Report No: AUS9174

EXECUTIVE SUMMARY

PUBLIC FINANCES RESILIENCE TO DISASTER RISK

GUATEMALA

Federal Ministry for Economic Cooperation and Development
CCRIF SPC The Caribbean Catastrophe Risk Insurance Facility
Canada
GFDRR Global Facility for Disaster Reduction and Recovery
THE WORLD BANK IBRD • IDA | WORLD BANK GROUP

Report No: AUS9174

Central America

6C CA Disaster Risk Financing

Public Finances Resilience to Disaster Risk

Guatemala

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LATIN AMERICA AND CARIBBEAN

CONTENT

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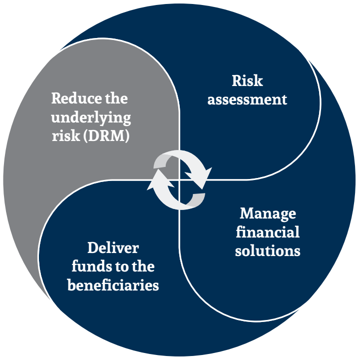
INTRODUCTION

Increasing public finances resilience to disaster risk is part of priority 3 of the 2015-2030 Sendai Framework for disaster risk management and the operational framework in disaster risk management[1] developed by the World Bank[2]. The guidelines for disaster risk management development are based on the fundamental principle that both citizens and governments should be empowered to make informed decisions about their risks and the best way to reduce, retain or transfer them. In order to increase resilience, the operational framework includes pillars: risk identification; risk reduction; financial protection; preparation and recovery after disasters.

Strengthening the resilience of public finances is a fundamental objective in developing countries. Poorly managed fiscal risks drag negative consequences in the development process of a country, generating a potential deterioration in economic growth, the fiscal position, the capacity of indebtedness and financial credibility; and high opportunity costs.

There are five characteristics that can help governments respond more effectively to disaster risk while protecting their fiscal balance: a. information on risks, (identification of exposure, and vulnerability, contingent liabilities of the Public Sector, and quantification of the economic impact of materializing the risk); b. attribution of risk, (that establishes who is responsible for the risk and who have responsibilities before the materialization of the same); c. cost of capital, (determination of financial instruments considering their costs and benefits in the processes of prevention, reduction, response and recovery); d. temporality, (disposition of financial instruments according to the levels of financing required and in a timely manner); and e. discipline, (promotion of planning, to agree ex ante rules and processes to respond appropriately).

Operational Framework for Disaster Risk Financing



Source: Financial Protection Against Disasters, World Bank 2014.

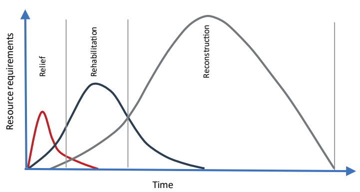
[1] The 2015-2030 Sendai framework, adopted by 187 states, as well as international actors, in March 2015.
[2] World Bank. https://www.gfdrr.org/sites/default/files/publication/Sendai_Report_051012_0.pdf

The operational framework for strengthening financial resilience and adequate disaster risk financing includes the understanding and sizing of risk, the allocation and execution of resources, as well as strategies to reduce risk and possible future impacts.

The operational cycle seeks: (i) the risk assessment that quantifies possible disaster impacts based on historical and simulated data; (ii) the management of financial solutions that allow for resources and instruments for financial protection, market development, among others; (iii) deliver (the funds to the beneficiaries in a timely, transparent and responsible manner; and (iv) reduce the underlying risk factors, giving priority to those that have a greater impact on society and public finances.

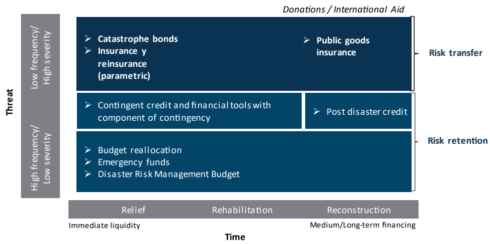
Best international practices promote the elaboration of disaster risk financial strategies that involve the combination of retention and risk transfer instruments, associated with the magnitude of events and the temporal dimension in the use of resources. A disaster risk financing strategy by layers combines instruments against events of different frequencies and severity, considering the opportunity cost of resources. It also considers the temporary dimension of liquidity needs for emergency assistance and optimal financing schemes for recovery, a stage characterized by the greater need for resources to be executed over a longer period of time.

Temporal Dimesion of Post Disaster Funding Needs



Source: Ghesquiere and Mahul (2010)

Risk Layering Approach for Disaster Risk Financing Strategy



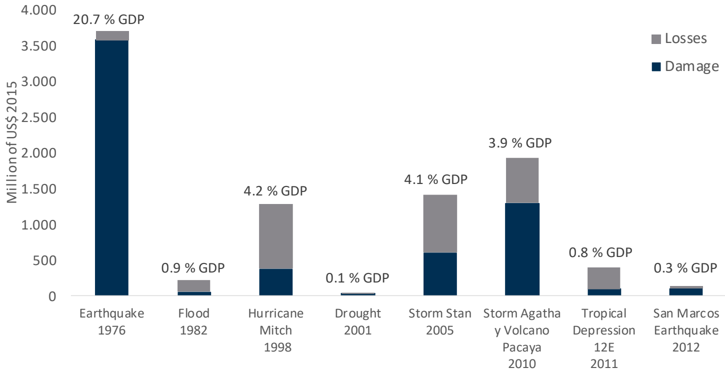
Source: Adapted from Financial Protection Against Disasters, World Bank 2014

1. Disaster Risk and its Impact in Guatemala

Guatemala is exposed to multiple hazards, both geophysical (earthquakes, volcanic eruptions and tsunamis) and hydrometeorological (storms, floods, droughts, landslides, among others). The high exposure plus an accelerated and poorly planned urbanization process, as well as the high levels of poverty, placed Guatemala as the ninth most vulnerable country according to the 2016 Global Climate Risk Index[3], for the last 20 years.

