What is FISLAC?

FISLAC (Fiscal Sustainability for Latin American and the Caribbean countries) is an ecosystem developed by the Inter-American Development Bank to help governments of Latin American and Caribbean countries (LAC) strengthen macro-fiscal policy and decision-making.

FISLAC is comprised of two primary elements: the models and the website. The models serve as the core of the tools displayed on the website. Upon exploration, within the website you will discover a variety of dashboards and tools designed to facilitate a comprehensive understanding of the macro-fiscal dynamics of LAC countries.

Why FISLAC?

FISLAC is an agile and accessible platform that provides an overview of the macro-fiscal risks faced by countries in the LAC region.

How can I access FISLAC?

To access the FISLAC tool, go to https://www.fislac.com

What can I find in FISLAC?

La página web de FISLAC cuenta con varios módulos:

- 1. THE CLIMATE CHANGE DASHBOARD: Presents a Deep Dive into the Economic and Fiscal Implications of Environmental Challenges in LAC
- 2. PUBLIC INVESTMENT DASHBOARD: Dashboard that allows to explor the Public Investment in Latin America.
- 3. FISCAL RULES COMPLIANCE HUB: A Hub for Transparency and Accountability in Fiscal Rules in LAC. The Compliance Hub empowers LAC policymakers with a Multidimensional Compliance Indicator (MCI) for assessing fiscal management, gaining valuable insights, and driving informed decision-making towards sustainable fiscal policies.

What is the compliance tracker?

It provides a comprehensive view of each country's fiscal rule framework, compliance, and the Multidimensional Compliance Indicator (MCI). It also allows countries to explore fiscal rules in detail, including deviations from the target.

How is compliance of rascal rules measured?

Following the research of Ulloa-Suarez, C., & Valencia, O. (2022), the compliance rate by rule (r) and by country (i).

To compute a country's compliance rate, we must consider the various rules it has implemented and the duration of each one. Therefore, a country's compliance rate is an average value, considering each rule's compliance rate over the period it was in place. We assume that the implementation periods of each rule are independent. Thus, the average compliance rate for each country (i).

What is the Multidimensional Compliance Indicator (MCI)?

The Multidimensional Compliance Indicator (MCI) is a comprehensive assessment tool specifically designed to measure and evaluate fiscal rule compliance within Latin American and Caribbean (LAC) countries. The MCI consists of eight key categories: Fiscal Resilience and Tax Efficiency, Optimal Resource Allocation, Sustainable Debt practices / Debt Management, Macroeconomic Stability and Growth, Risk Management and Economic Stability, Institutional Governance, Optimized Fiscal Rule Design, Climate Change and Disaster Preparedness, each of which is assigned a numerical score. These categories encompass a range of indicators that delve into the various aspects of fiscal performance.

- The Fiscal Resilience and Tax Efficiency dimension evaluates a country's ability to maintain financial stability, handle revenue fluctuations, and efficiently manage taxes. It considers three key aspects: the effectiveness of tax administration, the impact of revenue volatility (especially in commodities), and tax productivity. Higher scores in this category indicate superior financial management and tax efficiency.
- 2. The Optimal Resource Allocation dimension focuses on how well a country allocates resources, emphasizing expenditure efficiency, total expenditure, and spending (in)flexibility. It evaluates a country's ability to maximize resources, aiming for lower total expenditure and reduced spending inflexibilities. Higher scores in this category signify a more effective allocation of resources, which is critical for achieving an optimal balance in expenditure.
- 3. The Sustainable Debt Practices/ Debt Management dimension focuses on a country's approach to managing its debt. This category evaluates the country's commitment to maintaining a sustainable and manageable debt burden. Higher scores in this category indicate prudent debt management practices that safeguard the country's financial stability and fiscal health.
- 4. The Macroeconomic Stability and Growth dimension captures variations in the economic landscape that can affect compliance with fiscal rules, helping identify whether (non)compliance results from transitory or permanent factors. This assessment considers multiple factors, including economic growth, inflation, the output gap, and financial market reactions. Higher scores in this category indicate a more stable and growth-oriented macroeconomic environment.
- 5. The Risk Management and Economic Stability dimension assesses a country's capacity to handle various risks and maintain economic stability. This category considers factors such as credit ratings, the EMBI, economic crises, and debt spikes to evaluate a country's preparedness to manage risks while sustaining economic stability. Higher scores in this category indicate better risk management practices and a more resilient economic environment.
- 6. The Institutional Governance dimension evaluates the quality and effectiveness of a country's institutions, including government quality, legislative elections, and the degree of autonomy granted to sub-national governments. This category provides insights into the governance structure and institutional autonomy within the nation. Higher scores in this category indicate more robust institutional governance and greater autonomy for sub-national entities.
- 7. The Optimized Fiscal Rule Design dimension focuses on the positive aspects of how fiscal rules are structured to enhance compliance and effectiveness. This category focuses on various design characteristics, including the presence of a

