# Online Annex 1. Economic Implications of Uncertainty in Latin America and the Caribbean<sup>1</sup>

This Annex presents technical details and background material for the analysis in Chapter 1 "Navigating a Shifting Global Environment" of the October 2025 Regional Economic Outlook for the Western Hemisphere.

Major shifts in trade policy have heightened global economic uncertainty. In Latin America and the Caribbean—particularly in countries with more open trade and capital accounts—a significant share of this rise in uncertainty stems from sources outside of the region. Elevated uncertainty exerts a lagged yet negative impact on economic activity, especially in countries with weak institutions and high debt. The findings underscore the importance of strong policy frameworks and fiscal consolidation in mitigating these adverse effects.

#### 1.1. Introduction

Global economic uncertainty has risen sharply in 2025, largely driven by escalating trade tensions—including successive rounds of tariff announcements and negotiations. Heightened uncertainty distorts consumption and investment decisions and increases risk premia. For Latin America and the Caribbean (LAC) countries, the impact reflects trade exposure, dependence on global capital markets, and policy buffers. This annex outlines the methodology used to decompose uncertainty by source, estimates its impact on economic activity in the region, and examines how domestic vulnerabilities can amplify its effects.

## 1.2. Global Factors Driving Economic Uncertainty

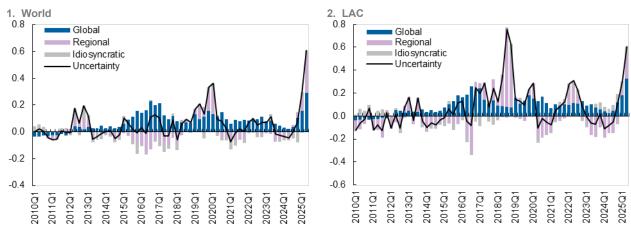
The analysis measures economic uncertainty using the World Uncertainty Index (WUI). This is a quarterly panel dataset developed by Ahir, Bloom, and Furceri (2022), covering 143 countries—20 of which are from LAC. The index is calculated by counting the frequency of the word "uncertainty" and its synonyms in Economist Intelligence Unit reports, adjusted for the total word count in each report. Using a dynamic factor model based on Stock and Watson (2011), each country's World Uncertainty Index (WUI) is decomposed into three factors: (1) a *global factor* for shocks that are common to all countries, (2) a *regional factor* for region-specific shocks that are orthogonal to global shocks, and (3) an *idiosyncratic factor* for country-specific shocks (see IMF 2025 for a similar analysis for the Middle East and Central Asia region).

The surge in uncertainty observed since end-2024 is largely driven by a global and synchronized factor. Online Annex Figure 1.1 illustrates the evolution of uncertainty components for the world as a whole (panel 1) and for LAC countries (panel 2). Uncertainty spiked since the start of 2025, particularly following the US tariff announcements in April, reaching levels not seen since the trade tensions in 2018–19. The global factor accounted for the bulk of the increase, both globally and within LAC, underscoring the broad impact of escalating trade tensions. This pattern is particularly pronounced in LAC countries with relatively more open trade and capital accounts, such as Mexico and Central America, Panama, and the Dominican Republic (CAPDR).

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## Online Annex Figure 1.1. Uncertainty Decomposition (Index)



Sources: World Uncertainty Index database; and IMF staff calculations. Note: LAC = Latin America and the Caribbean.

## 1.3. Uncertainty Weighs on LAC Economic Activity

The economic cost of uncertainty for LAC countries is estimated using the local projections approach by Jordà (2005), based on the following regression:

$$y_{i,t+h} - y_{i,t-1} = \beta_1^h UNC_{i,t} + \beta_2^h UNC_{i,t} * LAC_i + \sum_{j=1}^l \beta_3^{h,j} UNC_{i,t-j} + \sum_{j=1}^l \gamma_1^{h,j} (y_{i,t-j} - y_{i,t-j-1}) + \sum_{j=1}^l \theta_j^h X_{i,t-j} + \alpha_i^h + \alpha_t^h + \alpha_$$

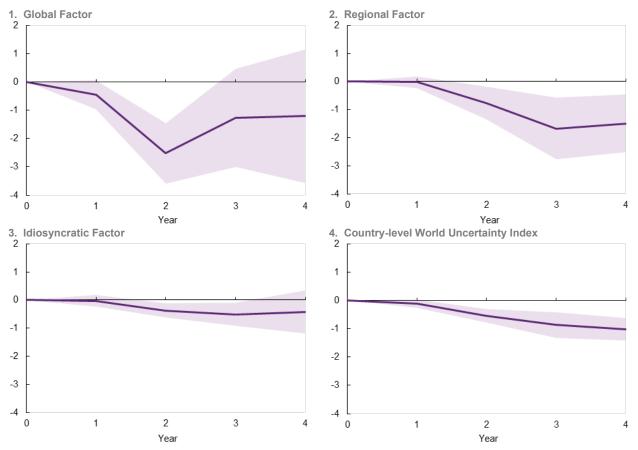
where  $y_{i,t}$  denotes (log) real GDP in country i and year t, and h is the impulse response horizon.  $UNC_{i,t}$  denotes a measure of uncertainty, which can either be the global, regional, or idiosyncratic factor, or the country-level WUI.<sup>2</sup>  $LAC_i$  is a dummy which equals 1 if the country is in the LAC region.  $X_{i,t}$  is a set of control variables capturing economic structure—such as (log) trade openness, terms of trade, export partners' growth—as well as other shocks that arguably affect growth through distinct channels, including epidemics, natural disasters, and conflicts.  $\alpha_i^h$  and  $\alpha_t^h$  denote country- and time-fixed effects, respectively. Standard errors are clustered at the country level.