According to post-disaster needs assessments, between 1975 and 2015, severe events caused damage and losses of US$ 9,148 million (in 2015 dollars), of which 42 percent correspond to geophysical events and 58 percent to hydrometeorological events. To date, the largest events have been the 1976 earthquake, and Agatha-Pacaya in 2010. The first event caused damage and losses equivalent to 20.7 percent of GDP[4]. While the second, product of the joint effect of the storm Agatha and the eruption of the Pacaya volcano, caused damages and losses of 3.9 percent of GDP. According to the type of hazards, earthquakes generate greater individual impact and have occurred less frequently; while hydrometeorological events have a smaller individual impact, and have occurred more frequently *(Figure 1).*

Figure 1: Damage and Losses Caused by Severe Events, 1975-2015
(percentage of GDP of the year before the disaster, Millions of US$ of 2015)

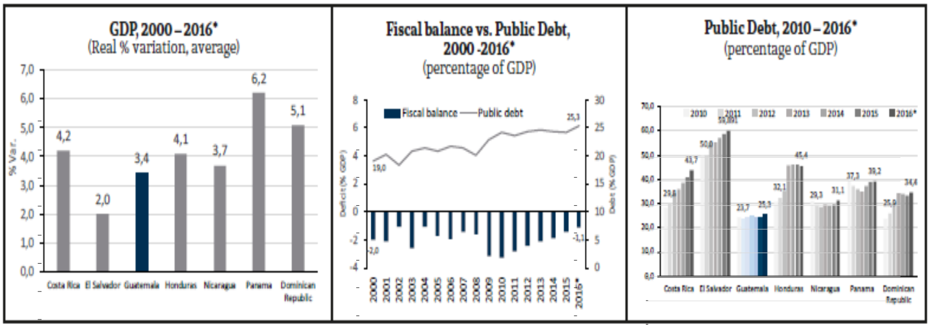


Source: Based on information from post-disaster needs assessments.
Note: The evaluations include direct damages for "damages" (ie destruction or deterioration of infrastructure or assets) and indirect effects for "losses" (ie variations in the economic flow due to higher costs and / or lower income due to interruption of services).

[3] This Index makes a ranking according to the human and economic impact of climatic phenomena. The 2016 Index included a total of 180 countries.
[4] Historical estimate of the economic impact of evaluation disasters conducted by the Economic Commission for Latin America and the Caribbean (ECLAC).

Guatemala has maintained a stable economic growth rate (3.4 percent on average); nevertheless, it presents challenges on the fiscal side. In the last 15 years, the level of public debt remained lower than the average for the region (24.1 percent of GDP for 2016); and between 2012 and 2015 it has met its inflation targets (annual average of 3.6 percent) *(Figure 2).* The greatest challenge corresponds to its low tax collection, which suggests the need to adopt measures that generate greater resilience of public finances aiming to maintain stable and sustainable growth.

Figure 2: Macrofiscal Indicators



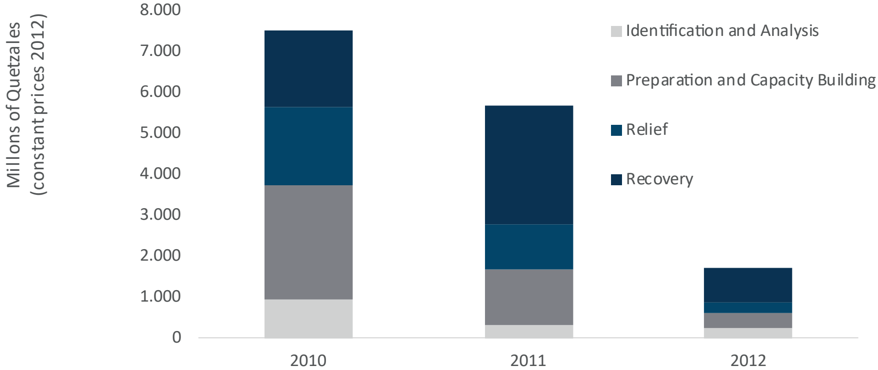
Source: Based on information from IMF, WEO April 2017, April. 2016 * WEO projections.

The fundamentals of the Guatemalan economy could be affected by a severe phenomenon such as the 1976 earthquake, or recurrent climatological events that affect the population, production and productivity. A World Bank study (Baez et al, 2016) points out that tropical storm Agatha in 2010 caused a drop of 10 percent in income per capita and an increase of 5.5 percent in poverty. Likewise, a study conducted in 2013 by the Ministry of Public Finance (MINFIN, Spanish acronym) and the German Cooperation Agency (GIZ), estimated an approximately 0.5 percentage points of GDP[5] annual increase in the fiscal deficit during the 1998 - 2011 period as a result of severe events.

On the other hand, the expenditure associated with disaster risk management activities is mainly aimed at post-disaster recovery, which does not contribute to reduce the country's vulnerability to disasters. For the 2010–2012 period, according to the thematic budget classifier for disaster risk management, prospective disaster risk identification and analysis activities only represented a 10 percent of the total expenditure. While the response and post-disaster recovery process concentrates the largest proportion of spending (60 percent) *(Figure 3).*

[5] The study analyzes the average impact on the deficit of severe events during the period 1998-2011.