fiscal council, escape clauses, legal basis, monitoring and enforcement procedures, independent oversight, and the treatment of public investment in rule targets. Higher scores in this category indicate a well-crafted fiscal rule framework that promotes better fiscal rule compliance and overall fiscal health.

8. The Climate Change and Disaster Preparedness dimension evaluates a country's readiness to address the challenges of climate change and natural disasters. This category considers various indicators, including vulnerability and readiness assessments and data from sources like EM-DAT. It assesses a country's capacity to manage and recover from climate-related shocks and natural disasters while maintaining fiscal rule compliance. Higher scores in this category signify better preparedness to mitigate the impact of such events on fiscal health.

Each category within the MCI consists of a carefully chosen set of indicators that effectively capture the essential dimensions of fiscal rule compliance. These indicators are assigned specific weights based on their relative significance, enabling a thorough and well-balanced assessment of a nation's fiscal performance.

Why escape clauses are important?

Escape clauses in fiscal rule frameworks are vital for maintaining fiscal discipline and balancing rule-based rigidity with flexibility in unexpected and exceptional circumstances.

Well-defined escape clauses provide clarity, precise activation triggers, and clear guidance, allowing fiscal rules to adapt without compromising long-term fiscal responsibility.

What is the Escape Clause Clarity Index (ECCI)?

The Escape Clause Clarity Index (ECCI) assesses how effectively an escape clause is defined and its capability to balance crisis response with long-term fiscal responsibility.

This index is built upon a scoring system that favors escape clauses that closely align with the ideal scenario within six dimensions. Higher values signify a well-defined EC and a close alignment with the best scenario in each dimension. Conversely, lower values indicate significant deficiencies and ambiguity in addressing exceptional circumstances, highlighting the potential for improvement.

How is the Escape Clause Clarity Index (ECCI) calculated?

The Escape Clause Clarity Index (ECCI) evaluates the effectiveness of escape clause definitions and their ability to balance crisis response with long-term fiscal responsibility.

This index utilizes a scoring system based on six key dimensions: Triggers and Conditions, Activation Responsibility, Activation Timeline and Return to Objectives, Procedures for Activation and Compliance, Control Mechanisms, and Communication Strategies.

Our assessment follows a systematic process that involves establishing an ideal scenario as a reference point for evaluation. We evaluate each country's escape clause against the criteria defined for each dimension. Higher scores are assigned to escape clauses that closely align with the best-case scenario within each dimension, while lower scores are given to those that do not meet these ideal criteria.

Following this scoring process, we normalize each dimension by dividing the score by the maximum points attainable within that specific category. This normalization results in scores ranging from 0 to 100 for each of the six indicators. These individual scores are then aggregated to create the ECCI, which serves as an indicator of the quality and well-defined nature of each escape clause.

The ECCI scale ranges from 0% to 100%. A score of 100% signifies an escape clause that closely aligns with the ideal scenario in all dimensions, while a lower score indicates room for improvement in the escape clause's definition. For example, an index of 70% reflects that there is 30% room for improvement in the definition of the escape clause, with a focus on dimensions that received the lowest scores.

Why targets in fiscal rules are important?

Fiscal rules can adapt to changing conditions, resulting in the evolution of their targets. Understanding target evolution is essential for an assessment of compliance behavior. It also sheds light on how countries effectively maintain their macroeconomic aggregates near their targets, enabling the pursuit of sustainable fiscal policies and fiscal discipline.

How is the deviation from the fiscal rule defined?

The deviation from the objective is defined as the number of standard deviations that the executed value is deviated from the objective of rule. The sign represents the direction of the deviation. For instance, a value of -3 in 2010 means that the executed value was three standard deviations below the target that was ruling that year.

What are the Immediate effects of extreme natural disasters in public finances?

The occurrence of a natural disaster resulting in damages equivalent to 2% of Gross Domestic Product (GDP) leads to a rise of up to 0.3 percentage points (pp) in public debt in the affected region for a minimum of three years, and simultaneously, causes a decrease in revenues by 0.04 pp in the first year.

