

13TH UNCTAD Debt Management Conference

Relief, Restructuring and Recovery: Dealing with Debt in Times of
Global Crisis

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Operational Risks in Public Debt Management

by

Mr. Luis Felipe Vital Nunes Pereira

Coordinator of Debt Operations, Ministry of the Economy, Brazil



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2022

Operational Risks in Public Debt Management

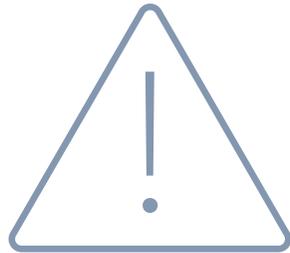
Brazil National Treasury Experience

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1 Operational Risks



What is it?

Sudden undesirable event that affects the DMO routine operations

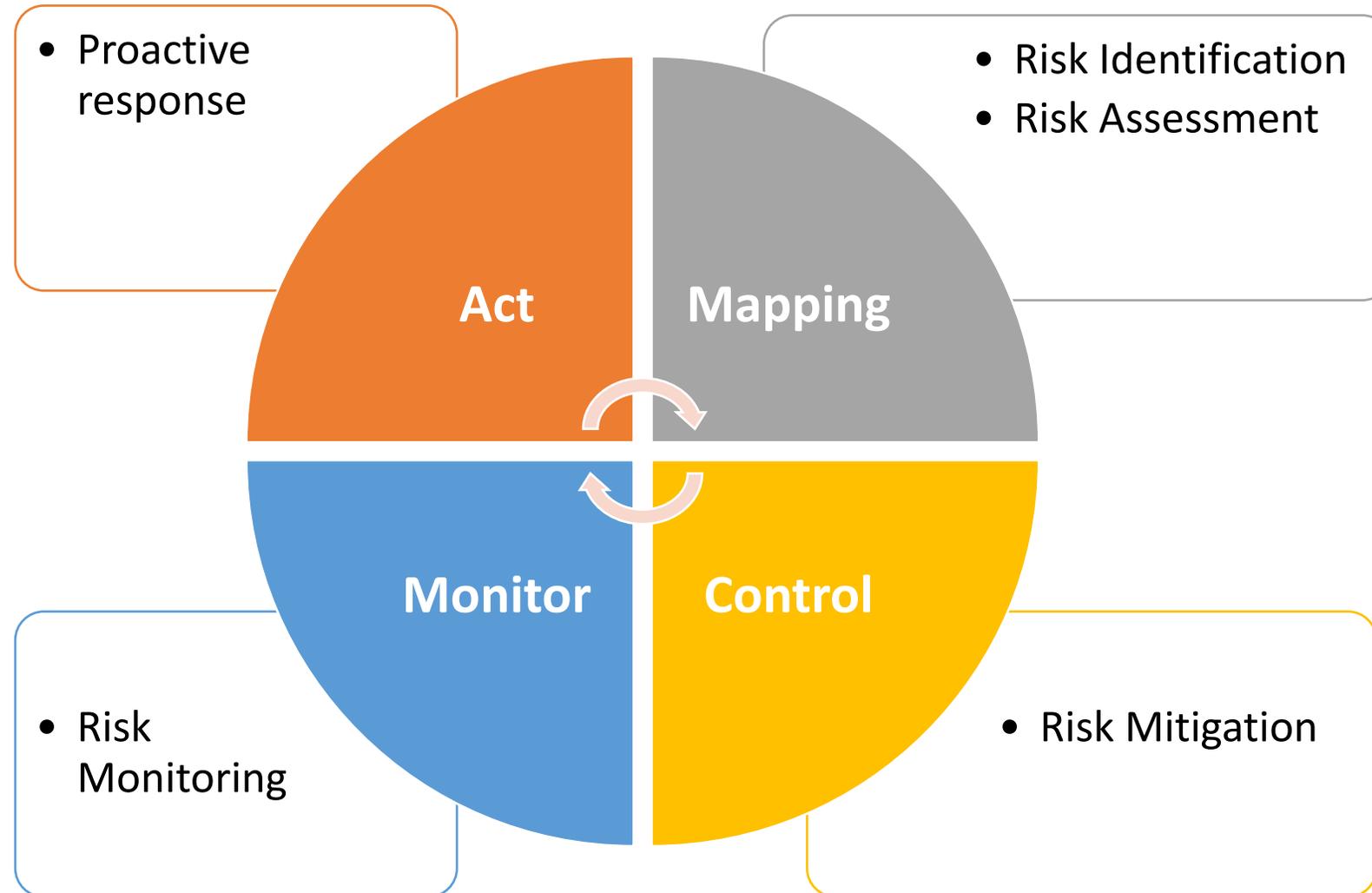


Possible Causes

Cyber attacks
Human error
Unsafe practices
Outdated IT systems
Etc.

