Operational Risks in Public Debt Management

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
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Outdated IT systems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.
Operational risk management

- Adapted typical PDCA model for improving operational standard

- Proactive response
- Risk Identification
- Risk Assessment
- Risk Monitoring
- Risk Mitigation

Act
Mapping
Monitor
Control
Brazil – Public Debt Context

- 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
Brazil – Public Debt Context

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

• FX Operations

• Treasury Direct Program - 2 million retail investors
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
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

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

Level of review during pandemic:

★★★★ ★★★ ★★★
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:

☆☆☆☆☆
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 trigged
• KPI logging
  • Log of KPI result over the time: outliers could indicate unattended incidentes
• Teams integration
  • Collaborative work between IT and DMO teams

Level of review during pandemic:

⭐⭐⭐⭐⭐
Typical risk event in Brazil

Risk Event:
- Truck driver’s strike (2018)
- 2020 Pandemic

Market Turmoil
- Increased volatility
- Disfunctional 2ary markets

Increase in Financing Needs
- Fight economic impacts of pandemic
- New subsidy or public policy
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.
Thank you

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