



CANNING HOUSE RESEARCH FORUM

Inequality and Trade Diversification:

How Can Income Inequality
in Latin America be reduced
beyond Commodity Booms?



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Foreword

Welcome to the first report from the Canning House Research Forum at the LSE.

The Canning House Research Forum is hosted by the LSE Latin America and Caribbean Centre (LACC) and is a multi-year rolling programme of research and policy engagement around the overarching theme of “The Future of Trade in Latin America and the Caribbean”.

The programme consists of a series of individual, policy-focused research projects that aim to advance academic knowledge and offer insights of practical application to political, economic, social and business policy-making.

The Forum was set up as a collaboration between Canning House and the LSE Latin America and Caribbean Centre (LACC). Canning House has been dedicated to the promotion of understanding and relationships with Latin America for over 75 years. Part of its longevity is due to the dedication of successive teams at Canning House itself; the rest is explained by our unparalleled links with expert partners.

Canning House is particularly proud to be working with the LACC, the LSE’s hub for research and engagement on the region. The LACC supports new academic, policy and practice-relevant research across politics and international affairs, economics and business, the environment, society and culture, and to increase the flow of research-informed ideas with governments, business and civil society through publications, events and social media.

This inaugural Canning House Research Forum report focuses on “Inequality and Trade Diversification” – an enormously relevant topic for our times – and is the work of our first Canning House Research Fellow, Dr. Amir Lebdioui.

We very much hope that the report’s insights will be of considerable value, not only in academia, but also to government ministers and parliamentarians, policymakers and regulators, opinion-formers and other research institutions and think-tanks – whether in the UK or wherever there is interest or potential interest in the region – and of course in Latin America and the Caribbean itself.

Research for the next report is already underway, on “Latin America Trade in the Age of Climate Change”; with publication anticipated in Summer 2022. Further reports will follow over the course of the next three years.

Cristina Cortes
CEO
Canning House

Professor Gareth A. Jones
Director
LSE LACC

For further information about the work of Canning House and the LSE Latin America and Caribbean Centre, see www.canninghouse.org and www.lse.ac.uk/lacc/about-us.

About the Author

Dr Amir Lebdioui is the Canning House Research Fellow based at the LSE Latin America and Caribbean Centre. (LACC). He leads the *Canning House Research Forum*, a multi-year rolling programme of research and policy engagement, consisting of project outputs as well as events on the future of trade in Latin America and the Caribbean.

Amir's research lies at the crossroads between industrial policy, natural resource management and the sustainable development agenda. He has published numerous articles on the political economy of resource-based development, export diversification strategies, and green industrial policy in the context of climate change. Amir also regularly provides analysis for governments, multilateral development organizations, and NGOs.

He was previously a Fellow in Development Management at the LSE Department of International Development and an affiliated lecturer in Development Studies at the University of Cambridge. He holds an MPhil and a PhD in Development Studies from the University of Cambridge.

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Executive Summary

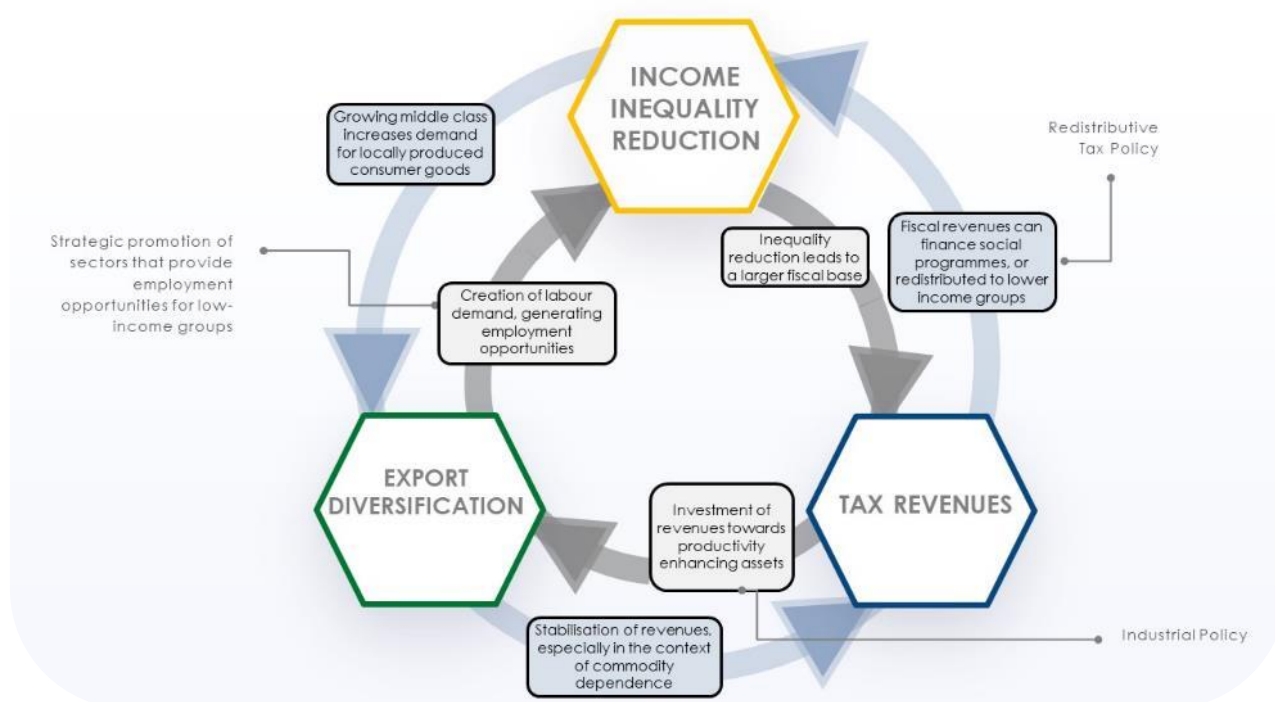
This report outlines the findings from a study of the policy pathways to sustainably reduce income inequality in Latin America, which remains one of the most unequal regions in the world. Persistent income inequality has undermined socio-economic progress and resulted in social unrest, aggravating political and economic instability across the region. The COVID-19 crisis has further exposed and exacerbated existing inequalities affecting both the health outcomes and livelihoods of the poorest segments of the population. Rethinking inequality reduction programmes in Post-COVID Latin America is therefore timely and urgent.

This report finds that policy approaches to inequality reduction in Latin America have too often focused on mitigating the symptoms of inequality rather than its root causes. Although redistributive taxation and cash transfers are useful and needed, such measures offer limited prospects of sustaining inequality reduction on their own in the Latin American context. Not only are the initial levels of pre-distribution income inequality too high for redistributive measures to suffice, but long-term inequality reduction in Latin America is constrained by other important obstacles, such as the limited productive capabilities and areas of competitive advantage in high value-added sectors, a scarcity of jobs that pay above subsistence levels, and the high degree of commodity dependence.

What a country produces and exports matters for improving the distribution of income. Most of the inequality reduction achieved in the 2000s was the result of commodity-financed social spending and improvements in education (leading to important changes in labour market, the informal sector, minimum wage, and redistributive taxation) but did not address the region's trade structure, which remains concentrated around commodities. These interventions therefore could not be sustained after the fall in commodity prices from 2014, which has led to the reversal of the progress achieved in the previous decade. Inequality rates have indeed stagnated across the region since 2014 and even increased back in several Latin American countries.

There are therefore clear limits of what can be achieved in terms of inequality reduction without measures to diversify away from commodity dependence. While the association between inequality and taxation is well known, relatively little attention has been devoted to the critical relationship between economic diversification and income inequality.

Interconnections between diversification, income inequality, and tax revenues



Source: Author's

Economic diversification has a central (yet understudied) impact on inequality because it can affect both the pre-distribution and post-distribution structure of income. In the context of commodity-dependent economies that are vulnerable to commodity price fluctuations, as in Latin America, export diversification contributes to stabilising and increasing tax revenues (without having to increase the tax rate), which can in turn finance poverty reduction programmes and social transfers. Diversification can also have a more direct impact on market inequalities. Export diversification and sophistication can contribute to expanding employment opportunities for low-income groups which are otherwise limited, thereby improving pre-tax income distribution.

The embeddedness of income inequality in the broader context of trade and export concentration in Latin America bears considerable policy implications. To help move the policy debate beyond 'palliative solutions', this report offers three main messages:

1. **Conditional cash transfers (CCTs) are useful but are not sufficient beyond a certain level in the context of a limited supply of productive jobs.** CCTs, which have become increasingly used as tools of inequality reduction in the region, offer the opportunity to the poorest segments of the population to have a better access to education and health. Nevertheless, the improvement of the socioeconomic conditions of the lowest income groups not only depends on their skills but also on the social and macroeconomic conditions that influence the demand for such skills. The CCT model not only assumes that schooling will enable recipients to access available jobs, but also that those jobs will exist when young people enter the

labour market. Policymakers in Latin America therefore need to make sure there are fish in the lake when people are taught how to catch them.

2. ***Policies aiming to promote economic diversification should be key ingredients of inequality reduction strategies.*** The need to promote competitiveness in new sectors and activities makes the role of industrial policies particularly relevant. Improving the pre-distribution of income also requires a coordination between social, education, industrial and innovation policies to generate the demand for skilled workers and their newly acquired skills, to avoid skills mismatches, and to ensure the integration of unskilled workers in the labour market. To achieve such coordination and promote a productive development model that helps reduce inequalities, more sophisticated and holistic government interventions are needed. Institutional capacity to implement industrial and innovation policies must also be improved, with a focus on the creation of mechanisms to adequately incentivise, coordinate, monitor and evaluate firms that receive public support, and the promotion of stronger interlinkages between firms, universities, and public agencies.
3. ***Inequality reduction should be treated as a policy priority (including by the business leaders) to avoid further social unrest and conflict.*** Persistently high income inequality damages economic progress and political stability, which affects society as a whole. In other words, if the bottom of the wine glass pyramid is too unstable, and the top glass too heavy, it is the whole pyramid that will crumble. The inability of governments in the region to increase taxation has historically been related to the strong relationship between wealth and political power. Inequality reduction through structural transformation would be a pragmatic approach to complement redistributive taxation, as such agenda should face lower political resistance than over reliance on redistributive taxation on its own, but it requires a long-term vision, strong social coalitions, and state capacity.

If Latin America is ever to shake off its label as ‘the most unequal place in the world’, its governments will need to take bolder steps that tackle the root causes of inequality.

Organisation of Report

Section 1 provides an overview of this report. Section 2 puts forward and discusses the inequality trends in Latin America since the 2000s. Section 3 reviews some of the competing approaches towards inequality reduction and lays out the peculiarities of the Latin American context. Section 3 also explains the intrinsic relationship between inequality, economic diversification, and tax revenues. Section 4 provides key lessons for policymakers aiming to reduce inequality rates across the region while section 5 provides concluding remarks.

List of Acronyms

CCT	Conditional Cash Transfer
ECLAC	Economic Commission for Latin America and the Caribbean
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
HHI	The Herfindahl-Hirschman Index
IDB	Inter-American Development Bank
ILO	International Labour Organization
MVA	Manufacturing Value Added
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
UNDP	United Nations Development Programme
WDI	World Development Indicators
WID	World Inequality Database

Overview

Introduction: Mould-breaking strategies to reduce inequality in 21st century Latin America

Following a decade in which inequality had fallen in Latin America, inequality started to rise once more since 2014, motivating waves of protests and political instability across the region. In 2019, the top 10% of income-earners in Latin America accounted for over one-half of national income, making it by some accounts the most unequal region in the world.¹ The COVID-19 pandemic has further exacerbated existing inequalities affecting both the health outcomes and livelihoods of the poorest segments of the population.

High inequality rates have also created high developmental ‘costs’ terms of productivity gains, market dynamism, financial stability and access to financial services. In public policy terms, maintaining the status quo is unlikely to be desirable and may further hinder political and economic stability in the region. Against this backdrop, rethinking income inequality reduction programmes in Post-COVID Latin America is timely and urgent.

This report addresses several essential questions that arise when considering the future of inequality reduction in Latin America.

- Why has income inequality reduction proved to be so challenging in the region?
- Why was the progress in income distribution during the 2000s not sustained?
- Might redistributive taxation suffice to sustainably reduce income inequality in the region?
- What are the public policies that can best sustain inequality reduction?
- Can inequality reduction be promoted independently of industrial and innovation policies?

In contrast to the widespread narrative that a rise in inequality is the price of achieving higher economic growth (as per the classic interpretation of the Kuznets curve), it has become increasingly evident that growth on its own does not guarantee that income will be more evenly distributed in the long run, and the sources of growth matter in terms of potential future inclusiveness.²

The record of Latin America during the 2000s illustrates the point well. Although inequality was reduced, this progress was made possible in large part by the increase in fiscal revenues associated with the commodity boom, which was not sustained after 2014 as

¹ De Rosa, M., Flores, I., & Morgan, M. (2020). Inequality in Latin America revisited: insights from distributional national accounts. *Technical Note*, (2020/02).

² Aghion, P., Cherif, R., & Hasanov, F. (2021). Competition, Innovation, and Inclusive Growth. *IMF Working Papers*, 2021(080).

commodity prices fell. Fiscal pressure, and slower growth, eventually led to the slow down –and in some instances reversal– of progress. Latin America countries still tend to display levels of social spending, taxation, and investment in education, R&D and health that are below average.

Latin America's particular socio-economic conditions also imply that its inequality reduction challenge might be very different to most other regions. Solutions that may work in more diversified economies, as among the OECD for example, particularly in relation to redistributive taxation, may therefore not be applicable in the Latin American context. Inequality-reduction measures, that are exclusively designed to redistribute existing resources or to enhance the skills and capabilities of job-seekers, such as redistributive taxation or cash transfers, do not suffice in contexts where inequality is caused by a scarcity of jobs that pay above subsistence level (as in several Latin American countries). In addition, a strategy that only relies on redistributive taxation would also not suffice because of the initial levels of pre-distribution income inequality are too high compared to the rest of the World.

There is a vast literature that examines the deeper determinants of inequality in Latin America. Several studies have addressed the role of education policies³, social dynamics and discrimination⁴, minimum wage⁵, trade union and organised labour bargaining⁶, technological change⁷, and international trade.⁸ Nevertheless, it is only recently that attention was given to the role of export diversification more particularly.⁹

Aligning inequality reduction and export diversification objectives is particularly relevant, as Latin America includes some of the most unequal and some of the most commodity-

³ Katz, L. F., & Murphy, K. M. (1992). Changes in relative wages, 1963–1987: supply and demand factors. *The Quarterly Journal of Economics*, 107(1), 35–78.; Chetty, R., Friedman, J. N., Saez, E., Turner, N., & Yagan, D. (2017). *Mobility report cards: The role of colleges in intergenerational mobility* (No. w23618). National Bureau of Economic Research; Milanovic, B. (2019). *Capitalism, alone: The future of the system that rules the world*. Harvard University Press.

⁴ Sharkey, P. (2008). The intergenerational transmission of context. *American Journal of Sociology*, 113(4), 931–969; Telles, E. E., & Lim, N. (1998). Does it matter who answers the race question? Racial classification and income inequality in Brazil. *Demography*, 35(4), 465–474.

⁵ Moreno-Brid, J. C., Garry, S., & Krozer, A. (2016). Minimum Wages and Inequality In Mexico: A Latin American Perspective. *Revista de Economía Mundial*, (43), 113–129.

⁶ Piketty, T., Saez, E., & Stantcheva, S. (2014). Optimal taxation of top labor incomes: A tale of three elasticities. *American Economic Journal: economic policy*, 6(1), 230–71

⁷ Acemoglu, D., & Restrepo, P. (2020). Robots and jobs: Evidence from US labor markets. *Journal of Political Economy*, 128(6), 2188–2244.

⁸ Palma, J. G. (2014). De-industrialisation, 'premature' de-industrialisation and the dutch-disease. *Revista NECAT-Revista do Núcleo de Estudos de Economia Catarinense*, 3(5), 7–23.; Hartmann, D., Guevara, M. R., Jara-Figueroa, C., Aristarán, M., & Hidalgo, C. A. (2017). Linking economic complexity, institutions, and income inequality. *World Development*, 93, 75–93.

⁹ see Blancheton, B., & Chhorn, D. (2019). Export diversification, specialisation and inequality: Evidence from Asian and Western countries. *The Journal of International Trade & Economic Development*, 28(2), 189–229; Le, T. H., Nguyen, C. P., Su, T. D., & Tran-Nam, B. (2020). The Kuznets curve for export diversification and income inequality: Evidence from a global sample. *Economic Analysis and Policy*, 65, 21–39; Lebdioui, A. (2021). Forever unequal? Mould-breaking strategies to reduce inequality in Latin America. *LSE Latin America and Caribbean Blog*. <https://blogs.lse.ac.uk/latamcaribbean/2021/04/29/forever-unequal-mould-breaking-strategies-to-reduce-inequality-in-latin-america/>

dependent countries in the world, exposing them to an instability of fiscal revenues due to commodity price fluctuations, largely beyond the control of public policy, as well as the effects of climate change.

