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Fiscal risks and opportunities in a just climate transition: A latin american vision

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Fiscal Risks and Opportunities in a Just Climate Transition: a Latin American Vision

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Abstract

The main objective of this policy brief is to review fiscal policy's physical and transition risks and opportunities in the context of a just climate transition and to propose some recommendations.

The climate transition to a carbon-neutral economy between 2050 and 2070 represents significant physical and transition risks for fiscal policies in Latin America. For example, the physical impacts of climate change will increase public expenditure and reduce fiscal revenue, the generation of stranded assets in the oil industry will reduce fiscal revenue in some countries of the region, and the reduction of gasoline consumption from fossil fuels sources will reduce the tax base, and the construction of a sustainable and social infrastructure will increase public investment.

This situation will lead to fiscal imbalances, indicating that fiscal policies in Latin America are not prepared to support a just climate transition that affects mitigation pathways. However, there are opportunities, such as the implementation of green fiscal reforms (including a carbon tax) together with health and wealth tax reforms and the reduction of gasoline subsidies. Therefore, it is important to implement a task force for the analysis and recommendations on the risks and opportunities of fiscal policies that support just climate transitions in Latin America, and to begin to move in this direction. Otherwise, fiscal policy cannot support a just climate transition and will seriously limit the mitigation pathways.

Diagnostic

The Paris Climate Change Agreement aims to achieve a temperature increase between 1.5oC and 2oC, which requires the construction of a carbon-neutral economy between 2050 and 2070. Fiscal policy is a fundamental component of this climate transition, considering resource mobilisation, the configuration of a new matrix of economic incentives, and additional requirements for public expenditures and fiscal revenues. However, the physical climate change impacts and the just climate transition have significant consequences for a fiscal policy in at least six issues that are particularly relevant to consider:

1. After the COVID-19 pandemic, fiscal policies in Latin American and most developing countries face difficult conditions because of increasing expenditures and reduced fiscal revenues due to income contraction. However, significant fiscal efforts have been made to reduce the fiscal deficit and control public debt. Nevertheless, fiscal conditions are still challenging, and there is not enough margin to support the just climate transition and address climate change impacts.

2. The climate transition implies significant stranded assets in the oil and gas industry. For example, during the 30-40 years of valuable lifetime, the global energy infrastructure in fossil fuels will generate greenhouse gas emissions that will be 30% above the level consistent with a target of a temperature rise of 1.5oC (Tong et al., 2019). Around 40% of the actual oil and 50% of the gas and carbon reserves cannot be exploited in the context of the Paris Agreement (McGlade & Ekins, 2015). In Latin America, the generation of electricity with fossil fuels will generate emissions that will be 30% higher than the level that is consistent with a temperature rise of 1.5oC (González-Mahecha, et al., 2019) and between 50% and 70% of the oil reserves cannot be exploited in the scenario of a temperature rise of 1.5oC (Solano-Rodríguez et al., 2019).

Additionally, the stranded assets in Latin America will have significant financial costs (Binsted et al., 2019). Foster et al. (2024) argue that a carbon-neutral economy requires an average annual decline in global oil and gas production of 3% until 2050 and even more in coal. The stranded assets in the oil and gas sector will negatively impact fiscal revenues in oil-producing countries. For example, in 2021, the fiscal revenue from oil and gas exploration and production represented 0.7% of the Gross Domestic Product (GDP) in Peru, 3.4% of the GDP in Bolivia, 8.2% of the GDP in Ecuador, 1.4% of the GDP in Mexico, 4.4% of the GDP in Trinidad and Tobago, and 0.05% of the GDP in Guatemala (OCDE, 2023). This potential reduction represents a severe fiscal risk and will affect the rhythm of the decarbonisation pathways. Nevertheless, the consequences of these stranded assets are uneven between countries. For example, Paraguay or Guatemala have fewer stranded oil assets and a significant opportunity to expand electricity use. This situation will thus generate a dynamic tension between decarburisation and fiscal balances in some countries. Paradox situations could arise in which countries use oil revenues to address social problems or climate change impacts (i.e., Pakistan).

3. Climate transition implies the transformation of the fossil fuel automobile fleet and the reduction of gasoline consumption (Blanco et al., 2022). This situation will reduce the tax base and, therefore, fiscal revenue while reducing the significant gasoline consumption subsidies. For example, global fossil fuel subsidies1 are about 6.8% of the global GDP and is expected to increase to 7.4% in 2025 (Parry et al., 2021). The net fiscal consequences depend on specific country conditions. This indicates that the consequences of a deep decarburisation path in transport and gasoline consumption will produce different trajectories in countries with different fiscal consequences (Foster et al., 2022).

[1] Incorporating the negative externalities of gasoline consumption, such as atmospheric local pollution, car accidents, congestion and greenhouse gas emissions.