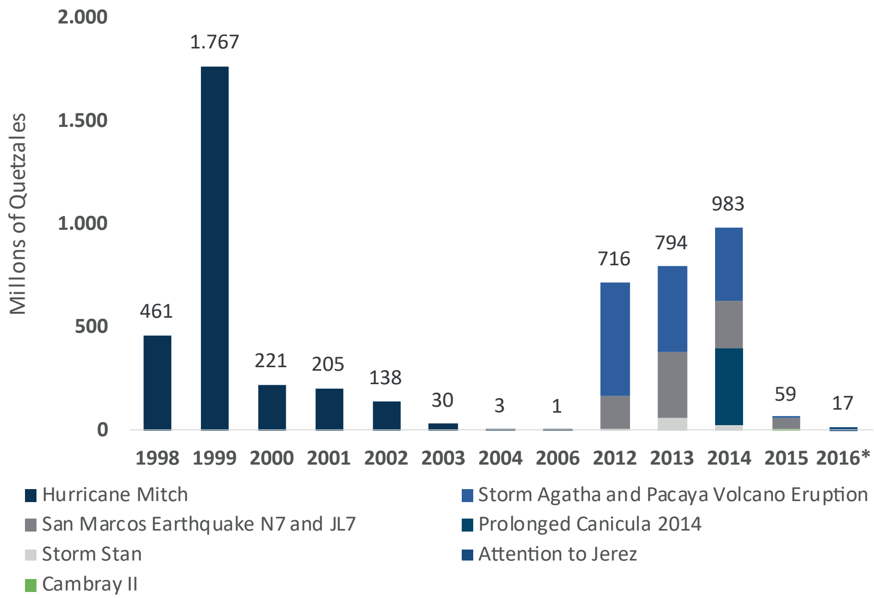
Figure 3: Disaster Risk Management Expenditure by Component, 2010 - 2012
(Millions of Quetzales, constant prices of 2015)



Source: Based on information from the Technical Budget Office of MINFIN.

Hurricane Mitch (1998) is the event that has demanded the largest public expenditure after disasters during 1998 - 2016 (52.4 percent of the total period) and it has required disbursements for 8 years. Likewise, the demand for public spending after disasters could be increased by the occurrence of more than one event within the same period, which exacerbates the scarcity of resources, and generates spending pressures on macroeconomic stability and the sustainability of public finances *(Figure 4).*

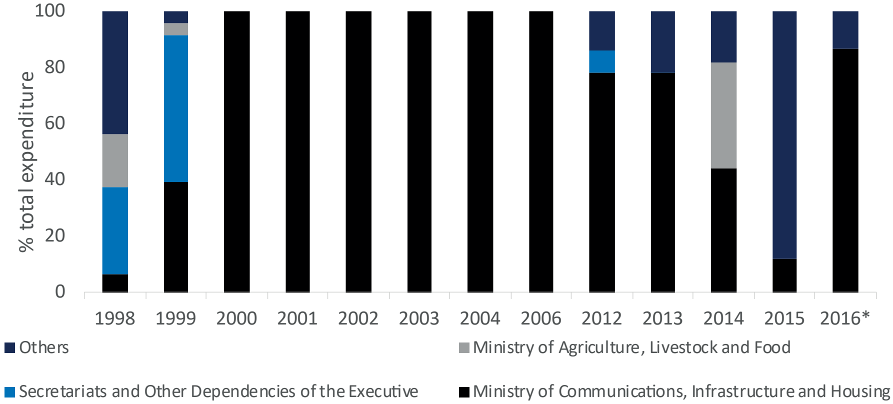
Figure 4: Post Disaster Public Expenditure by Calamities, 1998-2016
(Millions of Quetzales, constant prices of 2015)



Source: Based on information from the Technical Budget Office of MINFIN.
*Preliminary information.

The total public expenditure mobilized in response to the most severe events during 1998 and 2016 amounts to Q5,396 million, of which 55 percent was executed by the Ministry of Communications, Infrastructure and Housing. This entity executed expenditure in six of the eight events considered, and its responsibility extends over a greater number of years after a disaster occurred, which would be linked to the multi-year execution of medium and large-scale public investment projects *(Figure 5).*

Figure 5: Post Disaster Public Expenditure Response, 1998-2016, by Entities



Source: Based on information from the Technical Budget Office of MINFIN.
* Corresponds to accrual expenditure as of June 2016.

2. Financial Instruments Used by Guatemala in Previous Severe Events

Historically, Guatemala has used risk retention financial instruments for post disaster expenditure. The main financing sources were: (i) the General Budget of Revenues and Expenditures of the State under the budget line corresponding to the Permanent National Fund for Disaster Reduction, and the budgetary reallocation mechanism, (ii) the Emerging Fund and (iii) a contingent line of credit with the World Bank that was approved and disbursed in 2010, which is currently not in force. However, the 2017 Budget Law allows MINFIN to acquire risk transfer instruments, such as parametric insurance.

Despite not triggering a significant increase in the fiscal balance, Guatemala has mobilized resources using budget reallocation. For this reason, an analysis of the opportunity cost of budget reallocation would be appropriate, since the stagnation or delay in the provision of public goods and services previously planned and budgeted has implications for the medium and long-term development process.