Latin American trade is indeed intrinsically linked to climate change.¹⁰ As the world decarbonises its economic system, several Latin American countries depend on fossil fuels that are at risk of becoming stranded assets – meaning the investments made in their extraction will be lost as the projects become unprofitable. The region is also highly dependent on the exports of agro-commodities, where productivity is particularly vulnerable to fluctuations in temperature and precipitation. To note just a few obvious examples, climate change poses a serious risk to salmon farming in Chile, coffee in Colombia, and cacao in Ecuador.¹¹

The embeddedness of income inequality in the broader context of productive concentration in Latin America presents considerable policy implications. For instance, far more attention needs to be devoted to the effects of reducing pre-distribution inequality on the ability of the state to redistribute taxes without having to increase the tax rate, which is more likely to meet societal resistance. As explained in this report, the generation of employment and domestic productive capabilities stimulates the growth of the middle-income class, and therefore the expansion of taxable income.

The need to coordinate the demand and supply of both skilled and unskilled workers in new productive activities with opportunities for value addition and productivity gains also justifies a rethinking of the scope for public policies in the context of inequality reduction. This report investigates the type of state interventions required for the sustainability of inequality reduction and inclusive economic development.

The COVID-19 crisis also bears important implications for rethinking inequality reduction and economic resilience in Latin America. The pandemic-induced disruptions of global supply chains in 2020/2021 have further shown the vulnerability of many Latin American countries that overly depend on commodity exports, tourism, and the imports of manufactured goods. Against this backdrop, there is an urgent need to rethink the importance of diversification and strengthen productive capacities in strategic sectors to achieve both resilience, competitiveness, and productive employment that can reshape the inequality mould for the next decade.

¹⁰ Lebdioui, A. (2020). The case for a green recovery in post-covid Latin America. *LSE Latin America and Caribbean Blog*. <https://blogs.lse.ac.uk/latamcaribbean/2020/09/01/the-case-for-a-green-recovery-in-post-covid-latin-america/>

¹¹ Soto, D., León-Muñoz, J., Dresdner, J., Luengo, C., Tapia, F. J., & Garreaud, R. (2019). Salmon farming vulnerability to climate change in southern Chile: understanding the biophysical, socioeconomic and governance links. *Reviews in Aquaculture*, 11(2), 354–374; Macías Barberán, R., Cuenca Nevárez, G., Intriago Flor, F., Caetano, C. M., Menjivar Flores, J. C., & Pacheco Gil, H. A. (2019). Vulnerability to climate change of smallholder cocoa producers in the province of Manabí, Ecuador. *Revista Facultad Nacional de Agronomía Medellín*, 72(1), 8707–8716.

Inequality trends in Latin America



The informal settlement of Papagaio in Belo Horizonte, Brazil / Fred Cardoso (Shutterstock)

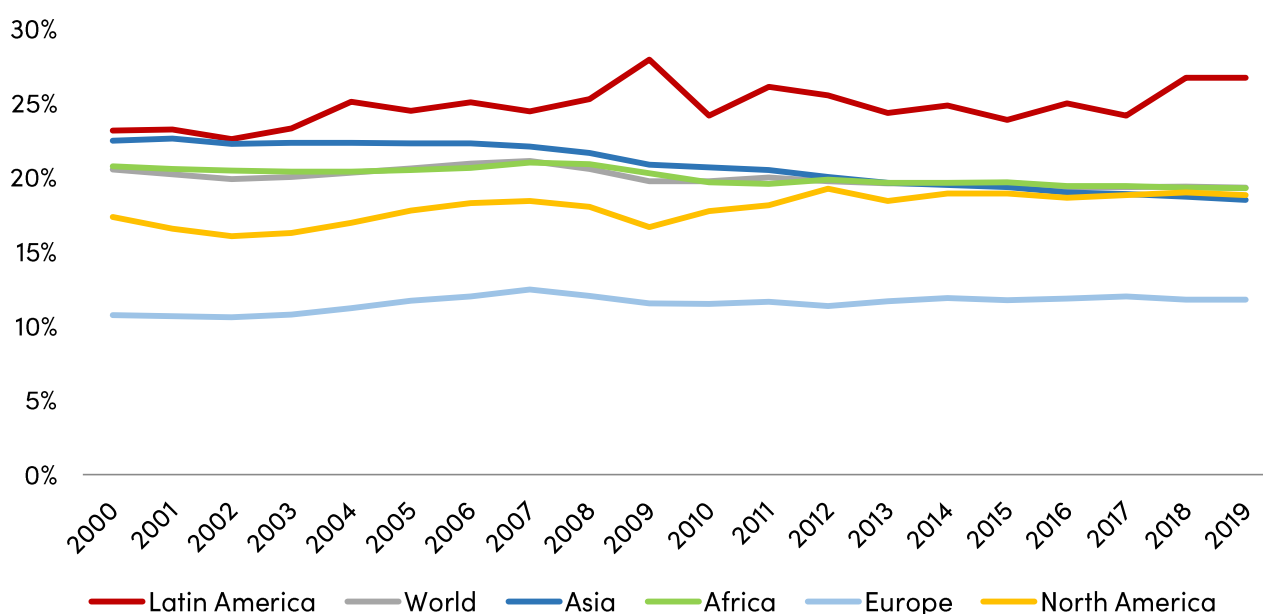
Overview of inequality indicators

Inequality declined in the 2000s (by some measures) but has risen in the past seven years in Latin America. Latin American countries therefore remain amongst some of the most unequal in the world. Notwithstanding limitations and heterogeneity in the quality of the data on income and wealth in the region, Latin American countries tend to feature some of the highest inequality rates in the world, across various sources and indicators of income inequality. The top 10% of income-earners capture 54% of the national income, while the income share of the top 1% in Latin America is by far the highest in the world and is almost double the world average (figure 1). Most Latin American countries have GINI coefficients that are above the world average (Figure 2).¹² Other studies that complement survey data with tax data and national accounts data, to provide a more accurate picture

¹² It should be highlighted that the WDI dataset does not include countries such as Cuba, where the GINI coefficient is estimated to be much lower than in the rest of the region.

of the true inequality level in Latin America, suggest an even higher GINI coefficient in Latin America (0.64, pre-tax national income).

Figure 1. Income share of the top 1% by region (2000-19)



Source: Author's elaboration based on the World Inequality Database (WID)

Following the progress achieved in the 2000-2014 period (especially in Ecuador, Bolivia, Peru, Argentina, and Uruguay), inequality rates have stagnated across the region since 2014 and increased in some cases such as Brazil, Argentina, and Peru. The stagnation (and worsening in some cases) of inequality rates for countries across the region holds across different indicators, such as the GINI coefficient, the Palma ratio¹³, the income share of the top 10% and top 1% (see figures 3 4, and figures A1 A2, A3 in the Annex) but is also reflected in region-wide rates. The income share of the richest 1% has increased by 8% between 2014 and 2019, while the income share of the poorest 50% has slightly reduced in the same period (figure 4).

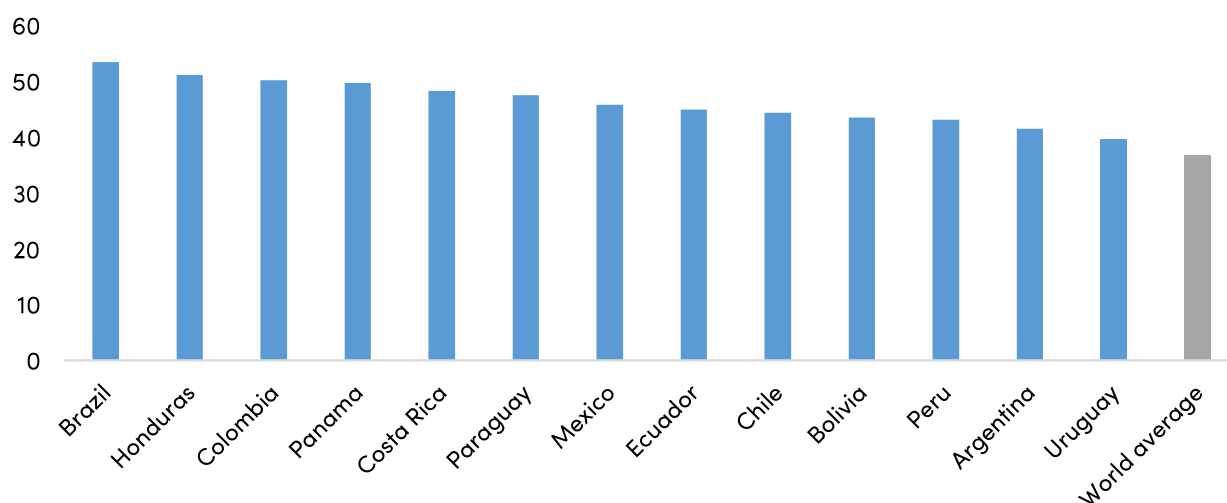
Brazil, Chile, Mexico are almost systematically the three most unequal countries in the region across different indicators of income inequality, with the top 10% share capturing respectively 59%, 59% and 57% of the average national income in 2019, and the top 1% capturing around 30% of national income (figure 6).¹⁴ In contrast, Uruguay (along with Cuba, although it is often excluded from international and regional datasets and Ecuador, albeit less systematically) features the lowest inequality rates in the region). Ecuador and Uruguay are the only two Latin American countries in which the income share of the poorest 50% is higher than the income share of the top 1%. Meanwhile, Bolivia, which used

¹³ The Palma ratio is a measure of inequality and is derived by dividing the the ratio of the richest 10% of the population's share of gross national income by the poorest 40%'s share.

¹⁴ De Rosa et al., op. cit.

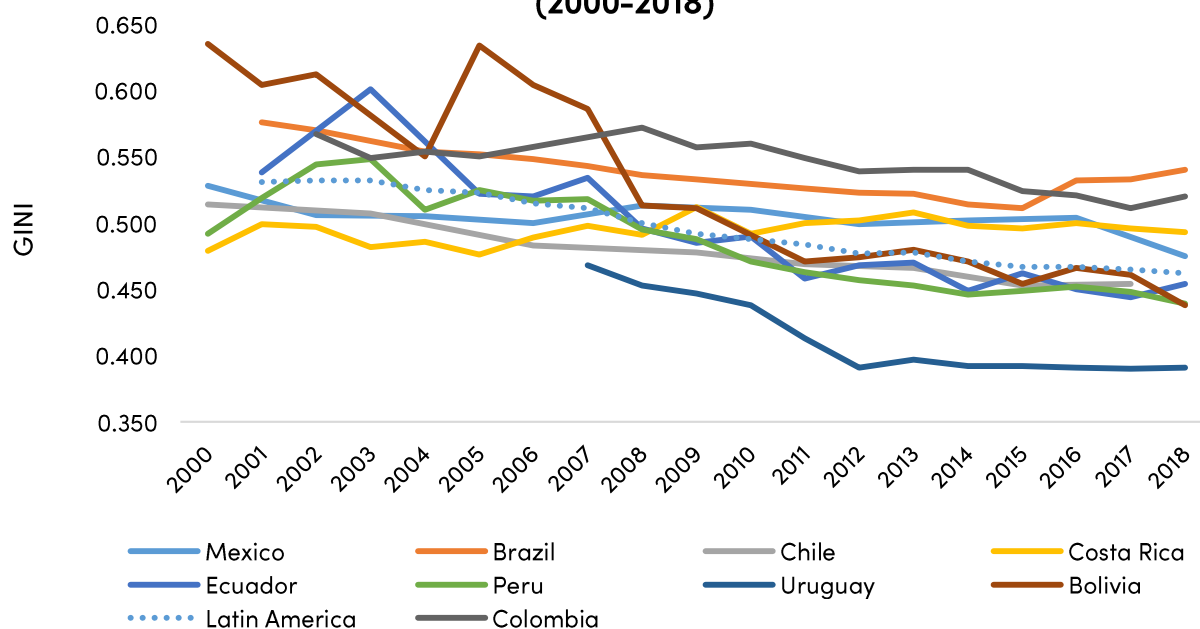
to have the highest income inequality rate (across various indicators) in the region in 2000, has experienced the largest drop in inequality rates between 2000 and 2014 (see Figure 3, A1, A2), although the income share of the top 1% has not changed much since the 2000s (see Figure 4).¹⁵

Figure 2. Gini rates in Latin America (average 2016–2018)



Source: Author's compilation based on data from the World Development Indicators

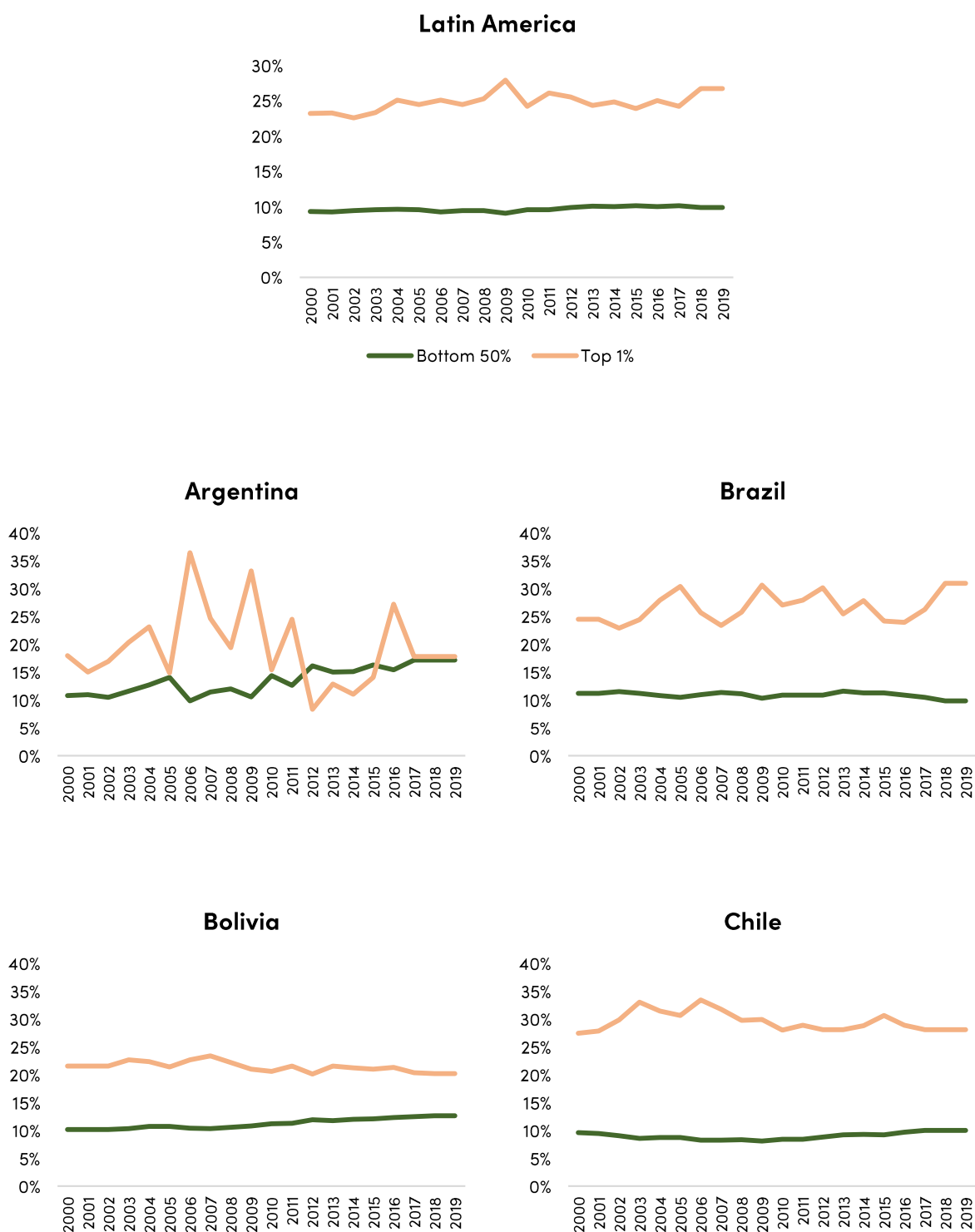
Figure 3. Inequality trends across Latin America, GINI Coefficient (2000–2018)