4. The just climate transition requires that governments significantly increase their public investment by advancing inclusive policy responses to ensure that the transition contributes to reducing income and gender inequalities as well as inequalities among territories, sectors, and households. Estimations suggest that sustainable investment in Latin America will require about 5% of the GDP per year until 2030, between 2% and 5% of the GDP for universal social protection that will contribute to a resilient economy to the impacts of climate change and even more sources for other social items such as reduction of infant mortality (Galindo et al., 2021; Malerba, 2023). Therefore, it is necessary that fiscal policy not only compensates for the potential fiscal revenue reductions but also considers increasing fiscal revenues to support additional public expenditure. It is also essential to consider that social conditions show significant differences between countries. In 2021, in Honduras, for example, 59.2% of the population lived under the poverty line. They require, therefore, a substantial increase in social expenditure. Uruguay, meanwhile, had 10.6% of the population under the poverty line in 2021 (CEPAL, 2022).

5. Climate change has general and significant adverse effects on economic activities, welfare and the environment, and it generates extreme weather events with potentially catastrophic consequences (IPCC, 2014; Bolton et al., 2020). Recent estimations of the New Climate Economy indicate, for example, that a temperature rise of 1oC reduces the annual growth rate of the GDP between 1% and 2% (Dell et al., 2014). This reduces fiscal revenue due to a contraction of economic activity and increases public expenditure to alleviate economic and social conditions. These physical risks represent additional pressures on public finances.

Recommendations

Fiscal policies during a just climate transition will face the risks of a significant revenue reduction due to the generation of stranded assets or the contraction of the tax base. At the same time, increasing public expenditure demands solving economic and social emergencies (multiple impacts of climate change or natural disasters) and constructing new infrastructure and a universal social protection system. This will lead to an increase in public deficit, public debts, and macroeconomic unbalances. Therefore, public finances in Latin America and other developing countries are not yet prepared for the climate transition. This implies that fiscal policies cannot support the just climate transition and the construction of a climate-resilient economy. Furthermore, climate risks could generate macroeconomic imbalances with negative consequences on deep decarburisation paths. The fiscal policy's ability to address these issues will show its capacity to contribute to a just climate transition strategy. In this context, important elements are:

1. General and sustainable or green fiscal reforms and a carbon price. There is fiscal space for green fiscal reform in Latin America considering international green tax levels (Graph 1). A general and green fiscal reform is required to increase fiscal revenue, maintain fiscal balances and promote other benefits. The green fiscal reform will contribute to:

- Control negative externalities such as local atmospheric pollution or greenhouse gas emissions. Green taxes reduce these negative externalities, but they should be accompanied by regulations and new infrastructure.

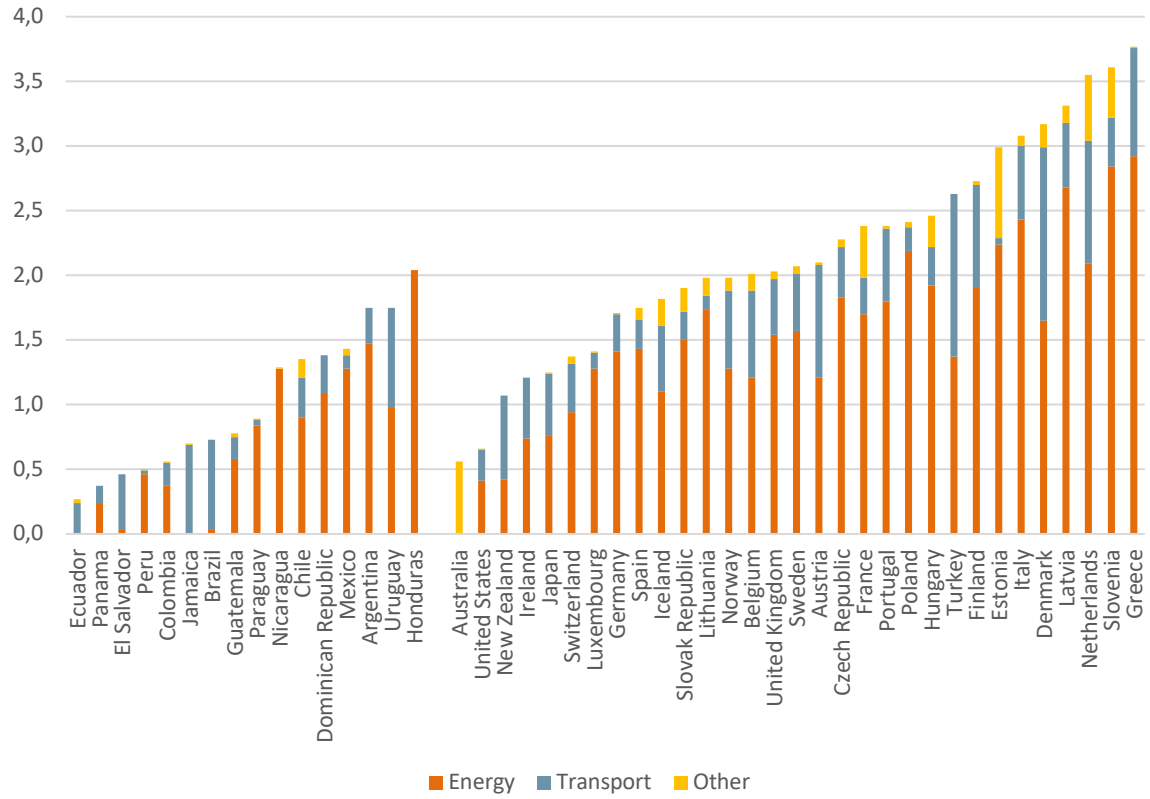
- Increase fiscal revenue. This is usually based on the low price elasticity of the products that generate the negative externality. However, the price elasticities are generally smaller in absolute terms in developing countries than developed countries (Galindo et al., 2015).