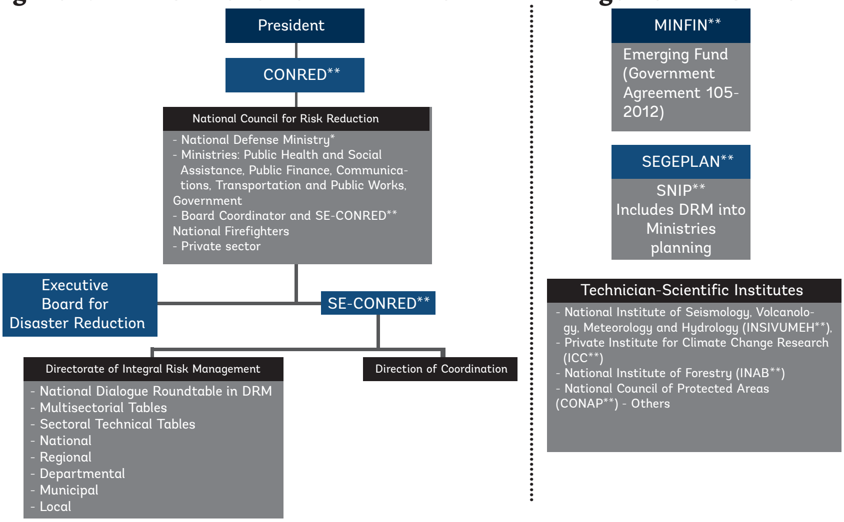
Currently, Guatemala has three financial instruments for disaster response: the "Emerging Fund", the "Emergency and Public Calamity Fund", and the "Permanent National Fund for Disaster Reduction". The objective of the Emerging Fund is to mitigate damages that may be caused by severe events. Its use requires a Declaration of a state of Calamity, which is regulated by the Law of Public Order. In 2017, the Budget Law created a budgetary line of Q192 million with the name "Public Emergencies and Calamity Fund" to transfer resources from the Emerging Fund to the attention of emergencies; as mentioned, it works as a budgetary line. It is worth mentioning that all public entities can access these resources to meet the different needs derived from the state of Emergency and / or Calamity. On the other hand, the Permanent National Fund for Disaster Reduction, created through the CONRED Law according to the availability of State resources, also functions as a budget line approved annually. This is included in the formulation of the budget to which, in practice, resources are transferred before the declaration of emergencies and/or Calamity Status. For year 2017, budget law has assigned a budgetary line of Q8 million to be executed by SE-CONRED, independent of the regular SE-CONRED budget (Q60 million).

3. Legal and Institutional Framework for Disaster Risk Financing

Legal framework for disaster risk management still lacks elements related to disaster risk financing, to prevention activities, definition of responsibilities, and coordination mechanisms. Legislative Decree 109-96, which regulates the National Coordinator for the Reduction of Natural or Provoked Origin (CONRED), presents gaps and overlaps in the functions of different public entities and levels of government. For instance, it does not establish responsibilities for the Ministry of Public Finance related to disaster risk financing, nor to the Secretariat of Planning and Programming of the Presidency (SEGEPLAN) related to planning for sustained development in the aftermath of a disaster.

The National Coordinator for the Reduction of Disasters of Natural or Provoked Origin (CONRED)[6] is the inter-institutional coordination platform for disaster risk management. According to law, its purpose is to prevent, mitigate, attend and participate in the rehabilitation and reconstruction of damages derived from disasters. The highest body of CONRED is the National Council for Risk Reduction, coordinated by the Ministry of National Defense and composed by six other Ministries (including MINFIN), National Firefighters and representatives of the private sector. The Executive Secretariat of CONRED (SE-CONRED) is the decision-making body of the National Council. In case of imminent risks and disasters, there is an Executive Board for Disaster Reduction, in charge of making decisions needed to be implemented immediately and cannot be postponed *(Figure 6).*

Figure 6: Main Stakeholders in Disaster Risk Management in Guatemala



Source: Based on legal instruments and information provided by SE-CONRED.
Notes: *Leading institution. **Spanish acronym

[6] Law of the National Coordinator for the Reduction of Disasters of Natural or Provoked Origin (Legislative Decree 109-96).

The National Policy for Disaster Risk Reduction (PNRRD, Spanish acronym) and the National Strategy for Disaster Risk Reduction 2012-2017 establish the need to conduct a study on fiscal vulnerability generated by the impact of a disaster and analyze the alternatives to reduce it in the future. Both documents are related to the comprehensive disaster risk management approach promoted at the international level through the 2015-2030 Sendai Framework and emphasize the need to develop financial and budgetary mechanisms that guarantee the availability and timely execution of resources in the processes of prevention, response, early recovery and reconstruction. It should be noted that Priority 3 of the Sendai Framework 2015-2030 is "investing in disaster risk reduction for resilience".

The Law and Regulations of the National Coordinator for Disaster Reduction CONRED[7] establish an economic and a financial regime, respectively, focused on establishing resources for disaster response processes, as well as for the operation of the CONRED Secretariat (SE-CONRED). Although the Regulation of the Law was updated in 2012 and presents progress towards a comprehensive management of disaster risk, it does not consider a financing approach, nor does it allow its development within the framework of other policies, norms and principles of public management, such as the decentralization policy, the macro-fiscal policy, the policy of adaptation to climate change; norms such as the Law of Public Order, the Law of the Integrated System of Financial Administration, and principles such as subsidiarity or results-based approach, among other binding matters.

The legal framework in disaster reduction creates and regulates, without success, the Permanent National Fund for Disaster Reduction[8]; and establishes other mechanisms for financing CONRED and for having extraordinary resources in case of State of Public Calamity or National Emergency[9]. The financial instruments established in the legal framework lack a regulation that gives them sustainability and focuses on risk retention financial instruments that depend primarily on macro-fiscal conditions and, above all, political concerns. The normative framework lacks a strategic focus and reflects disarticulation between SE-CONRED and MINFIN.