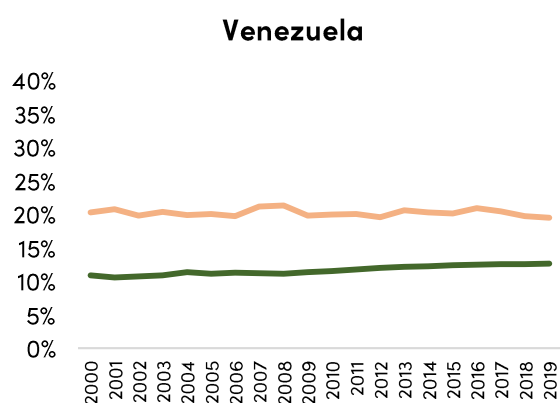
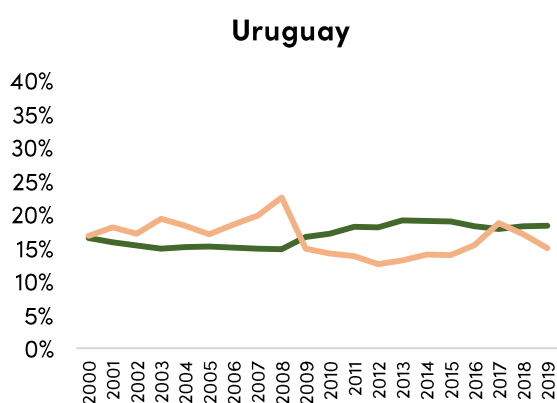
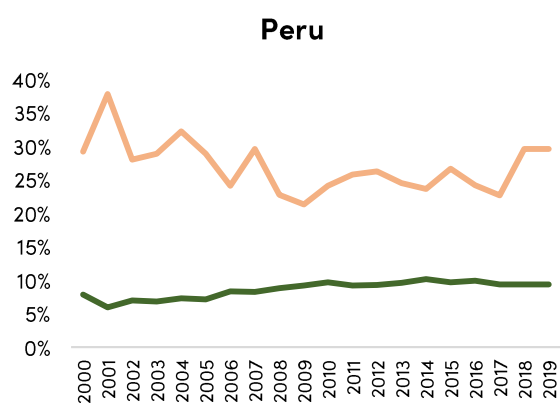
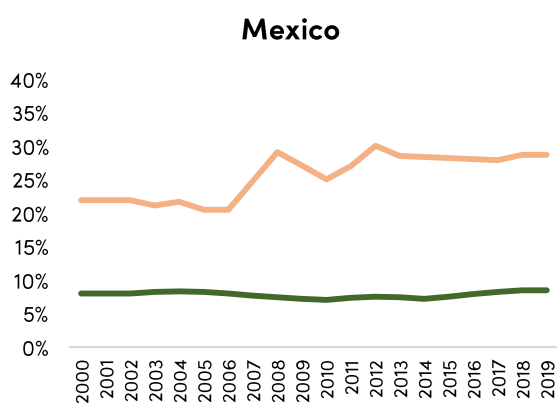
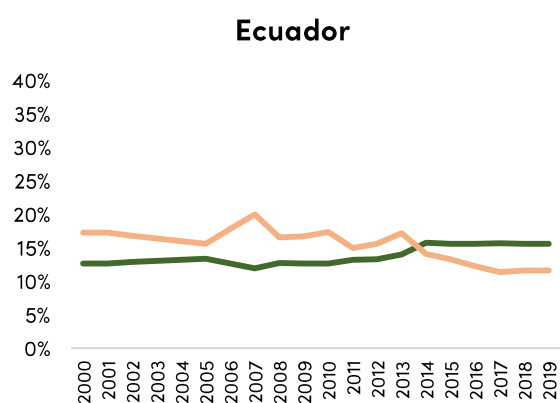
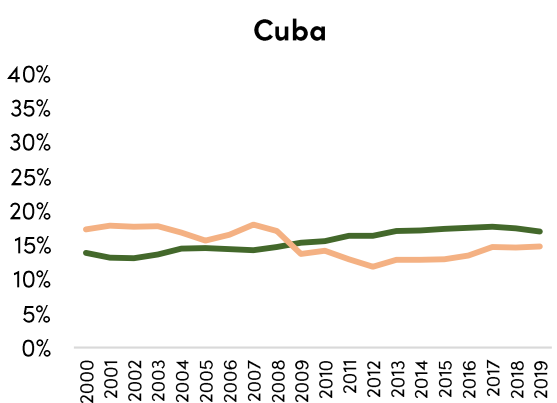
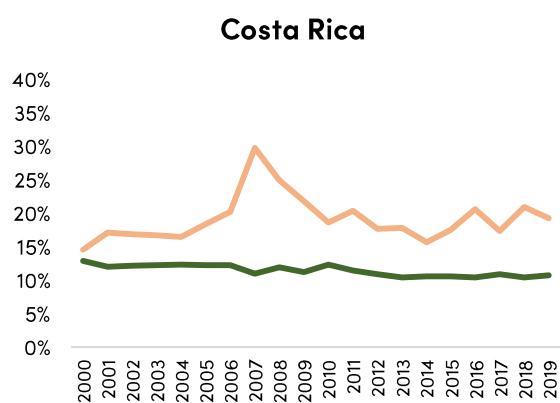
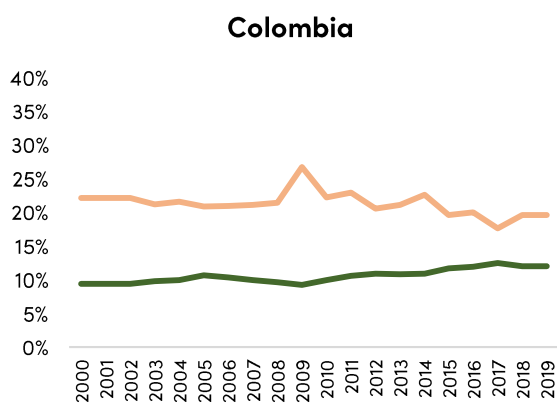


Source: Author's compilation based on data from CEPALSTAT

¹⁵ This was mostly due to pro-poor labour policies that enabled increases of minimum wages and transfers to specific population groups (see Vargas, M. & Garriga, S. (2015). *Explaining inequality and poverty reduction in Bolivia*. IMF Working Paper 15/265. Washington D.C.:International Monetary Fund).

Figure 4. Evolution of income distribution across selected Latin American countries





Source: World Inequality Database (WID)

Explaining the progress achieved in the 2000s

Most the progress achieved in the 2000s was the result of commodity-financed social spending and education policies, which led to important changes in labour market, the informal sector, minimum wage, and redistributive taxation.¹⁶ Each of these factors are discussed in turn below.

Changes in labour income explain almost two thirds of the improvement in income distribution during the 2000s.¹⁷ However, there are significant country differences: in Argentina, labour income was responsible for three quarters of the reduction in income inequality, compared to just half in Brazil.¹⁸ Changes in labour income were mostly the result of decreased returns on education, as the gap between the wages received by skilled and unskilled workers reduced in the 2000s.¹⁹ There is also a contrast between the record of extractive commodity exporters (Chile, Bolivia, Colombia, Peru, Ecuador, Brazil and Argentina) and other countries (Dominican Republic, Guatemala, Honduras, Mexico, Paraguay, El Salvador, and Uruguay) in terms of the evolution of wages between 2003 and 2013. In the former, wages of unskilled workers increased more than 5% per year—compared to 1 to 3% for skilled workers, while wage levels in non-commodity exporting countries remained stagnant or decreased.²⁰ This process of levelling up of the wages for unskilled workers was mostly the result of the expansion in the provision of basic education in the 2000s, which led to an improvement in the distribution of years of education.²¹

An expansion of the formal sector also contributed to inequality reduction in the 2000s. The share of informal jobs decreased from 61% in 2000 to 51% in 2010, and this was partly driven by state intervention.²² Across the region, governments begun paying more attention to regulation and increased the budget for labour inspections.²³ The transition

¹⁶ This subsection mostly draws from a review in Diego Sánchez-Ancochea (2019): The surprising reduction of inequality during a commodity boom: what do we learn from Latin America?, *Journal of Economic Policy Reform*, DOI: 10.1080/17487870.2019.1628757.

¹⁷ Lustig, N.; Lopez-Calva, L.P. and Ortiz-Juarez, E. (2013). Deconstructing the Decline in Inequality in Latin America (July 1). *World Bank Policy Research Working Paper No. 6552*.

¹⁸ Alejo, J., Bérigolo, M., & Carbajal, F. (2014). Las transferencias públicas y su efecto distributivo. La experiencia de los países del Cono Sur en el decenio de los 2000. *El Trimestre Económico*, 81(321), 163–198; Sanchez Ancochea (2019) op. cit.

¹⁹ World Bank. (2015). *Working to End Poverty in Latin America and the Caribbean Workers, Jobs, and Wages*. Washington, DC: World Bank Group.

²⁰ World Bank (2015), op. cit.; Sanchez Ancochea (2019) op. cit.

²¹ López Calva, L., and N. Lustig, eds. (2010). *Declining Inequality in Latin America. A Decade of Progress?* Washington, DC: Brookings Institution.

²² Sanchez Ancochea (2019) op. cit.

²³ Berg, J. (2011). "Laws or Luck? Understanding Rising Formality in Brazil in the 2000s." In S. Lee and D. McCann (eds) *Regulating for Decent Work. Advances in Labour Studies*, 123–155. London: Palgrave Macmillan; Ronconi, L. (2012). "Globalization, Domestic Institutions, and Enforcement of Labor Law: Evidence from Latin America." *Industrial Relations* 51 (1): 89–105.

from the informal to the formal sector, particularly among low-income workers, is correlated with the decline of the unemployment rate.²⁴

The rise of the minimum wage was also a key factor of inequality reduction in several Latin American countries. The growth of the minimum wage was particularly significant in Argentina, Brazil, and Uruguay (with a 200–250% increase of the real minimum wage between 2000 and 2012), which had a considerable impact on inequality reduction (the Gini index fell by 22% in Argentina, 16% in Uruguay, 6% in Brazil in that time period). In contrast, in Chile, the increase of the real minimum wage was less marked (less than 40% between 2000 and 2012, and the Gini index only fell by 5%).²⁵

Redistributive taxation has also been an important mechanism for inequality reduction in the 2000s. Between the 1990s and the 2000s, the redistributive capacity of taxation changed from negative to positive in nine Latin American countries (Argentina, Costa Rica, and Nicaragua experienced the largest swings from regressive to redistribute taxation, followed by Brazil, Chile, Ecuador, Guatemala, Panama and Uruguay) and it became less negative in two (El Salvador, Honduras) (see Figure 5).²⁶ Governments also succeeded in expanding their revenue capacity. The share of total taxation in GDP increased by 4.3 percentage points between 2000 and 2013 compared to an increase of 2.6 percentage points during the 1990s in Latin America and the Caribbean.²⁷ The improvement in the performance of redistributive taxation in the 2000s was particularly notable amongst commodity exporters such as Argentina, Bolivia, Ecuador, Peru, and Venezuela, because of an increase in state revenues as a result of the commodity price boom.²⁸

²⁴ Sojo, A. (2017). *Protección Social En América Latina: La Desigualdad En El Banquillo*. Santiago: Economic Commission for Latin America and the Caribbean

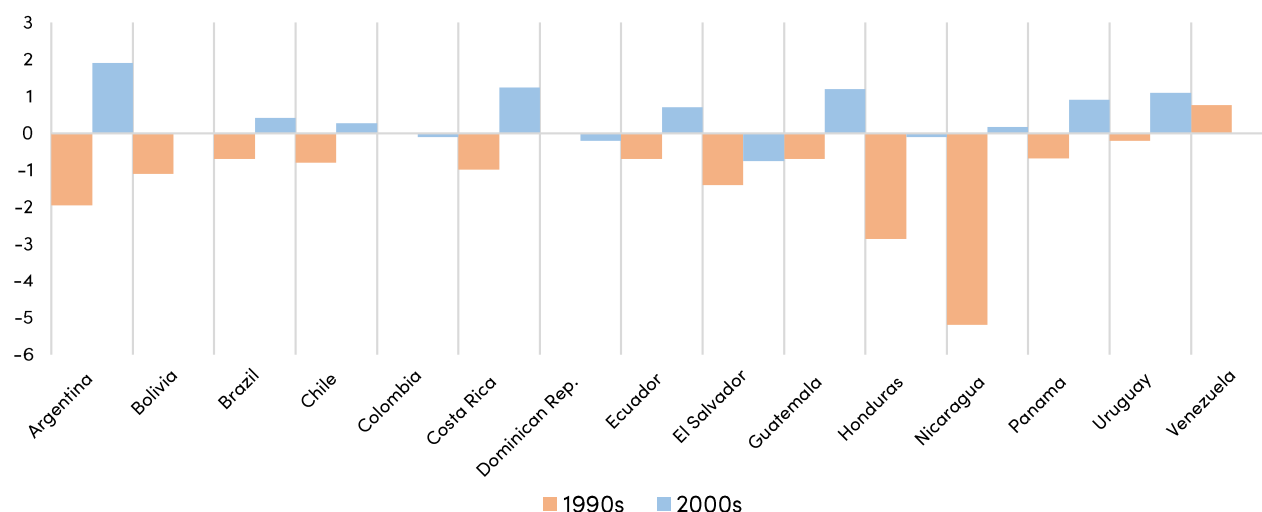
²⁵ Maurizio, R., and G. Vázquez. 2016. "Distribution Effects of the Minimum Wage in Four Latin American Countries: Argentina, Brazil, Chile and Uruguay." *International Labour Review* 155 (1): 97–131; Moreno-Brid, Garry, and Krozer, op. cit.; Sanchez Ancochea (2019) op. cit.

²⁶ Cornia, A., J. Gómez-Sabaini, and B. Martorano. 2011. "A New Fiscal Pact, Tax Policy Changes and Income Inequality." WIDER Working Paper 2011/70. Helsinki: UNU-WIDER.

²⁷ OECD/ECLAC/CIAT/IDB. (2016). *Revenue Statistics in Latin America and the Caribbean 2016*. Paris: OECD Publishing.

²⁸ Sánchez-Ancochea, D. (2019), op. cit.

Figure 5. Redistributive effects of taxation in selected Latin American countries in the 1990s and 2000s, using the Reynolds–Smolensky index²⁹



Source: Author's based on data from Cornia et al. 2011

Increased Social Spending and Cash Transfers also explain the initial reduction of inequality. Increased public spending on health, housing and social protection increased considerably during the 2000–2013 period, especially in commodity exporting countries (such as Argentina, Bolivia, Brazil, Chile, and Ecuador). The expansion of social spending was also far more efficient at targeting the poor than other income groups.³⁰ This is notably the result of the expansion of the coverage of conditional cash transfers (CCTs). Estimates suggest that the poverty headcount index in Latin America would have been 13% higher without the implementation of CCTs.³¹

Explaining the changing trend in inequality since 2014

State action relied on the increase in fiscal income associated with the commodity boom, which was not sustained after 2014. Governments have generally managed the commodity boom better than in the past but did not lead to significant transformations in the region's productive structures, which remain concentrated around commodities (see section 3.2).³² This inequality reduction model was unsustainable after the drop in commodity prices in 2014 and eventually led to the reversal of the progress achieved in the 2000s. Inequality rates have stagnated across the region since 2014 and even increased back in some cases (figure 3).

²⁹ The Reynold–Smolensky index is the difference between the Gini coefficients of the distribution of personal income before and after taxes.

³⁰ Ibid.

³¹ Stampini, M., and L. Tornarolli (2012). "The Growth of Conditional Cash Transfers in Latin America and the Caribbean: Did They Go Too Far?" IZA Policy Paper No. 49.

³² Sánchez-Ancochea. (2019), op. cit.

Countercyclical fiscal policies can help smooth spending from commodity revenues.

However, even in the case of Chile's, existing fiscal stabilisation mechanisms help solve short-term volatility problems but have often failed to serve a long-term structural transformation agenda.³³ In Chile, although there are clear rules of accumulation of copper revenues, no rules exist for using the resources of these funds, say to counteract an economic downturn or invest for diversification, and the decision of drawing resources from the sovereign wealth fund (SWF) depends on the discretionary judgement of the fiscal authority.³⁴ Chile remains dependent to a large extent reliant on raw copper exports and therefore potentially vulnerable to commodity price fluctuations. In commodity-dependent countries, countercyclical fiscal policies are therefore helpful but need to be accompanied by a longer-term diversification of the national economy.

Alternative data sources and methods reveal an increase of inequality, even in the 2000s.

Although the income share of the top 10% had decreased in most countries, the income shares for the richest 1% of the population increased in several countries, such as Argentina, Brazil, Chile and Mexico (and stagnated in Colombia and Ecuador).³⁵ Regionwide, the income share of the richest 1% increased from 23% to 28% from 2000 to 2009 (and has been on the rise again in recent years) (Figure 4). Such data confirm the perception that the 2000–2014 period saw a reallocation of income from the middle class to the poor, rather than from the rich to the poor.³⁶

Efforts to overcome inequality remain insufficient. Latin American countries (except Brazil and Argentina) still have lower levels of taxation (especially on income) relative to the norm for their GDP per capita. In all high-income economies in Latin America and the Caribbean, the level of taxation is below the average of high-income countries generally. In fact, several high- or middle-income economies of the region display tax-to-GDP ratios that are below those of lower middle-income economies around the world, which casts doubt regarding the ability of their governments to meet financing needs beyond commodity booms.³⁷ Personal income taxes are particularly low in Latin America: in 2015 they accounted for under 10% of total tax revenues, compared to almost 25% in OECD countries.³⁸ Such outcomes are also related to the fact that in some Latin American societies, the desired level of equality is inconsistent with the contribution that citizens are

³³ Chang, H. J., & Lebdioui, A. (2020). *From fiscal stabilization to economic diversification: A developmental approach to managing resource revenues* (No. 2020/108). WIDER Working Paper: Helsinki: UNU-WIDER.

