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Advocacy note — COP30[1]

In the Road to the Conference of the Parties (COP30)

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JUST CLIMATE TRANSITION AND FISCAL RISKS IN LATIN AMERICA: AN UNCOMFORTABLE RELATIONSHIP

Abstract: In the road to COP30, this advocacy note aims to analyze the main climate transition and physical risks for fiscal policy. The Paris Climate Change Agreement targets a temperature rise between 1.5° C and 2° C during this century. This requires the global economy to become carbon neutral between 2050 and 2070. This situation configurates some physical and climate transition risks. These main risks consist of:

1. Climate change, including extreme climate events, has significant negative effects on economic activities, social welfare, and the environment that reduce fiscal revenues and increase public expenditure to attend these emergencies. Therefore, climate transition generates several fiscal risks such as the reduction of fiscal revenues due to the changes in the economic structure, production and consumption patterns, and the constitution of stranded assets, such as the capital in the oil and gas industry, that will reduce fiscal revenues and the increase of public expenditure due the climate emergencies and natural disasters.
2. Climate transition requires significant public investment in sustainable infrastructure. A Just Climate Transition requires governments to compensate some economic groups and promote a more egalitarian economy. This represents significant pressures for an increase in public expenditure.
3. Reducing fiscal revenues and increasing public expenditure can lead to fiscal macroeconomic balances that negatively impact the conditions of a Just Climate Transition.

However, there are also options and measures to administrate these physical and transition risks, such as:

1. Identify and elaborate a systematic risk administration of these physical and climate transition risks.
2. Green fiscal reform (including a carbon price) to generate additional revenue.
3. New financial instruments such as thematic bonds like debt for nature.
4. The elaboration of a new economic incentive matrix with consistent regulations that are in favor of sustainable development.

Therefore, an efficient, feasible, and credible Just Climate Transition requires a solid fiscal policy that adequately addresses climate change risks consistent with the Paris Climate Change Agreement

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Introduction

Climate change is an obstacle to development, considering the magnitude and relevance of its impacts on economic activities, social welfare, and the environment and the magnitude of resources required for adaptation and mitigation processes.

To avoid the worst climate scenarios, the Paris Climate Change Agreement targets a temperature rise between 1.5º C and 2º C for this century. These temperature targets require the construction of a carbon net zero global economy between 2050 and 2070.

The climate transition to a global carbon net zero economy requires significant structural changes in current production and consumption patterns and the instrumentation of multiple public policies. This involves significant transition policy risks as well as technological, market, and reputational risks that are intensified by the physical risks.

These climate transition and physical risks thus significantly impact fiscal conditions and policies. Physical climate and transition risks can reduce fiscal revenues and increase public expenditure, leading to significant fiscal and macroeconomic unbalances. These fiscal and macroeconomic unbalances can reduce the potential contribution of the fiscal policy to the Just Climate Transition and might even represent an obstacle to a climate transition.

In this sense, there is increasing interest from the academic and policy perspective in identifying and analyzing the main fiscal risks and considering some options and opportunities to tackle and properly administrate these risks. Therefore, the main objective of the advocacy note is the analysis of the main climate transition and physical risks for fiscal policy.

General Framework

Climate change is an obstacle to development, considering the negative physical impact on economic activities, social welfare, and the environment and the magnitude of resources required for adaptation and mitigation processes. The Paris Climate Agreement targets a temperature rise between 1.5º C and 2º C for this century. This requires building a global carbon-neutral economy between 2050 and 2070 (United Nations, 2015).

This requires a significant structural transformation of the economic structure and current production and consumption patterns. This transformation requires an active fiscal policy in fiscal revenues, public expenditure, and macroeconomic balances. However, fiscal policies face significant physical and climate transition risks. Among these risks are:

- Climate change, including extreme weather events, has significant negative effects on economic activities, social welfare, and the environment, and through this channel, on the public deficit. The New Climate Economy (NCE) estimates that a temperature rise of 1º C implies a reduction of the annual growth rate of the *per capita* Gross Domestic Product between 1% and 2% (Dell *et al*., 2014). This reduces fiscal revenues and increases the pressures for additional public expenditure. In this sense, there is evidence that extreme climate events in Latin America induce a fiscal deficit between 0.2% and 0.3% of the Gross Domestic Product, representing around 10% of the public deficit between 2001 and 2019 (Delgado *et al*., 2021).

- The transition to a resilient and carbon-neutral economy requires a significant increase in public investment. Estimations of the investment in new infrastructure for a climate transition indicate that financing this requires about 5% of the GDP in Latin America and even more considering universal social protection systems (Galindo, *et al.,* 2022).