[7] Legislative Decree 109-96, Law of the National Coordinator for the Reduction of Disasters of Natural or Provoked Origin; and its Regulation, Governmental Agreement 49-2012.
[8] Art. 15 of Legal Decree 109-96.
[9] Art. 122 of Governmental Agreement 49-2012.

4. The Role of the Ministry of Public Finance in Disaster Risk Management

Guatemala lacks a fiscal responsibility law (quantitative fiscal objectives and rules) that provides a link with disaster risk management; moreover, the lack of regularity in the publication of fiscal transparency documents makes it difficult to monitor and comply with the objectives of the macro-fiscal policy and, consequently, disaster risk financing. The normative framework of the organization and functions of MINFIN, through the new Internal Organic Regulation (Government Agreement 26 – 2014, January 2014[10]) and the Institutional Strategic Plan 2016 - 2020, establishes the mission of contributing to the implementation of a sustainable fiscal policy through the efficient and transparent management of revenues, expenditures and public debt. However, the Medium Term Budgetary Framework and the sustainability analysis of the public debt lack the quantitative analysis of specific fiscal risks, as is the case of the risk associated with disaster events, currently included only qualitatively.

As the governing entity of public finances, the Ministry of Public Finance has implemented two budgetary instruments for monitoring public spending that allow identifying the allocation and monitoring the execution of post-disaster spending: (i) the tagger "Management for the Reduction of Risks to Disasters", tool of the programmatic structure of the budget, and (ii) the thematic classifier "Reduction of Risks and Disasters". The expenditure tagger is a tool created in 2010 to facilitate the identification of the allocation and reallocation of expenses derived from the occurrence of a disaster. They are created after the occurrence of an event such as a subprogram of Program 94 "Attention for Disasters and Calamity" with the name of the event. While the thematic classifier "Reduction of Risks and Disasters" is an ex ante tool that serves for the budgetary programming stage. MINFIN hopes this tool will be implemented soon with a results-based approach.

On the other hand, article 22 of the General Budget Law of Revenues and Expenditures of the State for Fiscal Year 2017 establishes that for the fiscal year 2017 a thematic classifier will be added to identify budget allocations oriented to mitigation and adaptation to climate change. It is important to work on the complementarity of this classifier and that of "Reduction of Risks and Disasters" in order to register and monitor adequately and transparently all the expenditure related to disaster risk management. These classifiers must be

[10] According to Government Agreement 26-2014, Number 1 of Article 4, which approves the Internal Organic Regulation (ROI) of MINFIN: *"It is the function of the Ministry of Public Finance to formulate the fiscal and financial policy of short, medium and long term, in function of the Government's economic and social policy ".*

binding for the registry not only on the part of the governing entities of each classifier, but on the rest of the related actors in the matter.

During 2017, MINFIN foresees the implementation of institutional reforms of public management and public financial processes. To this extent, it is worth to mention: i) the creation of the General Directorate of Purchasing and Procurement (DGCC, Spanish acronym), and ii) the design of a Fiscal Risk Management Unit (UGRF, Spanish acronym) that will be implemented through a modification of its organization and functions manual. As for the DGCC, MINFIN modified its organizational structure to elevate the Purchasing and Procurement Directorate to the General Management level. Hereinafter, it grants greater powers in the implementation of monitoring and evaluation instruments, such that they strengthen the transparency of post-disaster spending management. The design of the UGRF should include in its functions the analysis of contingent liabilities due to disasters in its general risk assessment, such that it identifies and assesses the potential impact of various hazards, to which the country may be exposed, and proposes measures for its mitigation.

5. Public Management Processes Associated with Post Disaster Expenditure

Declaration of Emergency or State of Public Calamity

The declaration of a State of Public Calamity is an instrument that exempts general processes of public administration. However, its use is limited since it restricts the constitutional rights of the population[11], since its elaboration took place in a context characterized by political-social conflicts. The declaration provides a legal framework for public officials to act under a special condition that facilitates the mobilization of resources and execution of post-disaster spending. The INSIVUMEH and SE-CONRED technical bodies send a declaration of public alert to the President of the Republic to make the decision to declare or not the State of Calamity. In case the decision is positive, the President issues and Executive Decree, which requires the subsequent approval of the Congress, who approves, disapproves and / or modifies it.

[11] The declaration of the State of Calamity, governed by the Law of Public Order, implies the restriction of constitutional rights such as free locomotion, concentrations of persons, expression or dissemination of information.

The State of Calamity declaration activates the use of financial instruments in disaster risk management such as the Emerging Fund and contingent credit lines. Also, it does not follow the requirements and general processes of purchases and procurement of the State, and of public investment. The State Procurement Law (Decree 57-92) establishes in Subsection (a) of Article 44 that: "… The bidding process or the quotation in the contracts in public agencies and entities will not be obligatory, according to the procedure established in the regulation of this Law the acquisition of goods, supplies, works and services indispensable to solve situations derived from the States of Exception declared in accordance with the Law of Public Order, that have caused the suspension of public services or that such suspension is imminent".

Mechanisms for Loss, Damage and Needs Assessments

A methodology for assessing damages, losses and post-disaster needs has not yet been officially established, providing information that allows the economic assessment of disasters and that can be used in the analysis of economic and fiscal impact; and in disaster risk financing. The Guatemalan government has various mechanisms for the evaluation of damages and losses after disasters, which have been improved with international cooperation assistance through workshops for the use of the Post Disaster Damage and Needs Assessment methodology (PDNA), and the implementation of such methodology in recent severe events. However, there is currently no official methodology.