Therefore, similar international taxes or carbon prices have different consequences in different countries, and it is expected that an adjustment by only using prices will be more costly in developing countries.

- The second dividend with positive effects on income distribution or economic dynamism. The evidence about a positive effect on income distribution is very heterogeneous between countries and tax products (i.e. electricity or gasoline), but, in general, it is possible to have a second dividend using fiscal recycling (Ekins y Speck, 2011; Bosquet, 2000; Labeaga et al., 2021). Therefore, fiscal measures should contemplate compensation for vulnerable groups.
- Carbon price. A carbon price is a fundamental component of any deep decarburisation strategy. This carbon price will contribute to a reduction in greenhouse gas emissions, raise fiscal revenue, and promote technological innovation. However, identifying vulnerable groups, either because of income or employment concerns, and using compensation packages is essential for a just climate transition, particularly in countries with significant social challenges. Additionally, it is increasingly relevant that developing countries are prepared to apply carbon adjustment taxes and other similar measures while considering their consequences and the construction of a national carbon tax system. However, this carbon tax adjustment system should not represent another development obstacle.

Graph 1. Fiscal revenue from green taxes in Latin America and OCDE, 2020

Percentage of the Gross Domestic Product (GDP)



Source: OECD.Stat. Environmentally related tax revenue.

2. Constitution of a task force to prepare fiscal conditions for a just climate transition. Analysis of the conditions and alternatives of fiscal policies to support the just climate transition and to conduct a proper climate risk administration. This includes the analysis of the consequences of stranded assets and the erosion of the tax base, investment requirements, the new opportunities for green and pro-health and wealth taxes and their consequences on income distribution and climate transition. This includes the analysis of designs, alternatives and consequences of carbon price and energy subsidy reductions.

3. Increasing recognition from the fiscal authorities that their activities should be consistent with the climate just transition. This implies the ability to maintain macroeconomic balances during the climate transition but also to promote the climate transition. This requires more fiscal space and more solid fiscal conditions to face drastic revenue and public expenditure changes, as well as the analysis of the contribution of fiscal policies to climate transition.

4. Explicit recognition that the fiscal transition risks are heterogeneous among countries and that these fiscal risks will condition the decarbonisation paths. For example, the oil-stranded assets will affect each country differently since countries will face different social requirements.

5. Initiate the fiscal transformation by applying green and sustainable taxes in conjunction with pro-health and wealth taxes.

6. The challenges, urgency, and magnitude of structural transformations, including fiscal policies, involved in a just climate transition require the support of a broad and long-term economic, social and political coalition. This coalition requires a solid and credible narrative supporting this transition that clearly shows long-term benefits for the population.

Scenarios

The evidence and potential scenarios indicate the relevance for the future development of the region of the relationship between climate just transition and fiscal policies:

- Fiscal policies during the just climate transition will face significant risks that will lead to fiscal unbalances. This will seriously limit the capacity of fiscal policy to support the climate transition and, moreover, limit the mitigation pathway options. In this scenario, preserving fiscal balances will postpone the climate transition, making the target of a temperature increase between 1.5ºC and 2ºC during this century unrealistic.

- The instrumentation of abrupt fiscal policy reforms, including a carbon tax, will affect both fiscal revenue and public expenditure as well as income distribution and income dynamism. The uncertainty of these effects will reduce the efficient implementation of these reforms. Additionally, the potential consequences of these reforms will limit the economic, social and political support.
- Therefore, green fiscal policy reform requires specific consideration of its consequences for the just climate transition, including analysing potential compensation packages. These fiscal reforms for a just climate transition require showing that it is possible to achieve a just climate transition with fiscal balance and welfare improvement. Otherwise, fiscal policy cannot support a just climate transition, and will, furthermore, seriously limit the mitigation pathways.
- The magnitude of the challenges and structural changes involved in this new fiscal policy, consistent with the just climate transition, indicates that it is indispensable to immediately initiate these fiscal transformations with a long-term perspective.

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