1 Operational risk management

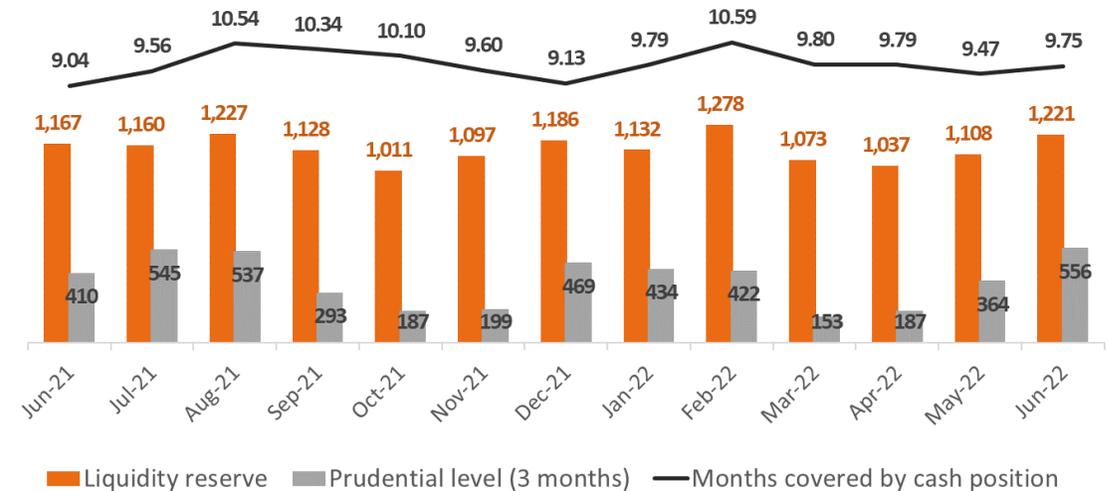
- Adapted typical PDCA model for improving operational standard



6 Brazil – Public Debt Context

Indicators	2021	Jun/22
Stock of FPD* held by the public (BRL Billion)	5,613.66	5,845.54
FPD Profile (%)		
Fixed Rate	28.90	27.23
Inflation Linked	29.30	31.55
Floating Rate	36.83	36.69
FX	4.96	4.53
FPD Maturity Structure		
Percentage Maturing in 12 Months (%)	21.02	23.11
Average Maturity (years)	3.84	3.88
Average Life (years)	5.15	5.20

Public debt liquidity reserve (BRL bn)



- ✓ Financing needs over BRL 1 Trillion (200 billion USD) per year
- ✓ 100 auctions per year
- ✓ 95% in local markets and denominated in reais
- ✓ 90% held by local investors

1 Brazil – Public Debt Context



- Weekly auctions – typically BRL 20-30 billion (USD 5-6 billion);



- FX Operations



- Treasury Direct Program - 2 million retail investors

6 Brazil – Public Debt Context

1st line of defense

- Within the DMO
- Risk mapping, controlling and monitoring

2nd line of defense

- Within the MoF
- Internal Controls and Risk Management

Internal Audit (CGU)

- Within the Executive branch
- Financial audit and specific topics.

External Audit (TCU)

- Legislative branch
- Continuous audit process

3 Risk Identification and Assessment

Identifying Risks

- Key performance indicators mapping
 - What may affect a KPI will be a great source for possible risks
- Incidents history
 - Incidents not handled has a greater chance of recurrence
- Legal stuff
 - Internal rules and applicable laws
 - Compliance reports

		Impact		
		Low	Medium	High
Probability	High	Low	Medium	High
	Medium	Low	Medium	Medium
	Low	Low	Low	Low