Institutional Arrangements for Resource Mobilization

MINFIN and SE-CONRED are the entities with greater responsibilities linked to institutional arrangements for the mobilization of post-disaster resources. MINFIN is also responsible for the identification and accreditation of financing sources for the phases of post disaster immediate response and recovery. Contingency plans and post-disaster recovery plans do not clearly identify the institutional arrangements to operate and facilitate optimal mobilization of post-disaster resources. For example, no criteria are identified for the allocation and prioritization of the use of public resources as a result of donations.

Procurement and Adquisicion Mechanisms

The legal framework of public procurement provides for a specific regime in an emergency context. However, this regime is restrictive and difficult to apply. There are several sectoral contracting devices in an emergency context (health, transport, electricity) that are not clearly articulated with the current general legal framework. The 2015 reform aimed to establish a universal procurement regime, applicable to all public entities, even in an emergency context, but it cannot yet be assessed whether its implementation will achieve that objective. This reform also proposed changes in open contracts, with clear guidelines in terms of process, procedures, accountability and public information and transparency.

Article 44 of the State Procurement Law provides that "the bidding process or the quotation [...] for the purchase and contracting of goods, supplies, works and indispensable services to solve situations derived from the states of emergency declared in accordance with the Constitutional Law of Public Order that have caused the suspension of public services or that such suspension is imminent". In practice, several cases of declarations of public calamity made it difficult to use direct contracting. Also, the Constitutional Law of Public Order only defines the possibility of "centralizing public services in a relevant entity", which in some cases did not allow all public entities the exception of the rules of procurement, only one entity was authorized for that purpose. Likewise, the Public Order Law enables the President to "establish maximum or minimum prices for articles of first necessity and prevent their hoarding".

Guidelines for Public Investment Projects

There are procedures for the presentation of public investment post disaster projects. Through the Protocol of Proof of Cause and Damage mitigation and/or recovery projects are identified. This tool allows to apply a different procedure given the event. Thus, for instance, before the eruption of Pacaya volcano or the effects of tropical storm Agatha, a Cause and Damage Certification was established for public investment projects, which was issued by the National Coordinator for Disaster Reduction of Natural or Provoked Origin (CONRED). In 2011, the Protocol of Proof of Cause and Damage was approved for Mitigation and/or Recovery Projects, a tool that allows investment projects adapting to current needs and that includes a procedure applicable to the event.

Budget Monitoring and Evaluation Tools - Accountability

Guatemala has budgetary tools that allow the identification of post-disaster public expenditure associated with the response to severe events[12]. The budgetary tools implemented by MINFIN are: (i) the tagger "Management for Disaster Risk Reduction", budgetary tool of programmatic structure, and (ii) the thematic classifier "Risk and Disaster Reduction".

The "tagger" allows to visualize the public expense associated with the occurrence of a disaster. When a State of Calamity occurs, MINFIN creates and makes available to public sector entities a specific budgetary subprogram with general observance, to facilitate the recording of the expenditure of entities that allocate resources in response to that specific calamity. Derived from the recurrence of disasters, in 2010 the Government instructed the linkage of disaster risk management in the sectoral planning and project formulation processes and developed, within the Integrated Accounting System (SICOIN), the expenditure tracking tool "Tagger" called "Management for Disaster Risk Reduction". Then, Program 94 "Disasters and Calamity Care" is created. When an event occurs, the subprogram with the name of the event is created.

In 2013, the thematic classifier was created under the name of "Reduction of Risks and Disasters", to give continuity to the special monitoring of the expenditure "Management for the Reduction of Risks to Disasters" (tagger)[13]. The classifier is a budgetary programming tool that seeks to facilitate the incorporation of disaster risk management into the actions and investment projects carried out by all sectors within the framework of their functions. However, conflicts and limitations have been identified in the progress of implementation of the thematic classifier in disaster risk management with a focus on results and the thematic classifier for adaptation to climate change, as there is no binding mandate for its implementation.

[12] The events in which these budget tools have been used are: Hurricane Mitch, Tropical Storm Stan, the combined effect of Agatha Storm and Pacaya Volcano eruption, the San Marcos Earthquake, the prolonged heat wave of 2014 and the landslides of Cambray II and Jerez.

[13] As regulated in Article 17 Quáter of Decree Number 101-97, Organic Budget Law, as well as Circular Number 4 of the Ministry of Public Finance for the year 2016.

RECOMMENDATIONS

Greater resilience of Guatemala's public finances requires the identification of the main actors, roles and responsibilities in the legal and institutional framework. SE-CONRED, MINFIN, SEGEPLAN and INSIVUMEH are identified as the main actors with responsibilities to generate and provide information and guidelines for the intrinsic incorporation of disaster risk management in the functions of the public sector and the population in general. It is recommended to amend Legislative Decree 109-96, which regulates CONRED, incorporating disaster risk financing, clarifying the competencies of the various actors in disaster risk management, and incorporating the conceptual framework of principles and guidelines in disaster risk management through a system that allows the implementation of measures in accordance with the best practices and the social and economic context of Guatemala.

Articulate the Sectoral Strategic Plans with the Municipal Territorial Development Plans. Recognizing the role currently played by subnational governments in the identification and mitigation of risk is relevant to achieve success in the implementation of a new country vision. Subnational disaster risk management could be strengthened through the generation of incentives with a focus on results, it would be for the government to evaluate programs and measures implemented by other countries for this purpose (such as the Peruvian case of the municipal modernization program, with a goal linked to disaster risk management).

