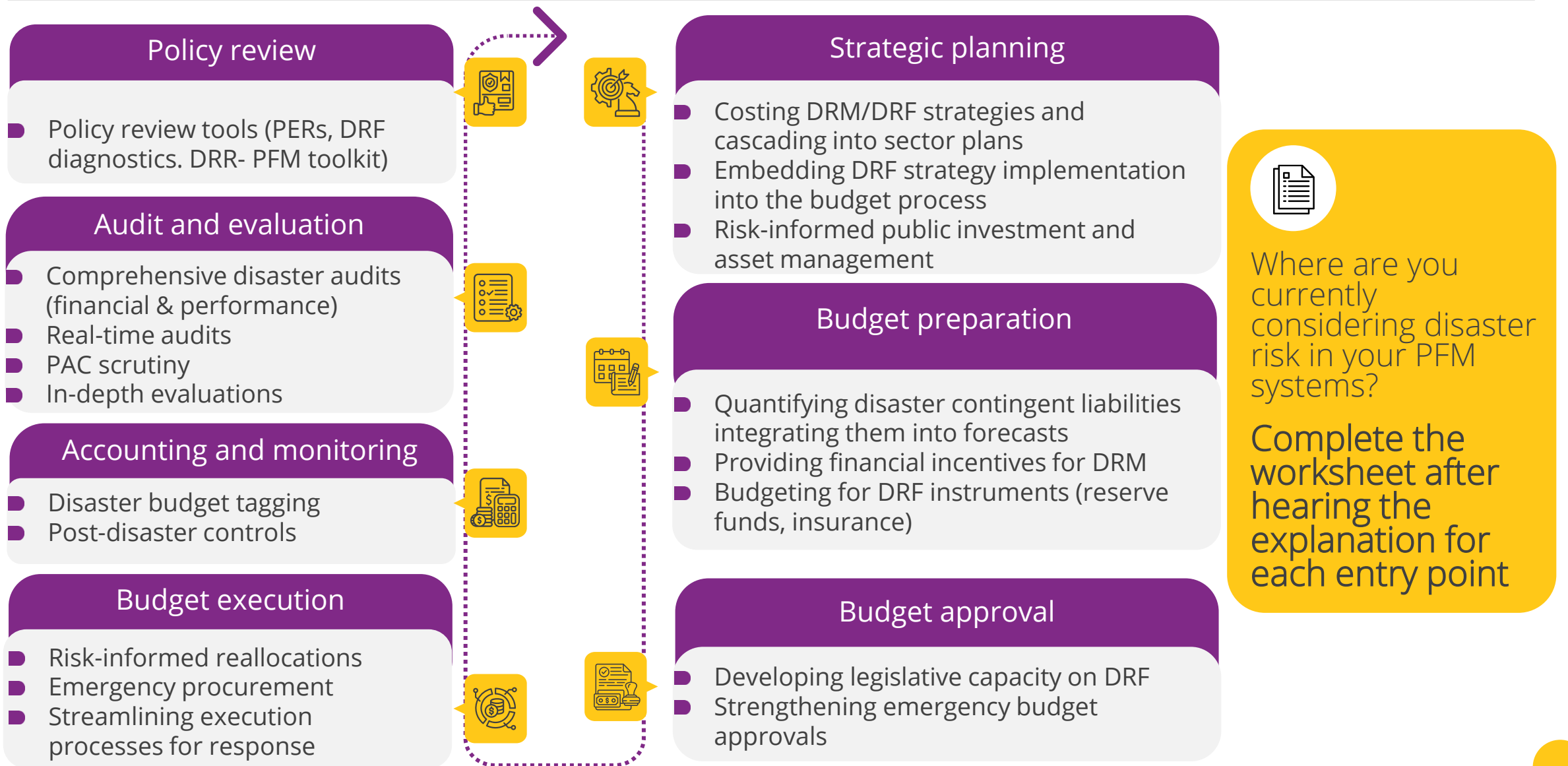
## Implementing Disaster risk- based budgeting

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Complete your worksheets  
throughout

# DRBB entry points



# DRBB entry points

## Strategic planning



**Costing** DRM/DRF strategies and cascading into **sector plans and budgets**



Embedding **DRF strategy implementation** into the budget process

- Annual refresh of decision making around levels of risk retention vs transfer



Risk-informed **public investment and asset management**

- Embedding disaster risk concerns in asset life-cycle management, e.g. screening asset registries for vulnerability to disasters, introducing building codes/regulations to reduce risk, putting in place asset insurance annually