³⁴ Solimano, A. and Guajardo, D. Calderón (2017) "The copper sector, fiscal rules, and stabilization funds in Chile: Scope and limits". WIDER Working Paper 2017/53. Helsinki: UNU-WIDER.

³⁵ Morgan, M. (2017). "Extreme and Persistent Inequality: New Evidence for Brazil Combining National Accounts, Surveys and Fiscal Data, 2001–2015." WID Working Paper Series, no 2017/12.; Fairfield, T., and M. Jorratt. (2016). "Top Income Shares, Business Profits and Effective Taxes in Contemporary Chile." *Review of Income and Wealth* 62: S120–S144.

³⁶ Palma, J. G. (2011). Homogeneous middles vs. heterogeneous tails, and the end of the 'inverted-U': It's all about the share of the rich. *Development and Change*, 42(1), 87–153; Sanchez Ancochea (2019), op. cit.

³⁷ OECD (2019). *Latin America Outlook*. Paris: OECD publishing.

³⁸ Sánchez-Ancochea, D. (2021). *The Costs of Inequality in Latin America: Lessons and Warnings for the Rest of the World*. Bloomsbury Publishing.

willing to offer, especially at the top end of the income scale.³⁹ Recent surveys show that although Mexicans seek greater equality, the average willingness to contribute hovers at around just 10% of income, which is significantly lower than in other countries.⁴⁰ Tax evasion also remains an important challenge. Estimates suggest that the amount of money hidden by nationals in offshore accounts represents 160% of foreign debt in Brazil, 224% in Mexico, and 728% in Venezuela.⁴¹ As a result of limited tax collection, education and social spending are well below the world average, which leads to lower investment and productivity gains, thereby further consolidating inequality.⁴²



Chile protests in 2019 / Carlos Figueroa (licence CC BY-SA 4.0)

³⁹ Krozer, A. (2021). Perceptions of 'the rich' limit the scope of tax policies in Mexico and beyond. *LSE Latin America and Caribbean Blog*. Accessible at <https://blogs.lse.ac.uk/latamcaribbean/2021/04/27/perceptions-of-the-rich-limit-the-scope-of-tax-policies-in-mexico-and-beyond/>

⁴⁰ Campos-Vazquez, R. M., Krozer, A., Ramírez-Álvarez, A. A., de la Torre, R., & Velez-Grajales, R. (2020). *Perceptions of Inequality and Social Mobility in Mexico* (No. 9517731e-dacf-4fae-8cd1-5cd658ebe4b9).

⁴¹ Sanchez Ancochea D. (2021), op. cit.; Rebosio (2012), 'Los ricos latinoamericanos guardan en paraísos fiscales tanto como el PIB brasileño', *Blog de Economía, El País*, 24 July, <http://blogs.elpais.com/eco-americano/2012/07/los-ricos-latinoamericanos-guardan-en-para%C3%ADsos-fiscales-tanto-como-el-pib-brasile%C3%B1o.html>

⁴² Sanchez-Ancochea (2021), op. cit

Latin America at the crossroads today

The cost of inequality in Latin America has become unsustainable. A century of inequality in Latin America has contributed to poor economic performance, weak political institutions, populism, and social problems such as violence and social mistrust, which has in turn reinforced the concentration of income.⁴³ In 2019/2020, the perception of growing inequality resulted in significant degrees of social, political, and economic instability across the region. The social unrest that has swept Chile, Colombia, and Ecuador in recent months led to considerable damage to public infrastructure, as well as a loss of investment and service revenues (see Box 1). The demonstrations have forced governments to rethink their development model and policies to address growing inequalities.

Box 1. The 2019/2020 protests in Chile

The 2019 Chilean protests, known in Chile as the *Estallido Social* (the Social Outburst), are a series of large-scale demonstrations and riots protests that took place between October 2019 and March 2020. Civil protests originated in Santiago in response to an increase in fares on the metro, but eventually spread throughout Chile to protest the increased cost of living and rampant inequality in the country.⁴⁴

The protests have generated considerable political and economic instability because of the level of violence and the state's repressive response, which caused considerable damage to public infrastructure. The protests constitute the worst civil unrest since the military dictatorship, which ended in 1990.

Chile has been considered by many as one of the most unequal countries in the world as it is characterized by an extreme concentration of income at the very top. The richest 1% controls almost 30% of the country's wealth.⁴⁵ Half of the workers in the country receive a salary equal or less than 400,000 pesos (equivalent to less than USD 500), while the minimum wage is 301,000 pesos (USD 370).⁴⁶

The protests halted with the COVID-19 crisis but contributed to a historic vote to redraft the Pinochet-era constitution. The new constituent assembly tasked with rewriting the constitution was elected on May 16th 2021.

⁴³ Ibid.

⁴⁴ McGowan, C. (2019). "Chile protests: What prompted the unrest?". *Al Jazeera*. 22 October.

⁴⁵ ECLAC (2019). *Social Panorama of Latin America 2019*. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

⁴⁶ Langman, J. (2019). "From Model to Muddle: Chile's Sad Slide Into Upheaval". *Foreign Policy*. November 23.

The COVID-19 pandemic has also prompted a rise in poverty and inequality to unprecedented levels even compared with recent decades. The total number of poor people rose to 209 million by the end of 2020, an increase of 22 million people over the previous year.⁴⁷ The indices of inequality in the region consequently worsened in 2020 leading to the average Gini index being 2.9% higher than what recorded for 2019.⁴⁸ Without the transfers made by governments to attenuate the loss of wage income, the increase in the average Gini index for the region would have been 5.6%.⁴⁹ Employment and labour participation rates have also declined, especially amongst women, informal workers, young people and migrants, despite the emergency social protection measures that some governments have adopted to manage the effects of the pandemic. The regional unemployment rate reached 10.7% by the end of 2020, which represents an increase of 2.6 percentage points compared with 2019 (8.1%).⁵⁰ The unsustainable cost of inequality in the region, coupled with the worsening effect of the COVID crisis, imply that it is essential for Latin America's economic recovery to be inclusive and be built around equity principles.

Table 1. Effects of the Pandemic on selected socioeconomic indicators in Latin America

	Change between 2019 & 2020
GINI Index	+2.9%
Unemployment rate	+32.1%
Job losses	41 million jobs lost
People living in poverty	+ 22 million
People living in extreme poverty	+8 million
GDP	-7.7%

Source: Compilation of data from ECLAC, World Development Indicators, the IDB.

⁴⁷ ECLAC (2021) Social Panorama of Latin America 2020. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.

Ways forward

Approaches to Inequality Reduction

There are at least three main views regarding the optimal degree of policy interventions that is required to viably reduce inequality within countries. The first view grounded in trickle-down economic theory, would suggest a laissez-faire approach; the second would emphasise redistributive measures through taxation; while the third approach would emphasise interventions to influence the market-determined structure of income to address 'pre-distribution' inequality (also known as market or pre-tax inequality).

The first approach is anchored in the trickle-down theory (which became common during the Reagan and Thatcher administrations in the United States and UK). The basic idea underlying the theory is that when rich people get richer, everyone benefits because of consumption multipliers and the investment effects, which justifies the reduction of taxes on wealthier groups of society to stimulate economic growth that benefits the rest of society. The underlying message behind such a view is that we should therefore not worry about inequality and its resulting short-run social costs because growth will eventually generate a trickle-down effect.⁵¹ Despite the simplicity of the idea, and its tenacity in public policy formation, there is a lack of evidence to support trickle-down theories. Several studies have found that tax cuts are regressive, that income concentration during the last three decades has resulted in negative trickle-down effects in the United States, and that the share of national income of the richest 1% has more than doubled.⁵²

The second approach focuses on redistributive measures as a way to reduce inequality. It relies on the assumption that if the distribution of labour income is skewed, redistributing capital income or assets is sufficient to reduce inequality. This approach treats pre-tax inequalities as given, and implies policy options for reducing inequalities that largely rest on redistributive taxation and cash transfers, while considering the constraints in terms of the behavioural responses from different segments of society to the tax and transfer system (such as tax compliance, resistance, or avoidance).⁵³

A third approach emphasises 'pre-distribution' / 'pre-tax' inequality to influence the market-determined structure of wage incomes. One of the underlying views of this approach is that the redistribution of taxes may not suffice to reduce inequality sustainably in the long term, because an excessive reliance on redistribution will prompt

⁵¹ Dollar, D., & Kraay, A. (2002). Growth is Good for the Poor. *Journal of Economic Growth*, 7(3), 195–225.

⁵² See Greenwood, D. T., & Holt, R. P. (2010). Growth, inequality and negative trickle down. *Journal of Economic Issues*, 44(2), 403–410.; Stiglitz, J.E. (2015), 8. Inequality and Economic Growth. *The Political Quarterly*, 86: 134–155.; Nallareddy, S., Rouen, E., & Serrato, J. C. S. (2018). *Do corporate tax cuts increase income inequality?* (No. w24598). National Bureau of Economic Research.

⁵³ see Kaymak, B., & Poschke, M. (2016). The evolution of wealth inequality over half a century: The role of taxes, transfers and technology. *Journal of Monetary Economics*, 77, 1–25.

a backlash, and highly unequal societies are the ones where creating a consensus for government action is often most difficult and where the top income groups are more likely to hold disproportionate political power and have the capacity to avoid taxation.⁵⁴ Policymakers should therefore focus on market reforms that encourage a more equal distribution of economic power and rewards even before government collects taxes or distributes benefits.

In contrast to a widespread perception, recent evidence reveals that the reason why overall inequality is much smaller in France than in the United States is entirely due to differences in pre-tax inequality rather than post-tax inequality, which suggests that policy discussions on inequality should, in the future, pay more attention to policies affecting pre-tax inequality and should focus less on “redistribution”.⁵⁵

The scope for state interventions is also far greater in the context of pre-distribution inequality reduction. Improving the pre-distribution of income requires coordination between social, education and industrial policies to generate the demand for workers and their newly acquired skills, as will be explained in Section 4.⁵⁶

The Latin American context requires attention to market inequalities that occur before redistribution

The Latin American context calls for an emphasis on pre-distribution inequalities to accompany redistributive measures. Even though many social policies have been successful as reducing poverty and inequality, the productive structures (marked by high degrees of commodity dependence) still create constraints to income inequality. Redistributive policies such as wealth taxes are useful but may not suffice to reduce income inequality on their own beyond a certain level because inequality in Latin America is not the result of a functional distribution of income (that is the split between providers of labour and owners of capital) but the result of an uneven personal distribution of labour income – that is, the split among wage earners.⁵⁷

The suitability of redistributive taxation as an efficient inequality reduction tool on its own also depends on the scale of the inequality reduction challenge.⁵⁸ In Latin America, redistributions and tax reforms are unlikely to lower the Gini coefficient to OECD levels because the initial income distribution is so uneven that society will remain highly unequal

⁵⁴ Hacker, J. (2011). The institutional foundations of middle-class democracy. *Policy Network*, 6(2011), 33–37.

⁵⁵ Bozio, A., Garbinti, B., Goupille-Lebret, J., Guillot, M., & Piketty, T. (2020). Predistribution vs. Redistribution: Evidence from France and the US. *World Inequality Lab Working Papers* n. 2020/22.

⁵⁶ Amsden, A. (2012). Grass roots war on poverty. *World Social and Economic Review*, 2012 (1, 2012), 114; Velasco, A. (2014). “Monsieur Piketty Goes to Latin America”. *Project Syndicate*. May 30.

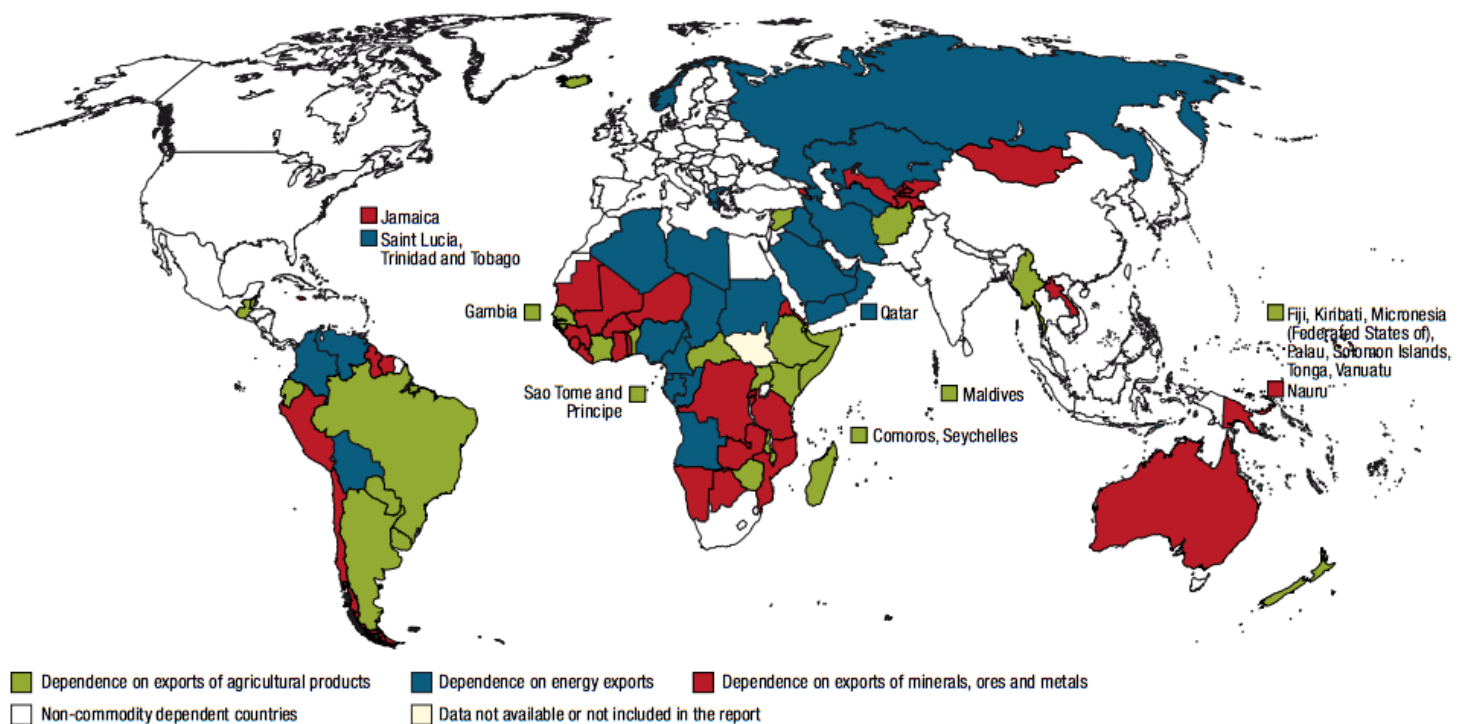
⁵⁷ Velasco, op. cit.

⁵⁸ Ostry, M. J. D., Berg, M. A., & Tsangarides, M. C. G. (2014). *Redistribution, inequality, and growth*. International Monetary Fund.

even after a sizeable fiscal redistribution, which may instead have adverse effects on economic growth.⁵⁹ Bolivia, Brazil, Chile, Colombia, Mexico, Peru and Venezuela's pre-tax Gini coefficient are above 60, while those of OECD countries are mostly in the 40s and even high 30s.⁶⁰

We need to pay attention to the role of productive diversification for pre-distribution inequality reduction. An overwhelming majority of Latin American countries are still dependent on either fossil fuels, mining, or agriculture exports (see Figure 6), (though there are important subregional variations: very few Central American countries are commodity-dependent, while every single country in South America is dependent on commodity exports, which effectively makes it the most commodity-dependent region in the world).⁶¹

Figure 6. Mapping commodity dependent countries (2013-2017)



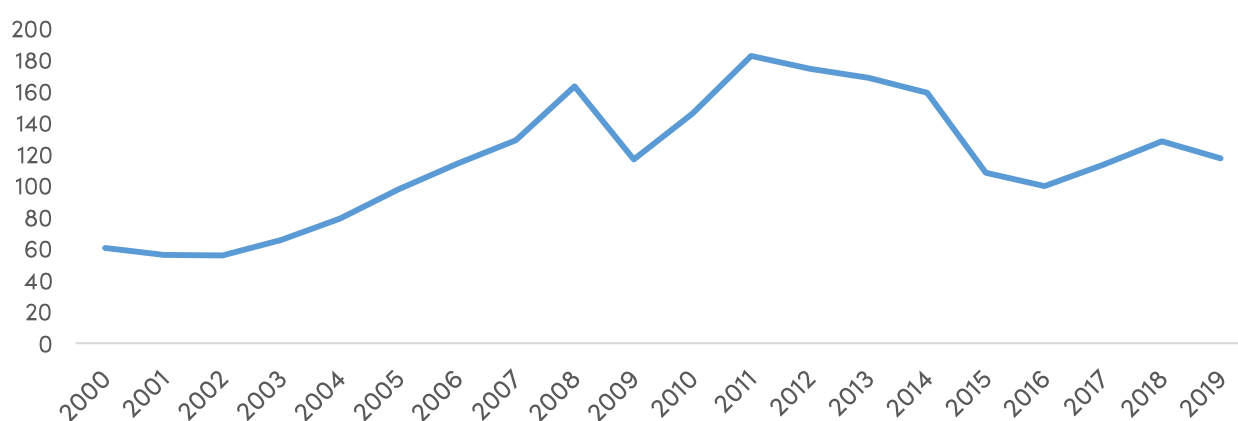
Source: UNCTAD (2019)

⁵⁹ Velasco A, op. cit.