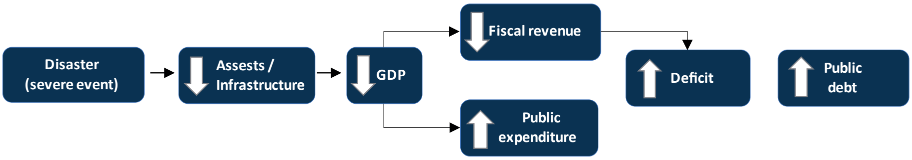
Strengthen the role of MINFIN in disaster risk management by establishing clear competencies that reveal the commitment, progress and agenda of this institution in the matter. The current legal and institutional framework does not directly indicate the MINFIN responsibilities related to disaster risk financing. It is necessary that the institutional arrangements indicate the specific functions of the MINFIN Directorates in terms of responsibility for the comprehensive management of fiscal risks, including those associated with hazards due to natural phenomena and the design and implementation of a disaster risk financing strategy, as well as the implementation of the results-based approach through budget instruments that improve the efficiency and transparency of post-disaster public spending.

Develop capacities for generation and transfer of knowledge and information about disaster risk in order to properly identify, estimate and assess risk. This implies a greater coordination and articulation of the information generated by the technical-scientific entities with the rest of the relevant stakeholders.

Thus, information on disaster risk allows the identification of contingent liabilities to which the country would be exposed in a disaster situation, which is relevant in the preparation of a disaster risk financing strategy and for the prioritization of investments for risk reduction. Having the instruments for data collection, and methodologies for the incorporation of economic and fiscal impact analysis is not enough.

Formulate evaluations of potential impact of disasters on economic growth and main macro-fiscal aggregates, complemented by a sustainability analysis of public debt. The potential fiscal impact due to disasters in the medium-term macroeconomic projections requires the consideration of fiscal policy measures that affect budget decisions, financial equilibrium, and in many cases the prevention (ex ante) and reactivation (ex post) actions. The design and implementation of these measures requires a technical support to strengthen the capacities of MINFIN, to allow this sector to incorporate issues that were not previously developed in their Directorates, or that merit being strengthened for a better performance and scope of the desired results.

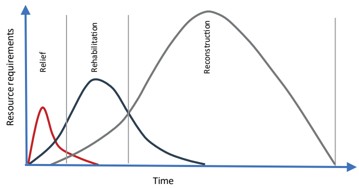
Figure 7: Possible Impact of Disasters on Public Finances



Promote the diversification of financial instruments in the face of disaster risk that allows an optimal combination of risk transfer and retention instruments. This implies the design and implementation of a disaster risk financing strategy, contribute to optimize the use of public resources and facilitates the timely mobilization of resources for immediate attention, as well as for recovery (rehabilitation, reconstruction and economic reactivation measures), and considers the opportunity cost of each instrument. The design of a disaster risk financing strategy for Guatemala requires joint work between its Vice Ministries of Financial Administration and Vice Ministry of Revenue and Tax Evaluation. As well as the active participation of SECONRED and SEGEPLAN, mainly.

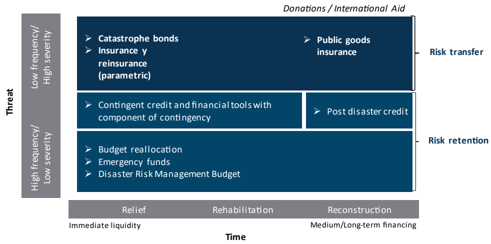
Identify and assess or quantify the contingent liabilities of the State against disasters with the objective of carrying out a cost-benefit analysis of the different financial instruments that Guatemala could access. So that the combination of instruments chosen allows the Government to respond to the multiple hazards to which the country is exposed in a cost-efficient manner taking into account the financial need in its temporal dimension.

Figure 8: Temporal Dimesion of Post Disaster Funding Needs



Source: Ghesquiere and Mahul (2010)

Figure 9: Risk Layering Approach for Disaster Risk Financing Strategy



Source: Adapted from Financial Protection Against Disasters, World Bank 2014

Strengthen and specify the existing legal framework of the Emerging Fund and the Permanent National Fund for Disaster Reduction, in order to optimize the purpose for which they were created. The use of the Emerging Fund is activated by the declaration of a State of Emergency in the territory; however, the Ministry of Environment and Natural Resources and the Ministry of Energy and Mines also receive transfers from this fund for uses in which it has not been possible to identify their connection with disaster risk management. On the other hand, the Permanent National Fund for Disaster Reduction, created with the purpose of financing not only the response but also the post-disaster recovery phase, presents a confusing legal framework that hinders efficient expenditure execution. In that sense, it is recommended to have clear administrative rules and procedures for the use of an instrument such as the Emerging Fund, whose institutional arrangements reflect the objectives of a comprehensive vision of disaster risk financing.

Develop the domestic insurance market, as well as a public goods insurance policy, in order to significantly reduce the State's contingent liabilities. The occurrence of a disaster, especially in developing countries like Guatemala, increases the liabilities that must be covered by the State. In view of this situation, Guatemala should promote public policies that seek greater deepening of the domestic insurance market, as it would contribute to reducing the State's contingent liabilities and, therefore, increase the resilience of public finances.