While the effect on public spending is positive and temporary for current and capital expenditures, the initial perception of sovereign risk increases but diminishes after the second year. Notably, the Caribbean economies face the most significant fiscal pressures, and the change in their Emerging Markets Bond Index (EMBI) spread is more than double that of the Latin America and the Caribbean (LAC) region in 2020.

What is the ND-GAIN index?

The ND-GAIN Country Index evaluates a nation's ability to adapt to the negative impacts of climate change through two key dimensions: vulnerability and readiness.

Vulnerability is measured by assessing a country's exposure, sensitivity, and capacity to adapt to climate change. The index considers six vital sectors - food, water, health, ecosystem service, human habitat, and infrastructure - to determine a nation's overall vulnerability. Exposure indicators are projected impacts that are invariant over time, while sensitivity and adaptive capacity may vary. Sensitivity measures a nation's

dependency on a sector negatively affected by climate change, and adaptive capacity measures the availability of social resources for sector-specific adaptation.

Readiness measures a nation's capacity to leverage investments and convert them to adaptation actions. Economic readiness captures a nation's ability to accept investment and apply it to adaptation, while governance readiness evaluates the institutional factors that enhance the application of investment for adaptation. Social readiness measures the factors such as social inequality, ICT infrastructure, education, and innovation that enhance the mobility of investment and promote adaptation actions.

WHAT IS FISLAC-EWS?

FISLAC-EWS is a web-app that presents an Early-Warning System (EWS) for fiscal risk in Latin American and the Caribbean. It helps sovereigns identify fiscal and macroinstitutional vulnerabilities by estimating fiscal stress episodes through different indicators classified into three types of risk: Fiscal, Macroeconomic, and Institutional.

What is the Within-Country Report?

Track the dynamics for each of the 25 countries in LAC through two reports: Dashboard Report with more than 140 indicators comparing the country against four peers: region, subregion, credit rating, and income group; and Risk Assessment Report that measures risk through fiscal and macroeconomic data.

What is the Between-Countries Report?

A detailed analysis of the dynamics of macro-fiscal risk across LAC countries; provides a comparative analysis and presents the risks related to each factor.

What is the Definition of Fiscal Stress?

A fiscal stress episode refers to a period in which a country suffers extreme shocks on its debt dynamics, forcing it to take extraordinary measures. These difficulties can create a certain degree of distress, as they could lead the sovereign into a fiscal crisis by failing to adjust its budget constraint to correct imbalances. The severity of the fiscal stress episode would force the country to tighten its financing by taking exceptional measures such as debt default, restructuring, debt reduction, or money printing.

According to the definition, we identified 1,813 stress episodes for the 180 countries from 1990 to 2020. This number accounts for a share of 32%, resulting in a slight degree of class imbalance. As for LAC, we identified 282 episodes averaging 11 episodes per country, which is relatively close to the average value for emerging economies. Conversely, advanced economies had an average of only 1.5 episodes per country throughout the sample, yielding a higher degree of imbalance with only 5% of crisis episodes.

The 80's in LAC was marked by a pronounced external debt crisis which triggered high levels of fiscal deficits. The repercussions of this 'lost decade', as it was called, had a strong impact in the long term and was characterized by a slow recovery that only until the 2000's with the rise in commodity prices could be solved for the most part. The years 2008 and 2009 were marked by the financial crisis where most of the countries in the region entered into fiscal stress due to their loss of market confidence which resulted in

the cessation of bond market issuance. The most recent Covid-19 pandemic has left a high number of countries under fiscal stress where the main triggering event is a high need for financing from the IMF with quotas exceeding 100% or adjustments in their fiscal programs.

What is the Leading Indicator?

The last EWS visualization tool is the macro-fiscal risk leading indicator, which reduces dimensionality, facilitates grouping relevant variables to explain fiscal stress episodes and macro-fiscal imbalances' forward evolution. This indicator captures the idea that a fiscal stress episode is more likely to occur if several variables show simultaneous signals.

The leading indicator is on a scale from 0 to 100, where 0 means low risk of a fiscal stress episode and 100 means high risk. This indicator measures short-term macro-fiscal vulnerability at the aggregate level and for each component factor. The higher the indicator's value, the more variables send signals, indicating a possible episode of fiscal stress.

The indicator uses the signal approximation methodology and includes the critical values calculated by the ALE with weights given by the variable importance index. This form of estimation adds value to calculate the leading indicator by combining the results from the best Machine Learning model.