Estimates suggest that uncertainty has a delayed but persistent impact on economic activity in LAC as a whole. The impulse responses of real GDP to a one-standard-deviation increase in uncertainty are illustrated in Online Annex Figure 1.2, with each panel representing a different measure of uncertainty. Three key findings stand out. First, the effect is gradual: while not significant on impact, it becomes increasingly negative over time. Second, while the peak effect of each factor tends to occur two-three years after the shock, the impact of the country-level WUI is notably more persistent. Third, compared to estimates for other regions previously documented, the negative effects are more pronounced in LAC.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> All regression coefficients are indexed by the corresponding measure of uncertainty, but the index is omitted for brevity.

<sup>&</sup>lt;sup>3</sup> Online Annex Figure 1.2, panel 4, shows that a one-standard-deviation increase in WUI is associated with a 1 percent decline in real GDP growth in LAC three years after the shock. In comparison, the estimated impact is around 0.5 percent or less for Middle East and Central Asian countries and the rest of the world, according to Chapter 2 of the May 2025 *Regional Economic Outlook: Middle East and Central Asia.* On the other hand, Bhattarai and others (2020) show that the spillover effects of US uncertainty on Latin America tends to be weaker than in other emerging markets due to lower monetary policy sensitivity to capital flow volatility.





Sources: IMF, World Economic Outlook database; Ahir, Bloom and Furceri (2022); World Uncertainty Index database; Torres Munguía and others (2022); Uppsala Georeferenced Event Database; Center for Research on the Epidemiology of Disasters, Emergency Events Database EM-DAT; World Bank, Worldwide Governance Indicators; and IMF staff calculations.

Note: LAC = Latin America and the Caribbean.

## 1.4. Domestic Vulnerabilities Amplify the Impact of Uncertainty

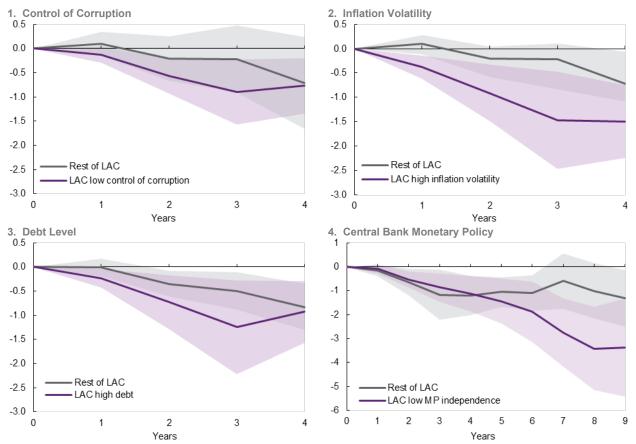
To study how domestic vulnerabilities influence the impact of uncertainty, the following specification incorporates interactions with measures of vulnerabilities:

$$y_{i,t+h} - y_{i,t-1} = \beta_1^h UNC_{i,t} + \beta_2^h UNC_{i,t} * LAC_i + \beta_3^h UNC_{i,t} * P_{i,t} + \beta_4^h LAC_i * P_{i,t} + \beta_5^h UNC_{i,t} * LAC_i * P_{i,t} + \sum_{j=1}^l \beta_6^{h,j} UNC_{i,t-j} + \sum_{j=1}^l \gamma_1^{h,j} (y_{i,t-j} - y_{i,t-j-1}) + \sum_{j=1}^l \theta_j^h X_{i,t-j} + \alpha_i^h + \alpha_t^h + \epsilon_{i,t}^h$$

 $P_{i,t}$  is a dummy that captures pre-existing vulnerabilities, such as high debt levels, weak control of corruption, and high inflation volatility. A country is classified as having high debt when its debt-to-GDP ratio is above its income group's median, weak control of corruption when its corruption measure is below the global median, high inflation volatility when its 5-year rolling inflation volatility exceeds the global median, and low monetary policy independence when the central bank monetary policy independence index is below the global median.

Domestic vulnerabilities play a key role in shaping the economic impact of uncertainty. Countries with weak anticorruption institutions, fragile monetary policy frameworks (reflected by high inflation volatility and limited monetary policy independence), and elevated debt-to-GDP ratios tend to experience more severe effects from uncertainty shocks (Online Annex Figure 1.3). High debt limits fiscal space and constraints the effectiveness of monetary policy frameworks (see Chapter 3), reducing the government's ability to cushion the economy when shocks hit, while weaker governance undermines policy credibility and effectiveness. In contrast, estimates suggest that less vulnerable countries are more resilient to uncertainty environments, with uncertainty shocks having limited and often insignificant economic effects.





Sources: IMF, World Economic Outlook database; Ahir, Bloom, and Furceri (2022); World Uncertainty Index database; Torres Munguía and others (2022); Uppsala Georeferenced Event Database; Center for Research on the Epidemiology of Disasters, Emergency Events Database EM-DAT; World Bank, Worldwide Governance Indicators; Romelli (2022, 2024); and IMF staff calculations.

Note: LAC = Latin America and the Caribbean; MP = monetary policy.

Overall, this analysis suggests that heightened uncertainty puts a high value on efforts to strengthen macroeconomic and institutional frameworks. Coping with short-term risks from trade shocks while advancing medium-term reforms to strengthen institutions, enhance policy frameworks, and maintain fiscal consolidation can help LAC countries build resilience against the persistent effects of uncertainty.

### References

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