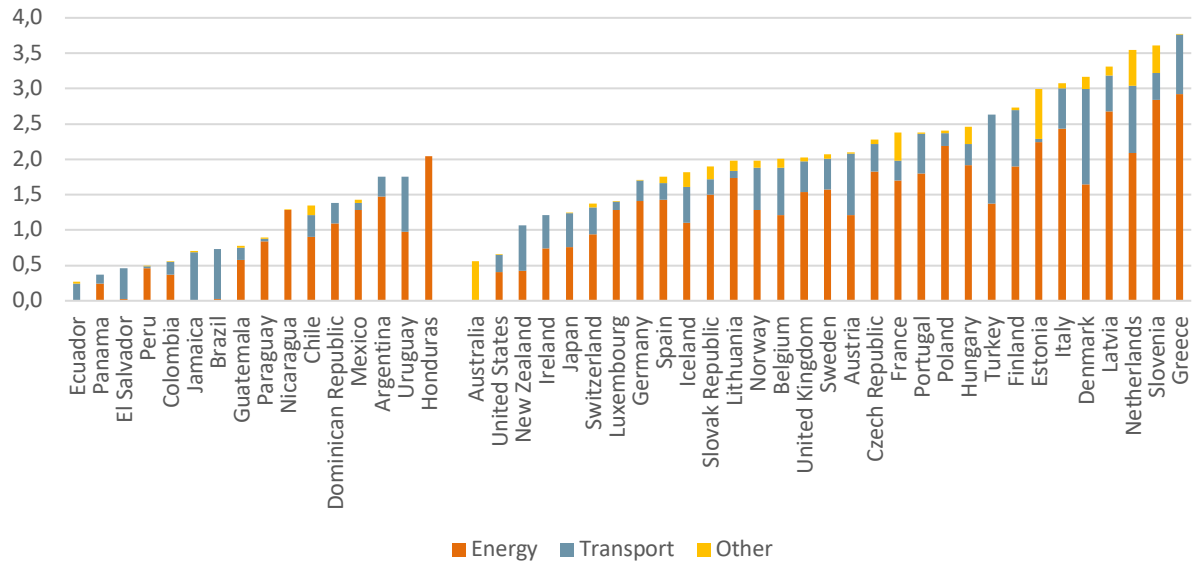
- Henceforth, fiscal policy will face physical and climate transition risks that will increase the pressure on the public deficit and public debt. This situation could lead to fiscal and macroeconomic unbalances with negative shocks on economic dynamism and a higher inflation rate and interest rates. This situation represents an obstacle to a Just Climate Transition or, even more, will inhibit the Climate Transition.

There are multiple options for the fiscal policy to cope with these risks, such as:

- Identify the main physical and transition risks and their consequences on fiscal revenue and public expenditure. For example, continuing the exploitation of fossil fuel resources is inconsistent with the carbon budget of the Paris Climate Change Agreement. Therefore, it is indispensable for a climate transition to eliminate the oil and gas industry (Tong *et al*., 2019; McGlade & Ekins, 2015). The disappearance of the oil and gas industry will generate significant stranded assets with negative impacts on the financial sector and fiscal revenue (Binsted *et al.,* 2019). Moreover, eliminating the oil and gas industry reduces the demand for inputs, employment, profits, and final products affecting the rest of the economy (Desnos *et al*., 2023; Roncali and Semet, 2024).

- A Green fiscal Reform will reduce greenhouse gas emissions, promote the use of new technologies, and generate additional fiscal revenue. Henceforth a Green fiscal Reform will contribute to consolidating fiscal conditions. This reform should consider potential weak or strong second dividends on income distribution promoting a Just Climate Transition (Galindo *et al*., 2021). This risk must be administrated using a systematic risk assessment and compensation measures. The evidence suggests that there is still fiscal space for this Green fiscal reform in Latin America (Graph 1).

Graph 1. Tax revenues from environmental taxes in OECD and selected Latin American selected Latin American countries, 2022
(% GDP)



Source: OECD, 2025.

- There are also new mechanisms to finance the climate transition, such as debt for nature. In this case, the issue of thematic bonds can be used to finance the restoration and preservation of nature. This option will open options for new public debt.

- Instrumenting an institutional public sector reorganization consistent with the carbon-neutral economy and a Just Climate Transition, including regulations and new infrastructure. This implies that all public and private investments and household expenditures are consistent with the deep decarbonization of the economy (Galindo & Caballero, 2025).

Conclusions

Climate change represents an obstacle to development. Considering the economic costs of climate inaction, resource mobilization, and structural changes involved in the mitigation and adaptation efforts, it must be addressed. The Paris Climate Change Agreement is the basis of the strategy against climate change. However, this agreement has relevant physical and transition risks, including fiscal risks.

These fiscal climate risks should be addressed to have a Just Climate Transition. This is possible considering options such as proper risk administration, green fiscal reform, programs of debt for nature, and the instrumentation of regulations and new infrastructures consistent with the deep decarbonization process.

A Just Climate Transition is impossible without a solid fiscal climate policy.

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