⁶⁰ World Inequality Database

⁶¹ UNCTAD (2019) considers a country to be commodity-dependent when commodities represent more than 60% of its total merchandise exports in value terms.

Figure 7. Commodity Price Index



Source: Author's elaboration based on IMF Statistics

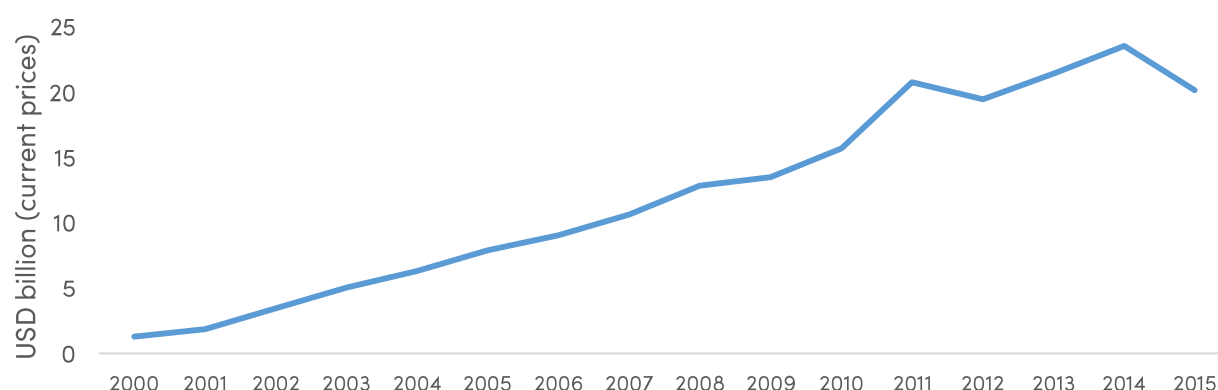
Commodity dependence has important implications for income inequality reduction because social spending is particularly tied to commodity price volatility. Investments in social provisions and conditional cash transfer (CCT) programmes have dropped following the 2014 commodity price falls (Figure 7, 8). The collapse in commodity prices in 2014 has left many producers in Latin American struggling to cover production costs and has generated a considerable loss of government revenues, which has translated into lower public investments and a slower growth.⁶² Between 2014 to 2015, there was a decrease in expenditure on the CCT programmes in Brazil (USD -3.057 billion), Mexico (USD -783 million) and Colombia (USD -276 million), while Ecuador's budget for its Human Development Grant programme was cut almost by half from USD 1.062 billion in 2013 to USD 651 million in 2015.⁶³ Some of the largest programmes were implemented in commodity exporting countries, including Bono de Desarrollo Humano in Ecuador and Bolsa Familia in Brazil, which could not sustain the financing needs of the programme after the commodity boom.⁶⁴

⁶² Monaldi, F. (2020). "Who the Oil Price Collapse Hurts Most in Latin America". *Americas Quarterly*. April 29; Parraga, M. (2020). "Latin America's oil producers sweat to cover costs as price war takes toll" *Reuters*. March 24.

⁶³ Cecchini, S., & Atuesta, B. (2017). *Programas de transferencias condicionadas en América Latina y el Caribe: tendencias de cobertura e inversión*. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

⁶⁴ Sanchez Ancochea (2019), op. cit.

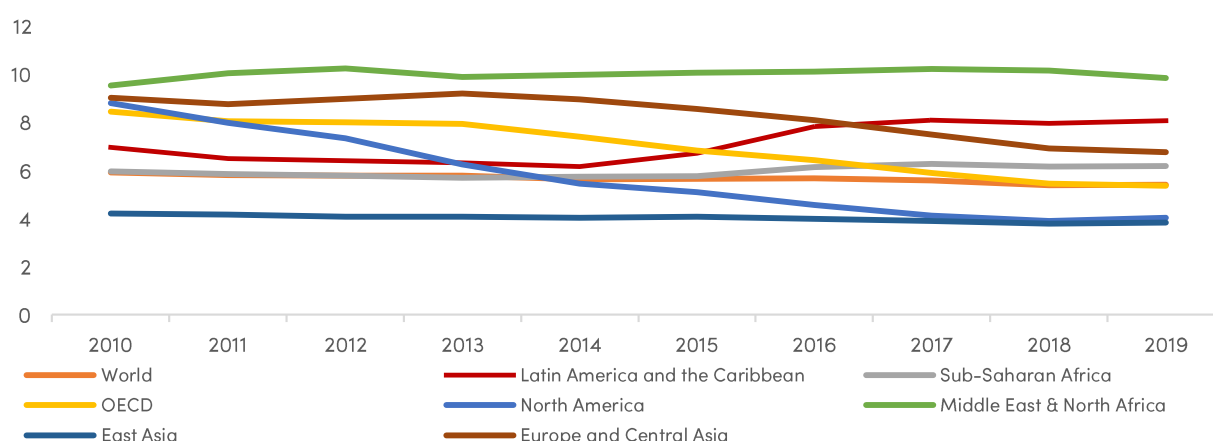
Figure 8. Public Investment in CCT programmes in Latin America and the Caribbean



Source: Author's elaboration and adaption from data in Cecchini and Atuesta (2017)

Reduced public investment due to lower commodity revenues have also translated into higher unemployment rates across several Latin American countries (Figure 9). While Mexico, Uruguay, and Honduras have witnessed a drastic downward trend in their unemployment rates in the past five years, half of Latin American countries have seen their unemployment rates increase in the same period. Such dynamics explain in large parts why inequality rates have stagnated and even increased in several countries of the region since 2014 as shown in Section 2.

Figure 9. Evolution of unemployment rates by world region (2010-2019)



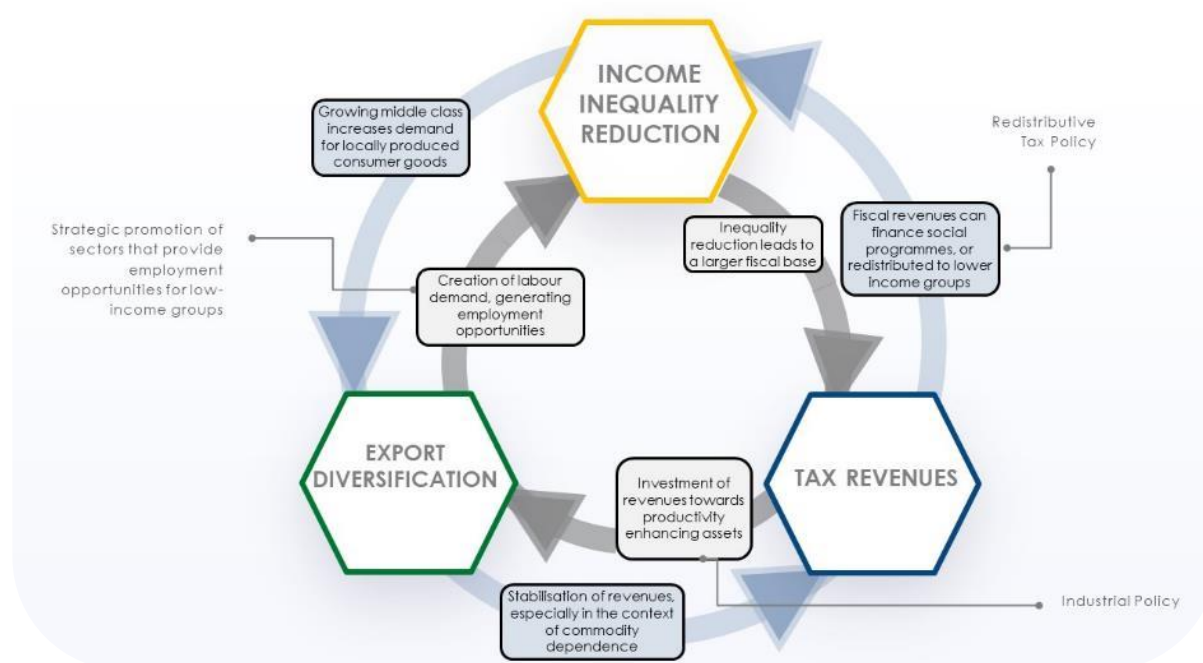
Source: ILO statistics

There is no one-size-fits-all approach when it comes to inequality reduction. The solutions that may work in North America or Europe may not work elsewhere and may not be replicable in the Latin American context, where high initial degrees of income inequality and commodity dependence pose challenges to the sustainability of redistributive measures on their own. As explained below, those findings have considerable implications for the role of diversification strategies to support inequality reduction efforts.

The relationship between Inequality, Diversification & Taxation

Economic diversification has a central (yet understudied) impact on inequality because it can affect both the pre-distribution and post-distribution structure of income. While the association between inequality and taxation has been relatively well studied over the years, it is only recently that studies have begun to address the possible correlation between economic diversification and inequality⁶⁵ and the correlation between diversification and taxation.⁶⁶ Economic diversification, income inequality, and tax revenues are intrinsically related to one another. Figure 10 highlights and explains their embeddedness in a virtuous circle, as further discussed in this section. In the context of commodity-dependent economies that are vulnerable to commodity price fluctuations, as in Latin America, export diversification can help stabilise and increase tax revenues, which can in turn finance poverty reduction programmes and social transfers, but can also expand employment opportunities for low-income groups, thereby improving pre-tax income distribution.

Figure 10. Interconnections between diversification, income inequality, and tax revenues



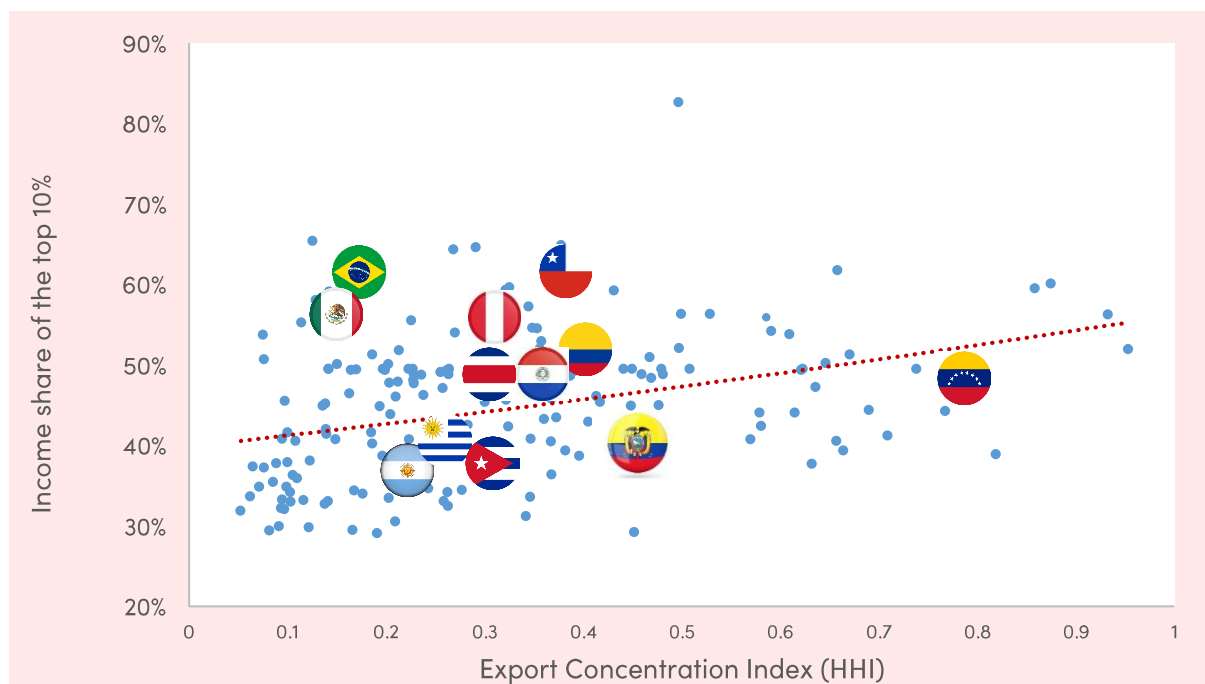
Source: Author's

The interconnections in Figure 10 are supported by statistical analysis based on a sample of over 90 countries, which reveals the apparent correlation between income inequality, export diversification, and tax revenues (see Figures 11, 12 and 13).

⁶⁵ see Hartmann et al. op. cit.; Blancheton et al., op.cit. ; Le et al. op. cit.

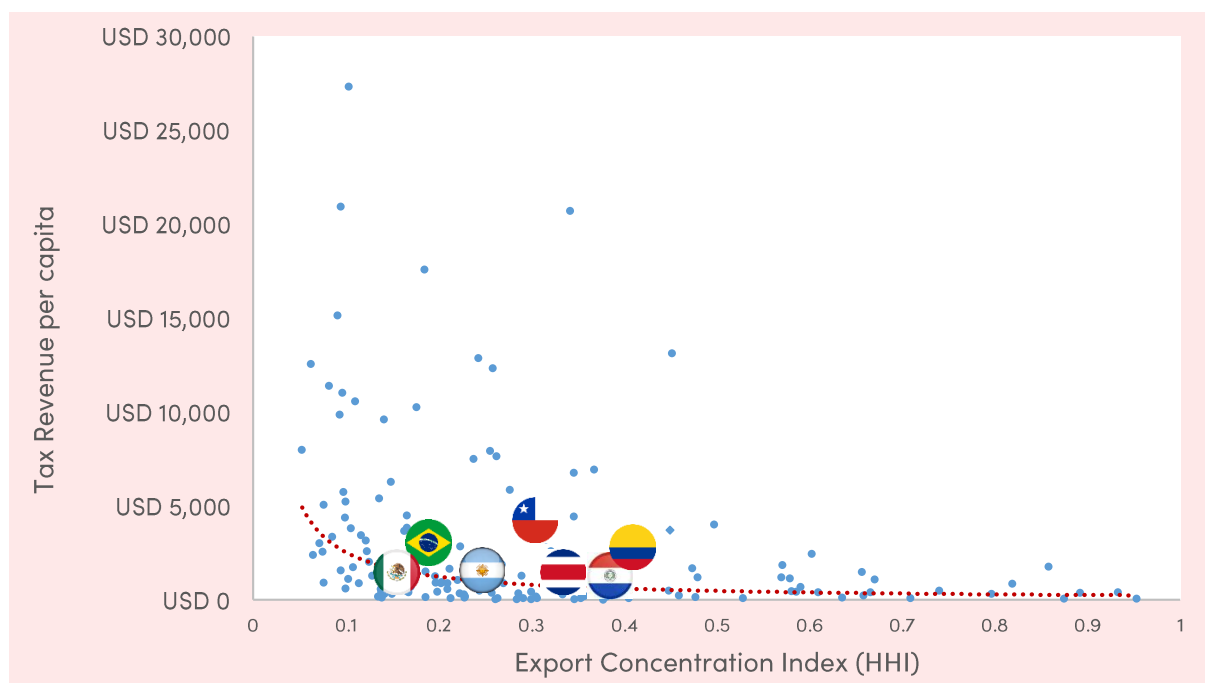
⁶⁶ Gnangnon, S. K. (2020). Export product diversification and tax performance quality in developing countries. *International Economics and Economic Policy*, 1-28.