Photo credit: Chvun/ World Bank



**Are any of these current features in your PFM systems?**

# Example: public asset insurance in New Zealand



The Canterbury earthquakes of 2011 caused damage  $\approx$  20% GDP but had only moderate national macroeconomic impact, due to higher levels of private and public insurance



Since then, hardening insurance markets has led the Government to consider a new collective approach pooling risk for all national government assets with the aim of reducing premium prices and minimizing pricing volatility



Building on centralized approach to insuring private (residential) property via the Earthquake Commission.



Photo credit: melvet77 / World Bank

Antich, R., G. Fowler, L. Ping, D. Middleton, and B. Signer. 2023. Financial Protection for Public Assets: A Practitioner's Guide for Public Officials. World Bank. 2021. The Impacts of Disaster Risk on Sovereign Asset and Liability Management. Photo credit: Nigel Spiers on Shutterstock

# DRBB entry points



**Quantifying disaster contingent liabilities** & integrating them into forecasts

- Based on historical spending on disasters, or modelling comprehensive balance sheet impacts

## Budget Preparation



Providing **financial incentives** for DRM expenditure

- e.g. a special purpose fund for risk reduction, or funds to incentivize cross-agency collaboration



Budgeting for DRF instruments

- Reserve funds:** % revenues/expenditure, or derived from expected losses
- Insurance:** optimising coverage within available resources; including in MTEF to strengthen sustainability



**Are any of these current features in your PFM systems?**

# Example: quantifying disaster liabilities in Colombia



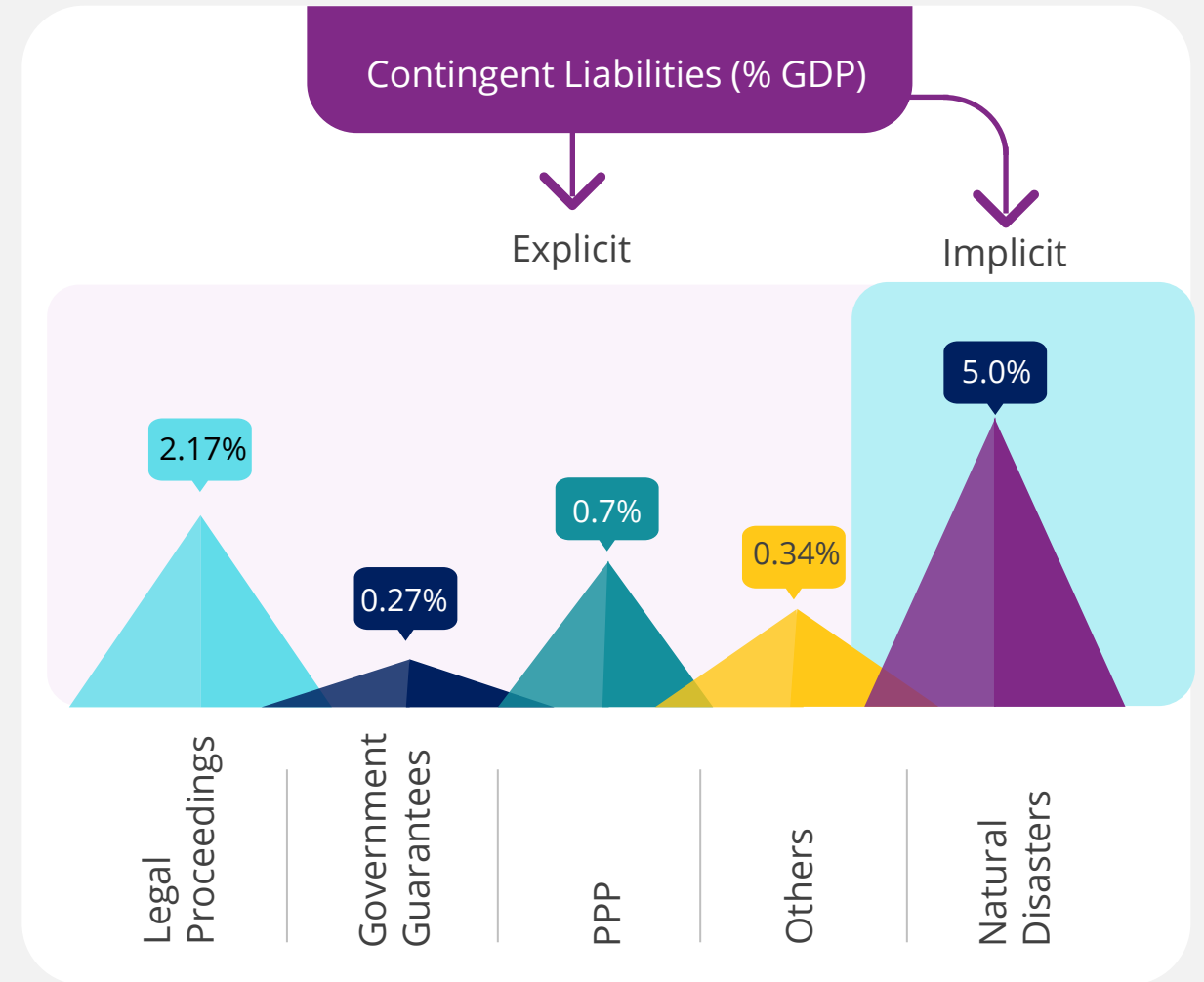
Colombia's annual MT fiscal framework includes contingent liabilities related to natural disasters (La Niña & earthquakes).