Identified risks should be assessed in a probability of occurrence / impact way

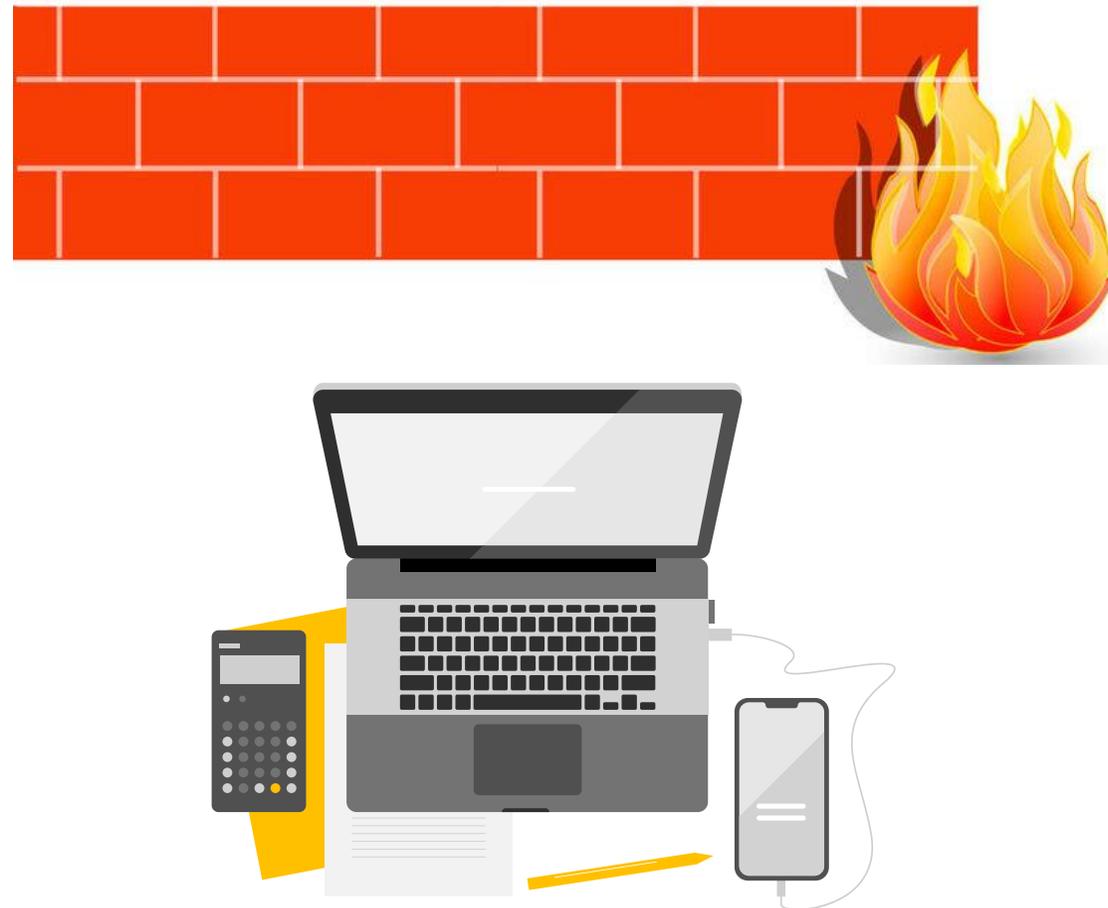
Level of review during pandemic:



3 Risk Mitigation

- **Segregation of duties**
 - Front-office and back-office duties and capabilities imposed by systems' constraints
 - Mandatory segregation along processes
- **Remote First Policy**
 - All processes can be executed remotely
 - Very small team (one representative by unit) working on premises during auctions as fail safety measure

Level of review during pandemic:



3 Risk Mitigation

- **Multiple Layers of security**
 - Segmentation of critical systems from general purpose systems
 - Corporate VPN required to access critical systems, with strong user control and limited access window
 - Two factor authentication required for all systems.
- **Secure communication channels**
 - IT controlled channels for internal communication
 - Market standards for market communication (Ex. Bloomberg IM)