Figure 11. Scatter plot of the pre-tax income share of the top 10% (p90p100) and the Herfindahl-Hirschman Index of Export Concentration (HHI) (2014-18 average)



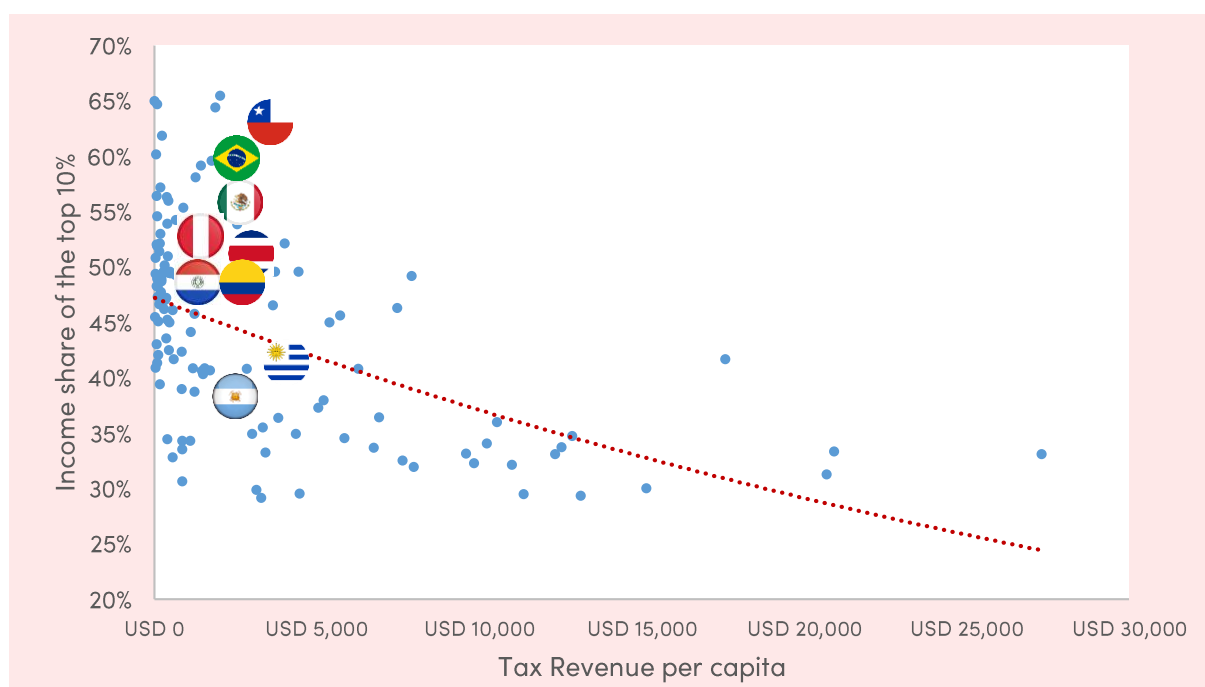
Source: Author's elaboration based on data from the World Inequality Database (WID) and UNCTAD

Figure 12. Scatter plot of the Tax revenues per capita (USD) and the Herfindahl-Hirschman Index of Export concentration (HHI) (2014-18 average)



Source: Author's elaboration based on data from the world development indicators and UNCTAD

Figure 13. Scatter plot of the pre-tax income share of the top 10% and Tax revenues per capita (USD) (2014–18 average)



Source: Author's elaboration based on data from the World Development Indicators and the World Inequality Database (WID)

The impact of diversification on (post-distribution) inequality through taxation

Export diversification has a very important (yet relatively understudied) impact on inequality through its positive impact on tax revenues. Several studies have highlighted the adverse impact of natural resource dependence on tax revenue performance.⁶⁷ Meanwhile, other recent studies evidenced that export product diversification not only generates higher tax revenues but also higher quality tax performance and induces tax reform through economic growth and firms' performance.⁶⁸

The evidence presented in Figure 11 and Table 2 clearly shows that the countries that have an export concentration index (HHI) lower than 0.5, have on average much high revenues than countries with an export concentration index that is higher than 0.5. In 2017, not a single country that featured a concentrated export basket generated tax revenues above USD2,500 (per capita). In contrast, 38.9% of diversified economies achieved tax revenues above that threshold.

⁶⁷ See Bornhorst, F., Gupta, S., & Thornton, J. (2009). Natural resource endowments and the domestic revenue effort. *European Journal of Political Economy*, 25(4), 439–446; Crivelli, E., & Gupta, S. (2014). Resource blessing, revenue curse? Domestic revenue effort in resource-rich countries. *European Journal of Political Economy*, 35, 88–101; Ndikumana, L., & Abderrahim, K. (2010). Revenue Mobilization in African Countries: does natural resource endowment matter?. *African Development Review*, 22(3), 351–365.

⁶⁸ Gnanon, op. cit.

Table 2: Distribution of countries based on tax revenues & export concentration levels in 2017

	Tax revenues < USD2,500 per capita	Tax revenues > USD2,500 per capita
Diversified economies (108 countries, HHI<0.5)	60.2%	39.8%
Concentrated economies (19 countries, HHI>0.5)	100%	0%

Source: Author's calculations

The impact of diversification on taxation can be explained in the following ways:

- Export diversification enables the stabilisation and increased resilience of tax and foreign exchange revenues in the face of external shocks or commodity price volatility.⁶⁹
- Export diversification fosters growth⁷⁰, which in turn generates a rise in corporate and personal income which in turn can translate into higher tax revenues.⁷¹
- Higher taxation revenues can promote further diversification through a virtuous circle of revenue mobilisation. As tax revenues increase, there is more funding available for domestic public investment in productivity enhancing assets (infrastructure, R&D, public education) that can lead to the development of new sectors and activities, which in turn can stimulate increases in tax revenues in the long term.

Taxation is deeply related to inequality (see Figure 12), including in the context of Latin America.⁷² Higher tax revenues can promote the reduction of income inequality because they imply a larger fiscal space for social transfers.

⁶⁹ Balavac M, and Pugh G. (2016) The link between trade openness, export diversification, institutions and output volatility in transition countries. *Economic Systems* 40(2):273–287; Joya O (2015) Growth and volatility in resource-rich countries: does diversification help? *Structural Change and Economic Dynamics* 35:38–55.

⁷⁰ Agosin M. (2009). "Export Diversification and Growth in Emerging Economies", CEPAL Review, 97, 115–31; Cherif, R., Hasanov, F., & Wang, L. (2018). "Sharp Instrument: A Stab at Identifying the Causes of Economic Growth" IMF Working Paper WP/18/117, Washington DC: International Monetary Fund.; Hausmann, R., Hwang, J., & Rodrik, D. (2007). "What you export matters", *Journal of economic growth*, 12(1), 1–25.; Prebisch, R. (1950) *The Economic Development of Latin America and Its Principal Problems*, United Nations Economic Commission for Latin America and the Caribbean (ECLAC): New York.

⁷¹ Gnangnon, op. cit.

⁷² Martorano, B. (2018). Taxation and inequality in developing countries: Lessons from the recent experience of Latin America. *Journal of International Development*, 30(2), 256–273.

The impact of diversification on pre-distribution inequality

Diversification can also have a more direct impact on market inequalities. While growth alone is not sufficient for inclusive development as it does not guarantee inequality reduction, what a country exports matters for improving both predistribution and postdistribution inequality. Several recent studies have found that economies that achieved high sustained growth and low market income inequality are characterized by a drive toward export sophistication and diversification.⁷³ In countries that predominantly export raw materials, the diversification into more complex products with larger spill overs can help generate and distribute more wealth across society, through the creation of formal and skilled jobs and the expansion of choices of occupation that are otherwise limited.⁷⁴ Export diversification and sophistication also generates productivity gains, spill-overs and linkages towards other tradable sectors, which sustains quality employment and which are key elements of inclusive growth.⁷⁵ Industrial employment is negatively linked to income inequality because industrialization and technological advancement created new employment opportunities while contributing to the growth of a new middle-income class in several developing countries.⁷⁶

Growth models that rely on natural resources or low-skilled industries, fail to deliver a sustained inclusive growth and might increase inequality. Non-diverse economies (for example, countries relying on few natural resources) are also more susceptible to suffer from both economic and political capture (the appropriation of resource rents can contribute to the consolidation of political control, while diversification tends to increase political competition and societal bases of power).⁷⁷

The influence of policy inputs

Policy interventions can influence the nature (and the direction) of the relationship between inequality, diversification, and taxation. The above-mentioned relationships are not linear nor automatic.

For instance, the regressive use of tax revenues can further promote income inequality; and an economic diversification towards capital-or technology-intensive sectors that is not coordinated with the integration of unskilled low income groups in the labour market

⁷³ Hartmann et al., op. cit; Aghion et al., op. cit.

⁷⁴ African Union Commission and OECD. (2018). *Africa's Development Dynamics 2018 Growth, Jobs and Inequalities: Growth, Jobs and Inequalities*. OECD Publishing; Le et al. op. cit.

⁷⁵ Aghion et al., op. cit.

⁷⁶ Mehic, A. (2018). Industrial employment and income inequality: Evidence from panel data. *Structural Change and Economic Dynamics*, 45, 84–93.; Milanovic, B. (2012) Global Inequality by the Numbers: In History and Now – An Overview. Policy Research Working Paper 6259

⁷⁷ Collier, P. (2007). Bottom billion. *The Blackwell Encyclopaedia of Sociology*, 1-3; Sokoloff, K. L., & Engerman, S. L. (2000). Institutions, factor endowments, and paths of development in the new world. *Journal of Economic Perspectives*, 14(3), 217–232; Dunning, T. (2005). Resource dependence, economic performance, and political stability. *Journal of conflict resolution*, 49(4), 451–482.

is likely to increase demand for (and potentially crowd out) a select group of existing skilled workers, which will disproportionately increase their wages relative to the wages of low income groups and in turn further exacerbate wage income inequalities.

In low-wages and labour-abundant countries, FDI in labour-intensive manufacturing sectors and services leads to reducing income inequality by offering higher wages for low-skilled jobs, while FDI in skilled-labour services (such as finance, telecommunications, business services) and capital-intensive industries (such as chemicals, machinery) is expected to increase the wages of skilled workers to high levels, consequently increasing income inequality.⁷⁸

Similarly, the growth in consumer demand that arises from a growing middle class could be met by imports rather than local production, which further shows the importance of contextual determinants such as the policy environment, domestic market scales, the productive capabilities of local firms.

The relationship between economic diversification and taxation is also dependent on the policy context and the type of diversification that is pursued. For instance, a diversification towards sectors where the evolution of prices is linked to the prices of the main exported products (e.g. petrochemicals) does not contribute to strengthening the resilience of tax revenues to commodity price shocks as much as a diversification towards unrelated sectors.

⁷⁸ Cornia, G. A. (2011). Economic integration, inequality and growth: Latin America versus the European economies in transition. *Review of Economics and Institutions*, 2(2).

Key lessons for policymakers

The fact that inequality reduction is associated with the transformation of the productive structures of an economy presents considerable policy implications. Measures that are limited to income redistribution (such as progressive taxation), may help redistribute income in the short term, but are not sufficient to sustainably reduce inequality in the long run in the Latin American context. The need for a holistic approach to reduce pre-redistribution inequality will require a reorientation of policy. This section provides three main lessons for policymakers in Latin America:

1. *Conditional Cash Transfers do not suffice to sustain inequality reduction.*
2. *Policies aiming to promote economic diversification should be key ingredients of inequality reduction strategies.*
3. *Inequality should be considered a policy priority to avoid further social unrest and conflict because inequality damages economic progress and political stability, which affects society as a whole.*

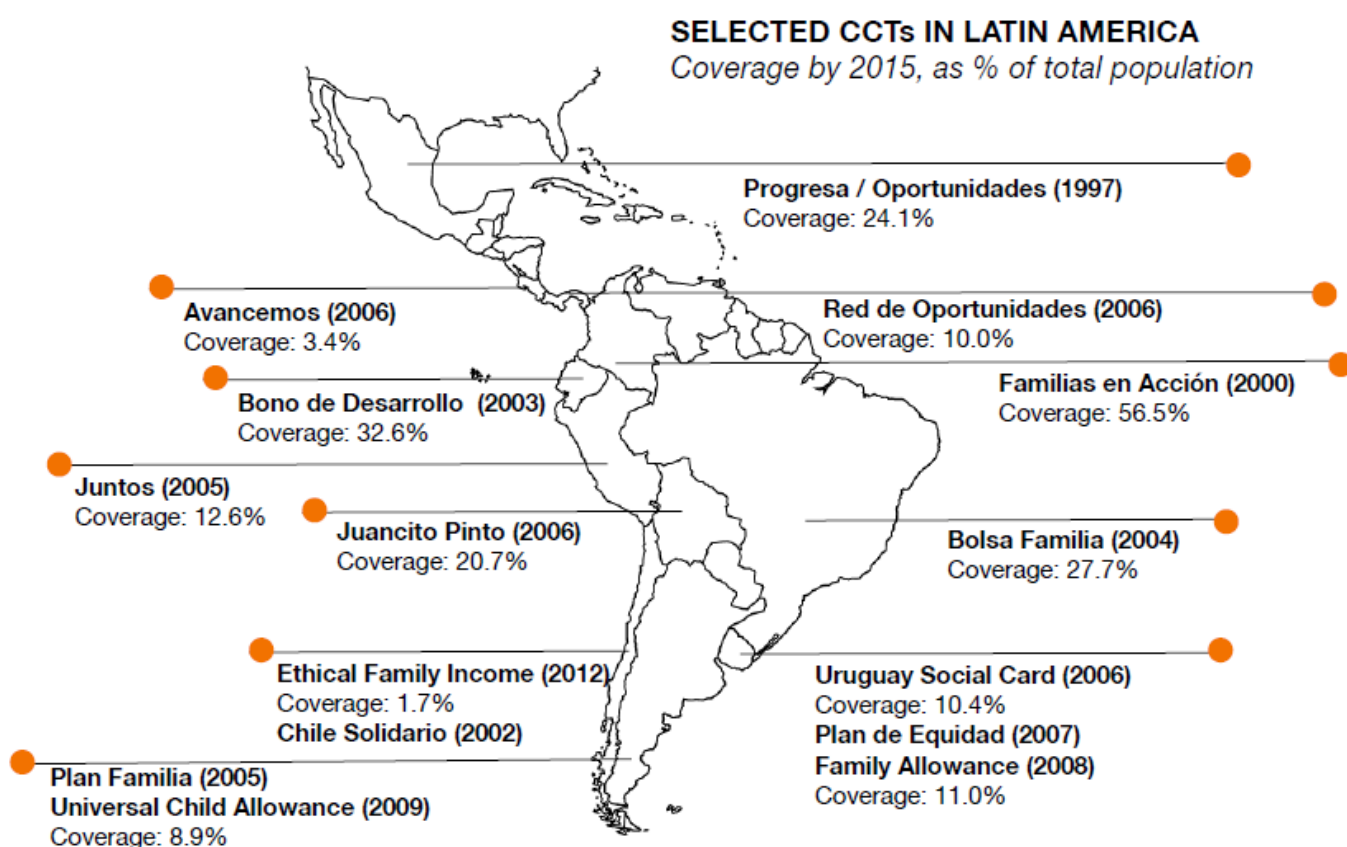


Chamber of Deputies Plenary at Brazilian National Congress / Diego Grandi (Shutterstock)

Learning to fish.... in a fishless lake? Conditional Cash Transfers are necessary but insufficient inequality reduction tools.

Conditional Cash Transfers (CCTs) have become increasingly used as tools of inequality reduction since their first appearance in the mid-1990s in Mexico and Brazil (figure 16). A CCT consists of a lump-sum cash transfer to poor families along with conditionalities that often relate to education (school attendance of a recipient's children, for example) or health (participating in preventive healthcare services for instance). CCTs that encourage schooling aim to help young beneficiaries acquire the human capital required to improve their employment outcomes. But without policies to stimulate export diversification and to coordinate both the demand and supply of labour and skills, CCTs will not be enough to significantly reduce inequality on their own.

Figure 16. Mapping CCTs in Latin America



Source: Author's elaboration based on data in Takahashi, Y. (2017). "Varieties of Conditional Cash Transfers in Latin America". WINPEC Working Paper Series, No.E1619; and Cecchini, S. and Madariaga, A. (2011). "Programas de transferencias condicionadas: Balance de la experiencia reciente en América Latina y el Caribe." Cuadernos de la CEPAL 96. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

Box 2. Conditional Cash Transfers in Latin America

Conditional Cash Transfers (CCTs) were pioneered in the mid-1990s in Mexico and Brazil, with the aim of breaking the intergenerational transmission of poverty and inequality through support for human capital formation. In the mid-1990s, the government of Mexico phased out food subsidy programmes and gradually replaced them with a conditional cash transfer programme, the *Programa de Education, Salud, y Alimentation*, or PROGRESA (now called Oportunidades). This programme initially covered 300,000 households with a budget of USD 60million, but had increased to reach more than 5 million households with a budget of US\$3 billion by 2010.⁷⁹ The Mexican programme's high profile, scale, and strong early evaluation results, had a particularly powerful demonstration effect across the region. Almost all Latin American countries subsequently implemented CCTs. By 2011, they had spread to 18 countries and covered as many as 129 million beneficiaries (one in four Latin Americans).⁸⁰

The largest CCT programme in the world is Brazil's Bolsa Familia, with a coverage of 13 million households (around 50 million people), which represents 25% of Brazil's total population.⁸¹ It was implemented in 2003, with the dual objectives of reducing short-term poverty and income inequality, by unifying four former programmes: Bolsa Escola for education, the Bolsa Alimentação food programme, the PETI anti-child labour scheme, and a cooking gas subsidy.⁸² It has been argued that CCTs such as Bolsa Familia offer a cheap and effective way to tackle extreme poverty, since almost 75% of benefits reach the poorest 20% of the population.⁸³ Nevertheless, despite some improvements, inequality and poverty rates in Brazil remain extremely high, which can be explained by the fact that CCTs rely on individual responsibility to escape the poverty trap and on the assumption that better education and skills are a principal driver to reduce poverty and inequality.