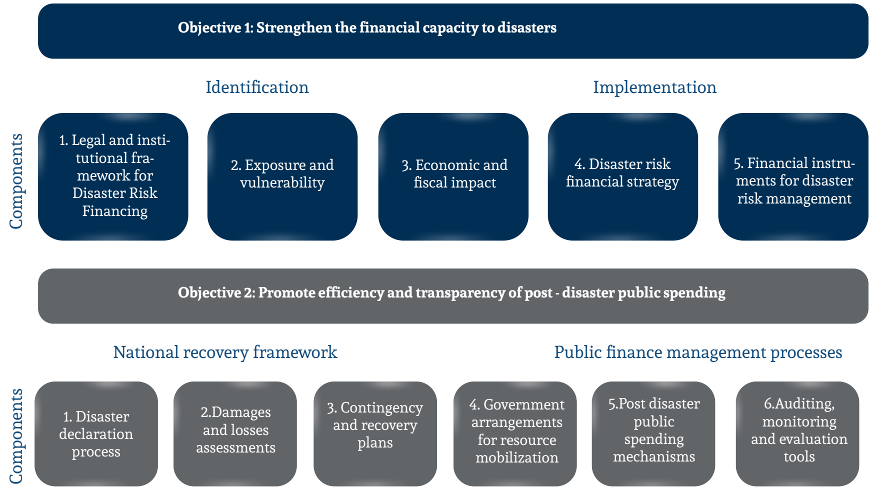
Implement agile and efficient mechanisms in terms of public management processes that facilitate the rapid mobilization of resources in the event of a disaster. Some of the mechanisms used to mobilize resources, such as budget reallocation and the contracting of debt after disasters, can represent a high opportunity cost for planned development. Thus, the gradual implementation of these mechanisms allows the deployment of various tools such as framework contracts, ex ante price fixing, special clauses for contracts and public investment projects in special situations of national emergency, among others, which allow streamlining the execution of expenditure post-disaster and meet the needs of the affected population.

Annex 1: Objective and Scope of the Technical Assistance in Disaster Risk Financing

General Objective: Include fiscal risk due to disasters in the broad management of public finances.

The inclusion of fiscal risk generated by disasters in public finances is structured through two complementary objectives that are (i) Strengthen the financial capacity to disasters; and (ii) Promote efficiency and transparency of post – disaster public spending.

Technical Assistance Scope



Note: Proposal framework used accordingly to Government priorities. The technical assistance do not necessarily cover all components mentioned above.

Among the expected results manifested by the countries, are:

- Inclusion of the role of the Ministry of Finance in disaster risk management (fiscal risk management unit, analysis of the economic and fiscal impact of potential disasters, budgetary tools that allow planning and identification of expenditure in DRM and CCA).

- Implementation of a disaster risk financing strategy (diversification of unding sources for emergency response, instruments suited to the needs of the countries, optimal mobilization of resources in emergency situations, agile public financial management processes).

- Harmonized disaster declaration processes and post disaster needs assessments methodologies (activation of optimal DRM response protocols).

Annex 2: Financial Instruments for Disaster Risk

Contingent Credit Line "Catastrophe Deferred Drawdown Option - CAT DDO"

- Credit that is triggered by an emergency/disaster declaration and provides immediate liquidity.
- Requires a pre-set trigger, declaration of a state of emergency due to a disaster associated with nature, or health-related event.
- It requires the satisfactory implementation of a policy on Disaster Risk Management and adequate macroeconomic foundations for approval and renewal.
- Interest rate based on LIBOR based on disbursements. It may require an initial commission (0.50%, which can be financed with the loan funds). The renewal fee is 0.25%.
- The total loan amount is based on the macroeconomic fundamentals of the country (IBRD, IDA). It can be up to 0.25% or 0.50% of GDP, or up to US $ 500 million or US $ 250 million, whichever is less.

Investment Financing with a Contingent Component of Emergency Response "Contingent Emergency Response Component CERC"

- Credit that allows a quick reallocation of resources from investment projects to recovery activities in case of an emergency, without the need to formally restructure the project.
- Flexible design options.
- Strengthens the preparation and response capacity during the project design and preparation process.
- Activated when an eligible emergency has occurred, or is imminent.

Investment Credit "Emergency Recovery Loan for Investment in Reconstruction"

- Requested after an event
- It is implemented as an investment loan. Includes technical assistance in preparation and design.
- Has prerequisites for eligibility (need for assistance due to a disaster).
- It can be used by all sectors (infrastructure, human development and agriculture) and supports a wide range of activities, including the provision of services, delivery of grants (microcredits).
- Unlike commercial bank loans, it serves for the transfer of knowledge.

Disaster Risk Transfer Instrument Promoted through the MultiCat Program "Catastrophic Bonds"

- Allows countries to access the "cat bonds" market through a common platform, in which the World Bank provides support in the management of the issue, without being the issuer.
- Alternative to cover less frequent, but more catastrophic disasters (earthquakes, hurricanes).
- It is activated based on intensity parameters, i.e. category 4 hurricanes on the Saffir-Simpson scale, or earthquakes of magnitude greater than or equal to 7.8 on the Richter scale.
- Instrument that transfers part of the disaster risk to the capital markets.
- Variety of structures, including the grouping of multiple risks and multiple regions.
- Coverage of several years at a fixed cost in contrast to annual insurance premiums.
- The issuance of Cat Bonds requires access and knowledge of the market.

Moreover, the World Bank facilitates access to the Catastrophic Risk Insurance Facility for segregated portfolios (CCRIF SPC) for countries in Central America and the Caribbean. It groups catastrophic risks from several countries and is backed by traditional reinsurance and capital markets. This facility has been developed with the technical assistance of the World Bank. Capitalized through contributions in a Multiple Donor Trust Fund.

- It offers parametric insurances with coverage against hurricane winds, earthquakes and excess rainfall and plans to implement coverage against droughts.
- It provides immediate liquidity (in a period no longer than 14 days after the event occurred).
- Offer premiums at a lower cost, than if countries request it individually.

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