Feeds into projections for revenue, expenditure and debt dynamics



Mitigation instruments and financing sources defined for each category of contingent liability



# DRBB entry points

## Budget Execution: Streamlining execution processes for disaster expenditure



### Emergency procurement

Expedited procedures which safeguard transparency and VfM e.g. a condensed competitive processes, select usage of direct contracting for response



### Framework contracts

Pre-arranged contracts with vetted suppliers e.g. for debris removal / reconstruction



**Readying last-mile delivery systems**  
e.g. shock responsive social protection



Are any of these current features in your PFM systems?

# Example: framework contracts in Japan



The Government of Japan has framework contracts in place for services related to post-disaster construction, engineering, surveying, and telecommunications



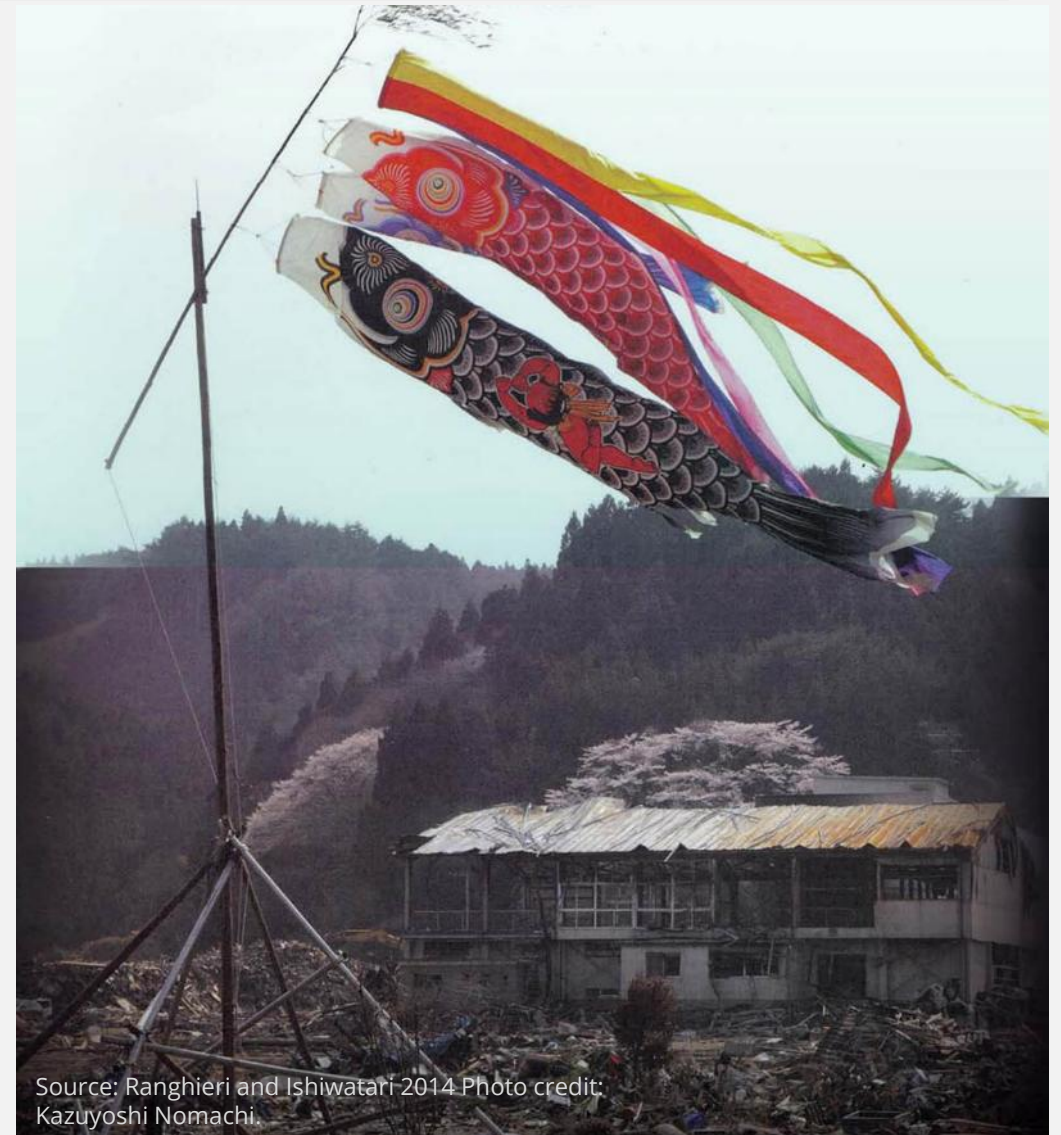
Offers contractors a guarantee of payment, sufficient for them to start work without time consuming contracting and paperwork