There is much debate about the usefulness and impact of CCTs. In most Latin American countries, cash transfers represent over 20% of poor beneficiaries' incomes, and it is estimated that the poverty headcount index would be on average 13% higher had CCTs not been implemented.⁸⁴ Nevertheless, CCT beneficiaries tend to remain highly vulnerable, with persistently low levels of physical and human capital, and suboptimal integration into the labour market.⁸⁵

⁷⁹ Adato, M. & Hoddinott, J. (2010). *Conditional cash transfers in Latin America*. Intl Food Policy Res Inst.

⁸⁰ Stampini and Tornarolli, op. cit.

⁸¹ Hall, op. cit.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Stampini and Tornarolli, op. cit.

⁸⁵ Saad-Filho, A. (2015). Social Policy for Neoliberalism: The Bolsa Família Programme in Brazil. *Development and Change*, 46(6), 1227–1252

The CCT model not only assumes that schooling will enable recipients to access available jobs, but also that those jobs will exist when young people enter the labour market. The reality is that many Latin American countries have low technological sophistication, limited areas of comparative advantage, and therefore few opportunities for skilled employment. Evidence from Brazil confirms that though CCT programmes such as Bolsa Familia provide the poorest segments of the population with better access to education and health, students that have benefited from Bolsa Familia have faced significant difficulties in finding good-quality jobs (Box 2).⁸⁶ There is also risk of growing dependence of Brazil's poor on cash transfers because they did not automatically translate to better jobs and a secure livelihood.⁸⁷ In these contexts, for CCTs (and skill upgrades in general) to have a positive long term impact on inequality and poverty reduction, they need to be complemented by demand-side policies to generate productive jobs that are capable of absorbing newly upskilled CCT recipients into the labour market.⁸⁸ CCTs therefore need to be properly integrated within more transformative programmes of social and economic development.⁸⁹

The CCT model also assumes that the quality of schooling is of sufficient quality to provide the required human capital to increase the future productivity and income of CCTs recipients. While evaluations of the impacts of CCTs have focused on limited short-term outcomes, particularly consumption and school enrolment and attendance rates, the long-term outcomes and notions of educational quality have received comparatively little attention.⁹⁰ There is also increasing evidence that access to schooling does not guarantee learning, which suggests it does not suffice to improve employment outcomes.⁹¹ In the Latin context, despite much progress in terms of expansion of access to education, skills remain low at every stage of life compared to countries with similar levels of development.⁹² Results from the OECD's 2015 Programme for the International Assessment of Adult Competencies (PIACC) reveal the very low level of skills among adults in Chile, the only Latin American country that participated in this round of the program. Deficient skills

⁸⁶ Jones, H. (2016). More Education, Better Jobs? A Critical Review of CCTs and Brazil's Bolsa Familia Programme for Long-Term Poverty Reduction. *Social Policy and Society*, 15(3), 465–478.

⁸⁷ Barrientos, A., & DeJong, J. (2006). Reducing child poverty with cash transfers: A sure thing?. *Development Policy Review*, 24(5), 537–552; Hall, A. (2012). The last shall be first: Political dimensions of conditional cash transfers in Brazil. *Journal of Policy Practice*, 11(1–2), 25–41.

⁸⁸ Amsden (2012). op. cit.

⁸⁹ In 2011, the government announced the programme 'Brazil Without Misery' (Brasil sem Miséria), which aims to link beneficiaries of the Bolsa Familia programme with formal employment opportunities, for example, through a national vocational training program. This is arguably a step in the right direction to facilitate the integration of CCT beneficiaries into the labour market, but such efforts face a glass ceiling if labour demand is not stimulated at the macroeconomic level.

⁹⁰ Jones, op. cit.

⁹¹ Hanushek, E. A. (1992). The trade-off between child quantity and quality. *Journal of Political Economy*, 100(1), 84–117.

⁹² Busso, M., Cristia, J., Hincapié, D., Messina, J., & Ripani, L. (Eds.). (2017). *Learning better: Public policy for skills development*. Inter-American Development Bank. Accessible at <https://publications.iadb.org/en/learning-better-public-policy-skills-development>

accumulation has negative effects on the productivity of individuals that enter the labour market.⁹³

There is also a multitude of political, environmental and social factors involved in the intergenerational transmission of poverty, as documented by an extensive literature.⁹⁴ Structural inequalities (along social, ethnic and gender lines) contribute to determining access to employment opportunities as evidenced in Latin America and elsewhere.⁹⁵ Nevertheless, the CCT model, which sees employment outcomes as directly related to human capital (and schooling in particular), may fail to account for this complexity and the social relations, networks and norms that play a crucial role in shaping access to the labour market.⁹⁶



Some of the many beneficiaries of the Bolsa Familia conditional cash transfer programme in Brazil (Minas Gerais, "*Especial Bolsa Familia*" by Helio Costa¹⁵, [CC BY-SA 2.0](#) licence)

Responding to the various critiques that CCTs do not suffice to improve the employability of its recipients, the Brazilian Minister of Social Development noted that:

⁹³ Ibid.

⁹⁴ For instance Sharkey (2008) op. cit.; Telles and Lim (1998), op. cit.

⁹⁵ Ibid.

⁹⁶ Jones, op. cit.

"Critics quote Confucius and say it is better to teach people how to fish than to give them fish, but Bolsa Familia recipients aren't poor because they are lazy or don't know how to work, they are poor because they have no opportunities, no education and poor health. How can they compete with those disadvantages? By giving people the money to survive, we are empowering them, including them and giving them the rights of a citizen in a consumer society."⁹⁷

It is undeniable that CCT programmes such as Bolsa Familia offer the opportunity to the poorest segments of the population to have a better access to education and health. Nevertheless, the improvement of the socioeconomic conditions of the lowest income groups not only depends on their skills but also on the social and macroeconomic conditions that influence the demand for such skills. In other words, policymakers in Latin America need to make sure there are fish in the lake before people are taught how to catch them.

⁹⁷ Cited in Watts, J. (2013). "Brazil's bolsa familia scheme marks a decade of pioneering poverty relief". *The Guardian*, December 17.

Industrial, education and innovation policy

The need for a coherent, holistic and sophisticated industrial policy for export diversification

More sophisticated government interventions are needed to reduce inequality in Latin America. Improving the pre-distribution of income requires a coordination between social, education but also industrial policies to generate the demand for workers and their newly acquired skills.⁹⁸

An industrial policy can be defined as the strategic effort by the state to encourage the structural transformation of an economy, for instance, towards higher value-added activities or towards new sectors. Specifically, industrial policy refers to “any type of selective government intervention or policy that attempts to alter the structure of production in favour of sectors [or activities] that are expected to offer better prospects for economic growth in a way that would not occur in the absence of such intervention in the market equilibrium”.⁹⁹ It generally involves the provision of infrastructure, incentives and/or skilled workforce to favour particular industries over others, with the objective of enhancing efficiency, productivity growth and competitiveness.¹⁰⁰ Industrial policy can also be used to balance regional growth and assist workers retrain or relocate, and therefore to “defuse the resistance to economic change likely to come from those who would be the hardest hit” more broadly.¹⁰¹

The impact of commodity dependence on inequality has implications for the role of industrial policies, which have been increasingly re-acknowledged in recent years as necessary ingredients of economic diversification. A strong body of evidence suggests that market forces are not sufficient to stimulate economic diversification and that the acquisition of new comparative advantages across several now-diversified and industrialised countries has benefited to a large extent from government interventions.¹⁰² Sector-neutral interventions to improve general education, infrastructure and the business climate are important but do not suffice to promote export diversification, which require the use of selective industrial policies.¹⁰³ The state has a key role in overcoming market obstacles to the emergence of new sectors and activities by catalysing targeted

⁹⁸ Amsden (2012) op. cit.; Velasco, op. cit.

⁹⁹ Pack, H., & Saggi, K. (2006). Is there a case for industrial policy? A critical survey. *The World Bank Research Observer*, 21(2), 267–297.

¹⁰⁰ Chang, H. J. (2011). Industrial policy: can we go beyond an unproductive confrontation?. In *Annual World Bank Conference on Development Economics* (pp. 83–109). Washington, DC: World Bank Group.

¹⁰¹ Reich, R. (1982). Why the U.S. Needs an Industrial Policy. *Harvard Business Review*. January, Accessible at: <https://hbr.org/1982/01/why-the-us-needs-an-industrial-policy>

¹⁰² Cherif, R., & Hasanov, F. (2019). *The return of the policy that shall not be named: Principles of industrial policy*. International Monetary Fund; Lebdioui, A. (2019a) Chile's export diversification since 1960: A free market miracle or mirage?. *Development and Change*, 50(6), 1624–1663; Mazzucato, M. (2016). From market fixing to market-creating: a new framework for innovation policy. *Industry and Innovation*, 23(2), 140–156.

¹⁰³ Cherif and Hasanov (2019) op. cit.

human capital accumulation; Solving collective action problems in knowledge creation through R&D support; Facilitating access of domestic firms to foreign markets through trade support and quality control; and sending market signals through price control mechanisms and public investments.¹⁰⁴

Table 3. Industrial Policy: Benefits, Challenges, and key Elements of Success

INDUSTRIAL POLICY

Benefits

- Helps acquire new capabilities and areas of comparative advantage
- Can support the structural transformation of an economy towards higher value-added activities and/or new sectors.
- Can be used to guide investments towards areas where private investment has been suboptimal
- Can also be used to balance economic growth and favour disadvantaged geographic areas and income groups.

Challenges

- Requires considerable state capacity to 'pick winners' to avoid risks of inefficiency and cronyism
- Requires some degrees of State autonomy from private interests to avoid state capture.
- Requires the political and technical ability to let go of 'losers' (firms that fail to become competitive).
- The policy space for industrial policy may be constrained by trade agreements and bilateral investment treaties signed by the government.

Key elements of a successful industrial policy

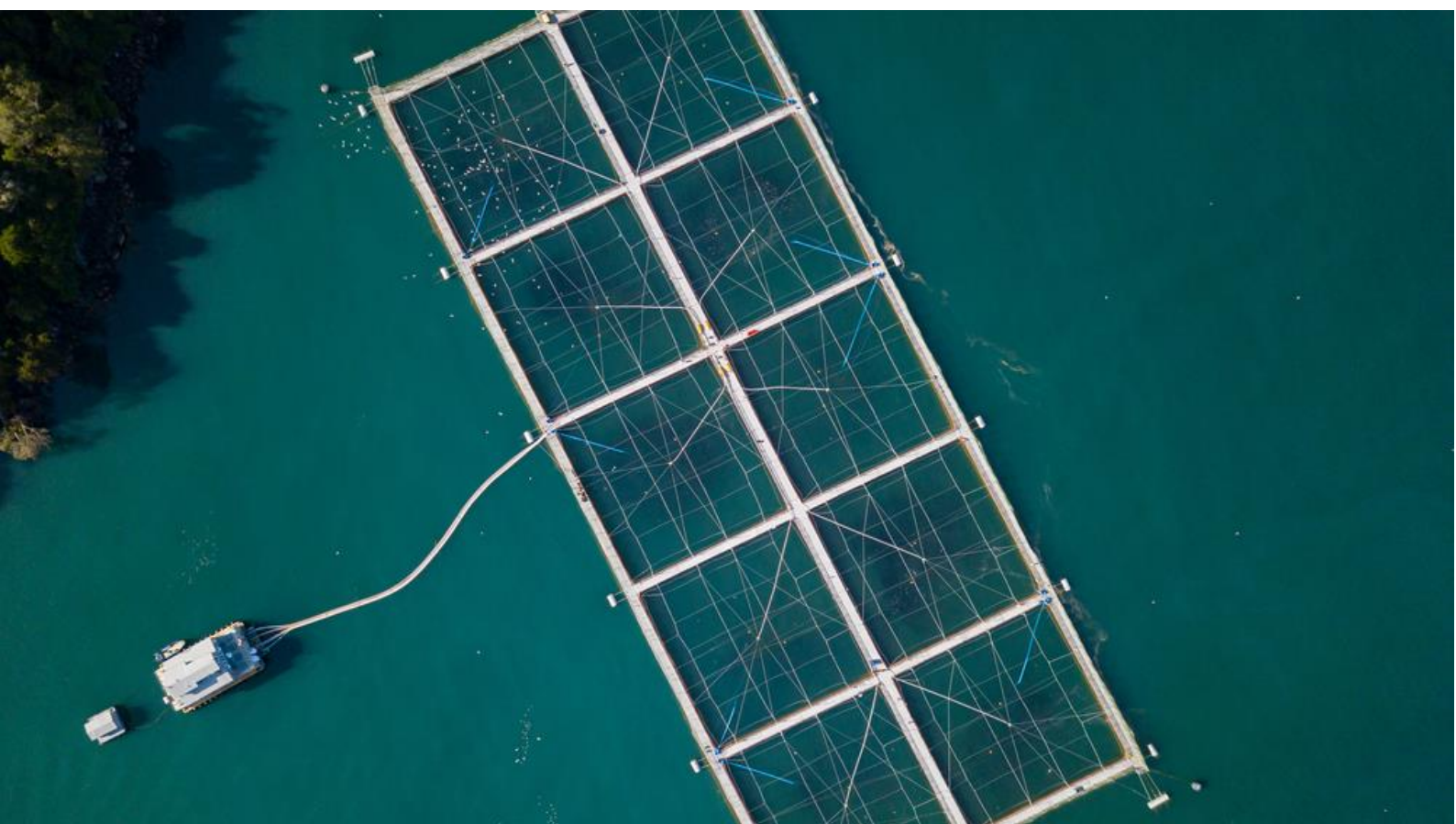
- Performance requirements for firms that receive state support
- Public-Private dialogue to share information & solve coordination failures
- Clear sector-selection criteria to reduce risks of wasteful spending or cronyism.
- Monitoring and evaluation mechanisms to assess implementation over time
- Coordination with social and education policies to avoid skills mismatches
- Provision of incentives rather than requirements on their own
- Inclusion of international competitiveness as a long-term objective.

Industrial policies (although often discreetly) were key to Chile's export diversification up until the 1990s, when industrial policy tools were progressively abandoned, and the diversification of the export basket stagnated before eventually reversing.¹⁰⁵ Chile's experience mirrors a broader trend in the region as it complied with the requirements for

¹⁰⁴ Lebdioui, A. (2020). The political economy of moving up in global value chains: how Malaysia added value to its natural resources through industrial policy. *Review of International Political Economy*, 1-34.

¹⁰⁵ Lebdioui (2019a). op.cit.

macroeconomic equilibrium set out in what became known as the Washington Consensus in the 1990s, when industrial policy lost legitimacy, having been discredited given its failure in the previous two decades. However, persistent growth problems, limited export diversification, rampant inequality rates, and the urgent need to generate new sources of employment give grounds for the return of industrial and innovation policy. Even so, despite the increasing evidence and the contrast with better performing countries in, for example, East Asia, and now-diversified economies that have adopted industrial policies, the majority of Latin American countries have been rather passive observers of the change in the industrial policy discourse since their abandonment in the 1980s, while the minimization of the role of the state, and the consolidation of the extractive economic model as the main source of wealth has led to a rapid and premature deindustrialization.¹⁰⁶ Even though there has been a slow return to industrial policies in the region (with different characteristics and approaches from one country to the next), most Latin American governments still lack a long-term and coordinated national development and industrial strategy.¹⁰⁷



In Chile, the emergence of the high value-added and knowledge-intensive salmon industry can be directly traced to the role of Fundación Chile / Alexander Gold (Shutterstock)

¹⁰⁶ Albaladejo, M. (2020) *Industrialization in Latin America: exile and return*, UNIDO; Palma, J.G. (2014) op. cit.

¹⁰⁷ ECLAC (2010). *Op. cit.*



Students on a tour at Audi Mexico / Alejandro Muñoz (Shutterstock)

Industrial policies require sufficient state capacity to implement them. Across most of Latin America, there is still a large gap between industrial policy design and implementation. To promote a productive development model that helps reduce inequalities, institutional capacity must therefore be improved or even rebuilt, with a focus on implementation capacity of industrial policy as well as the creation of mechanisms to coordinate, monitor and evaluate firms and agents that receive public support.¹⁰⁸ The lack of performance requirements and supervision for firms that benefitted from state support is one of the main differences between East Asia's mostly successful experience with industrial policy and Latin America's mostly failed one in the 1970s/80s.¹⁰⁹

The success of industrial policies also hinges on the quality of the public-private dialogue. Coordination between public and private actors is essential for information-sharing, identifying coordination failures and solving collective action problems. The existence of suitable communication channels between the private and public sector can also help refine incentives to encourage the private sector to invest in productive areas that can have positive effects for the national economy and society as a whole.