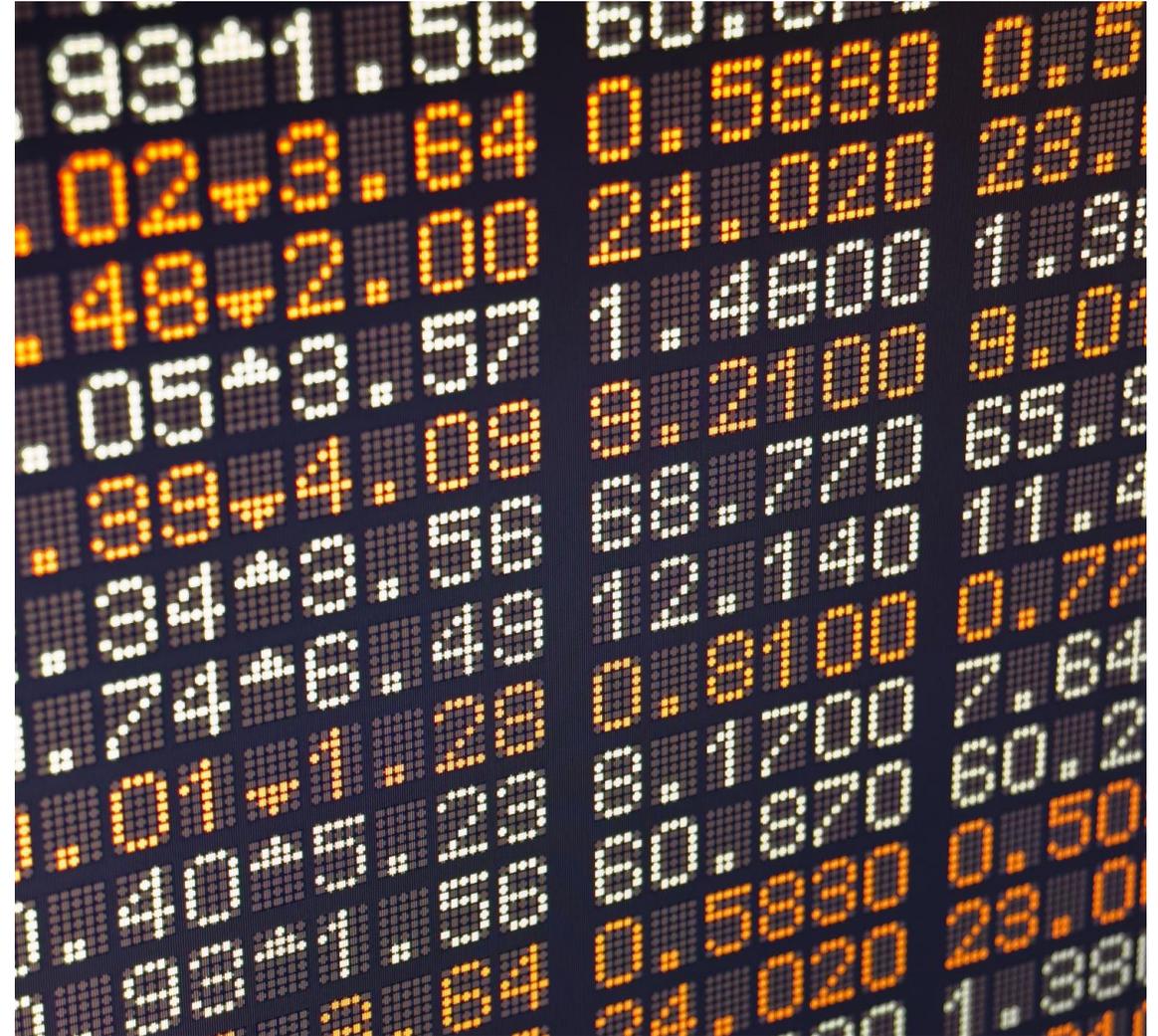
Level of review during pandemic:



4 Risk Monitoring

- Automated monitoring
 - Use of IT tools for online monitoring wherever is possible
 - Allocation of professionals with granted privileges to act when alerts are triggered
- KPI logging
 - Log of KPI result over the time: outliers could indicate unattended incidentes
- Teams integration
 - Collaborative work beetwen IT and DMO teams

Level of review during pandemic:



5

Typical risk event in Brazil



6 Concluding Remarks

- ✓ Countries with higher market presence must have robust Contingency and Business Continuity Plans
- ✓ The pandemic demanded significant review in risk policies for DMOs.
- ✓ Updated Contingency and Business Continuity Plans rely more on IT systems, virtual environments and redundancy.
- ✓ New working environments (ex: virtual and hybrid) come with new risks, to be mitigated.



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Thank you

luis.n.pereira@tesouro.gov.br