Used after 2011 Earthquake a Tsunami. Rapid reconstruction activity meant main **highways and roads to affected areas were repaired within one week**, and the bullet train service was resumed within **49 days**



This in turn supported relief in the affected areas



Source: Ranghieri and Ishiwatari 2014 Photo credit: Kazuyoshi Nomachi.



# DRBB entry points

## Accounting , Monitoring and Audit



### Tracking expenditures

Measures to enable a transparent picture on spending in relation to disasters

- e.g. disaster budget tagging, building on and complements climate budget tagging efforts
- e.g. additional reporting relating to a disaster fund



### Post-disaster controls

- To ensure expedited spending and augmented flexibility do not compromise safeguards.
- For example, clear separation of functions in management of emergency financing is important to avoid conflicts of interest and reduce the risk of fraud or misappropriation



### Comprehensive disaster audits

- Ex-post **financial/ performance** audits of disaster commissions (e.g. US audit of FEMA) vs more comprehensive audit of disaster spending from all public entities (Philippines); **compliance** audits against legal obligations towards reserve funds.
- **Real time audits** to support course correction during a response (e.g. Sierra Leone during Ebola)



**Are any of these current features in your PFM systems?**

# Example: auditing Ebola expenditure in Sierra Leone



Audit Service Sierra Leone undertook a real-time transaction audit of funds during the Ebola outbreak in 2014.



The report was presented to the Public Accounts Committee in a televised hearing, and highlighted irregularities, inadequate controls, and noncompliance with the procurement process.



As a result of the report, the Government of Sierra Leone improved processes to implement stronger controls



A real-time audit was again carried out during the COVID-19 pandemic in 2020.



Mills 2022; Taylor-Pearce 2018.  
Photo credit: MSF volunteers work during the Ebola outbreak in August (AFP/Getty Images)

# Taking the DRBB agenda forward

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Photo credit : Jerome Ascano / World Bank

# Recommendations



## When designing DRF instruments, make sure they are part of PFM processes

Align planning for DRFI with the budget process

Revisit funding and risk appetite decisions regularly

Invest in risk data and analytics and feed this into budgeting decisions



## Prepare PFM systems before a disaster happens

Think through which parts of the PFM system will be used and whether they could help/hinder DRFI effectiveness

Use an analysis of binding constraints to diagnose where PFM systems could better reflect disaster risk



## Ensure and evolving approach to DRBB

Update DRBB strategies annually

Facilitate learning through periodic expenditure reviews/  
budget tagging



How might you go about strengthening disaster risk considerations in your PFM system?

# Questions / discussion

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**Thank you**

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Disaster Risk-based Budgeting  
Report download:  
<https://hdl.handle.net/10986/42519>