In the context of inequality reduction, industrial policy should be tailored to the national context, and may further increase inequality if it focuses exclusively on sophisticated sectors that only create better jobs for a few high-skilled people. In contrast, focusing

¹⁰⁸ Ibid.

¹⁰⁹ Amsden, A. (1989). Asia's Next Giant-how Korea competes in the world-economy. *Technology Review*, 92(4), 46–53; Chang, H.-J. (1994). *The Political Economy of Industrial Policy*. Macmillan Press.

exclusively on labour-intensive sectors and services can help reduce income inequality by increasing the demand of unskilled labour (and offering higher wages for low-skilled jobs than in informal or rural sectors), but may not contribute to the long-term upgrading and sophistication of the national economy (one example of this is the *maquiladora* model in Mexico, which involves labour-intensive low value-added manufacturing). A viable option could therefore be to undertake a two-level industrial policy, which promotes both upgrading and skilled employment in high value-added activities, as well as unskilled employment through an initial expansion of labour-intensive activities.¹¹⁰ The pursuit of such strategy (even within the same sector) can also allow for knowledge transfer, learning, and collaboration within firms and workers, which can provide opportunities for value addition for low productivity firms in the long run.

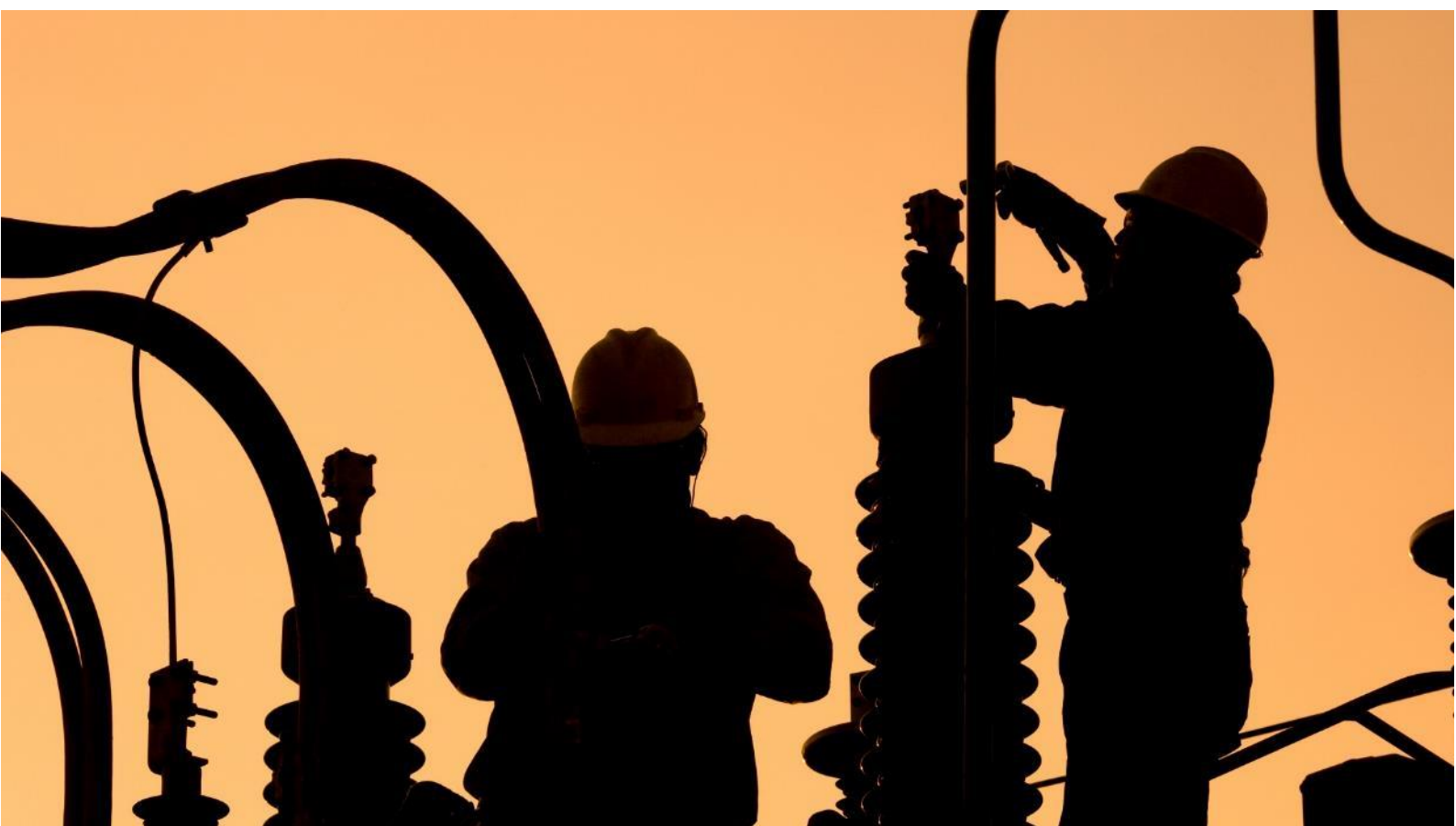
The role of Education Policy to avoid skills mismatch

Ensuring that low-income groups can benefit not only from unskilled employment opportunities in labour intensive sectors but also from the skilled employment opportunities that arise from diversification towards value-added sophisticated sectors enhances the relevance of an appropriate education policy. In order to break free of a model that fosters inequalities and that focuses on 'static' comparative advantages, (i.e. sectors making use of unskilled labour and raw material exports through a race to the bottom) rather than 'knowledge-intensive' and sophisticated activities, industrial and social policies need to be coordinated with education and skills development policies.

The accumulation of skilled human capital to support the emergence of new sectors and activities will require not only a major increase in education spending but will also require shaping human capital accumulation towards strategic areas. Concretely, this may imply the establishment of strategic priorities in national education systems and higher education in particular according to existing and future needs. Even in the context where education is provided privately or power over education policy is devolved to the subnational level, and where there is limited scope for the central government to intervene, the identification and communication of strategic areas can help guide education providers adapt their services to increase the future employability of their graduates.

¹¹⁰ As suggested in Perez, C. (2010). Technological dynamism and social inclusion in Latin America: a resource-based production development strategy. *Cepal Review*. N.100. pp. 121-141.

The need for discipline-based discrimination in tertiary education provision can be explained by the ‘doomed to choose’ logic.¹¹¹ The production of a particular good or service requires a set of specific inputs, which in turn requires labour with corresponding skills (amongst other things). However, education policy and scholarships systems that do not aim to support specific strategic areas can often result in the under provision of human capital that can be productively absorbed in the labour market, as the case with *Becas Chile*. While this programme aimed to promote the human capital accumulation required to build a knowledge economy, the lack of discrimination for specific areas in the allocation of scholarships resulted in a mismatch between the disciplines studied and domestic skills needs, especially in engineering fields. In their review of *Becas Chile*, the OECD and the World Bank emphasized that the studies sponsored by the government should be related to the national priorities it had defined.¹¹²






“Coordinated education, social, and industrial policies can help to generate demand for newly upskilled workers”, Santiago de Chile / José Luis Stephens (Shutterstock)

¹¹¹ Hausmann, R., & Rodrik, D. (2006). Doomed to choose: industrial policy as predicament. *John F. Kennedy School of Government, Harvard University*, 9.

¹¹² OECD and World Bank (2011). *Revisión de Políticas Nacionales de Educación: Programa Becas Chile*. Paris: OECD.

Skills mismatch is a discrepancy between the skills that are possessed by individuals and the skills required for available jobs. Such mismatch happens when education and training are not providing the skills demanded in the labour market, or that the economy does not create jobs that correspond to the skills of individuals. The consequences of skills mismatch reach all levels of the labour market, at the individual, firm and national level (see Table 4).¹¹³

Table 4: Multi-level Consequences of Skills Mismatch

Individual level	Firm level	National Level
		
Skills mismatch can lead to considerable wage penalties, especially for overqualification that eventually affect both job and life satisfaction. This is particularly relevant in Latin American given the context of decreasing returns on education.	Skills mismatch has negative consequences for productivity and competitiveness. When specific skills (or at least the bases for acquiring such skills) are not provided by the education system, firms either cannot grow due to the absence of skilled workers or have to train the necessary personnel in-house, which leads to high non-recoverable costs, if trained employees leave the company. ¹¹⁴	Skills mismatch can increase unemployment and damage competitiveness. Public or private resources are invested in skills development with the assumption that achieved qualifications will yield positive results in terms of employment insertion or wages. Yet, if skills mismatch leads to lower productivity gains because people that are unable to find a job that corresponds to their skill level are not employed at their full productivity potential. ¹¹⁵

Economic diversification therefore requires a collaborative framework between governments, firms and universities. Such collaboration is necessary to tackle skills mismatches and provide new skills required to shape the diversification and upgrading processes. Successful policy experiments exist and could be replicated. For instance, in Chile, to overcome skill mismatches that hindered the development of high value-added upstream activities in the copper sector, public interventions were used to match university training with the current and future labour needs of the mining industry. Large mining companies did not cooperate with each other but with Fundación Chile, a semi-public/semi-private foundation, which was granted access to different mining companies' payroll and future investment plans in order to elaborate a skills gap analysis and understand the qualifications that the sector needs, before coordinating with

¹¹³ ILO (2020). What is skills mismatch and why should we care?. April 1. Accessible at. https://www.ilo.org/skills/Whatsnew/WCMS_740388/lang--en/index.htm

¹¹⁴ Lebdioui (2019b). *Economic Diversification and Development in Resource-dependent Economies: Lessons from Chile and Malaysia* (Doctoral thesis: University of Cambridge).

¹¹⁵ ILO (2020) op. cit.

education providers in the country.¹¹⁶ A similar approach could be extended to different countries and sectors across the region.

The role of innovation policy for export sophistication

Productive capabilities and technological capabilities are highly complementary. Economic diversification requires public institutions that provide R&D support, quality certification, standards setting, incubation, technology transfer and technology diffusion.¹¹⁷ While sector-neutral (horizontal) policies that reduce costs and facilitate innovation, they are generally insufficient to bring about quick changes as important as those needed for open economies to be able to catch up, especially with an international technological frontier that is moving ahead at speed.¹¹⁸ Evidence also shows that sector-



In Brazil, public R&D has been key to the development of the internationally competitive aeronautics firms such as Embraer / Felipegsb (Shutterstock)

¹¹⁶ Lebdioui, A. (2019c). Local content in extractive industries: Evidence and lessons from Chile's copper sector and Malaysia's petroleum sector. *The Extractive Industries and Society*, 7(2), 341-352.

¹¹⁷ See Cimoli, M., Dosi, G. & Stiglitz, J. (Eds.) (2009). *Industrial policy and development: The political economy of capabilities accumulation*. Oxford University Press; Lee, K. (2013). *Schumpeterian analysis of economic catch-up: Knowledge, path-creation, and the middle-income trap*. Cambridge University Press; Nelson R.R. and S.J. Winter (1982) *An Evolutionary Theory of Economic Change*. Cambridge, MA: Harvard University Press.

¹¹⁸ ECLAC (2010). *La hora de la igualdad: brechas por cerrar, caminos por abrir*. Santiago, Chile: United Nations Economic Commission for Latin America and the Caribbean.

specific (vertical) policy interventions have been essential in the promoting innovation across various countries throughout history.¹¹⁹

Even in the case of Latin America, some of the past export successes can be attributed to public support for R&D. For instance, in Brazil, public R&D has been key to the development of the internationally competitive aeronautics sectors.¹²⁰ Public policies were critical for the shaping the technology transfer, progress, and internationalisation achieved by Embraer, which has become one of the most competitive aircraft manufacturer in the world.¹²¹ In Chile, the emergence of the high value-added and knowledge-intensive salmon and berries industries can also be directly traced to the role of Fundación Chile, a semi-public agency that has intervened to promote the diffusion of knowledge acquired through R&D and industrial trials as a public good.¹²² Fundación Chile's role has thus consisted in sending market signals in promising industries that would not develop through market forces alone.

Nevertheless, since the 1990s, Latin American governments have been increasingly reluctant to adopt proactive and vertical innovation policies to promote R&D. Instead, they have resorted to the use of 'neutral' price incentives, including tax reductions on R&D expenditures or grants for human capital upgrading.¹²³ There is little evidence suggesting that these neutral interventions have successfully induced Latin American firms to invest more in R&D and innovation.¹²⁴ Indeed, across Latin America, R&D levels remain extremely low. As shown in Figure 15, the region's average R&D expenditure (as a share of GDP) is amongst the lowest in the world (<0.6%), falling well below the world average (>0.2%). It is undeniable that more and better-oriented public R&D efforts and their coordination with the private sector of the economy needs to take place in Latin America.¹²⁵ The lack of development of strong technological capabilities constitutes an obstacle to break free of a model that fosters inequalities and that focuses on 'static' comparative advantages, (i.e. sectors making use of unskilled labour and raw material exports) rather than 'knowledge-intensive' and complex activities.

¹¹⁹ see Lee (2013) op. cit.; and Mazzucato, (2016) op. cit., for a review of successful innovation policies in Korea and the USA, respectively.

¹²⁰ Katz, J. (2003). Market-oriented structural reforms, globalization and the transformation of Latin American innovation systems. In *Seminar "Brasil em Desenvolvimento"*, UFRJ, rio de Janeiro.

¹²¹ Francelino, J. D. A., Urbina, L. M. S., Furtado, A. T., & Chagas Jr, M. D. F. (2019). How public policies have shaped the technological progress in the Brazilian aeronautics industry: Embraer case. *Science and Public Policy*, 46(6), 787–804; Cassiolato, J.E.; Bernardes, R. and Lastres, H. (2002) *Transfer of Technology for Successful Integration into the Global Economy A case study of Embraer in Brazil*. Geneva: UNCTAD.

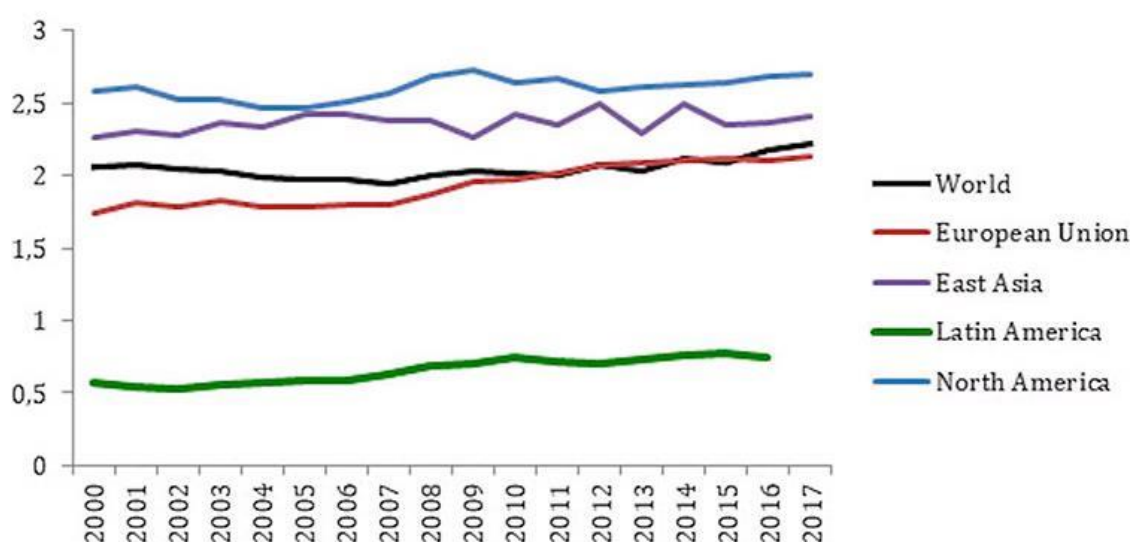
¹²² Lebdioui (2019a). Op. cit.

¹²³ Katz, J. M. (2012). *Revisiting the Latin American Development Process*. Working Paper 1. Washington DC: Policy Dialogue.

¹²⁴ Ibid.

¹²⁵ Perez, C. (2008). A vision for Latin America: A resource-based strategy for technological dynamism and social inclusion. *Globelics Working Paper Series*. Katz, 2003).

Figure 15: Expenditure on Research and Development by World Region (% GDP).



Source: Author's based on data from the World Development Indicators

Several concrete steps could be taken by Latin American governments to enhance domestic technological capabilities. Such an agenda will require not only a major increase in local R&D spending but also a new set of institutions strengthening educational systems, intellectual property rights, and interlinkages between firms, universities, and public agencies to coordinate research and development. In the context of growing concerns for climate change and the decarbonisation agenda, developing R&D capabilities around low carbon innovation could represent a promising way forward. Sustainability is indeed increasingly considered as the next innovation frontier ¹²⁶ and could constitute an area where Latin American firms have more room to cause technological disruption.

Political support and elite incentives

Politics play a central role in explaining how states intervene and why they do so. The design and implementation of export diversification policies are often anchored in specific historical, institutional, and ideological contexts.¹²⁷ A central question that remains therefore relates to the policy incentives for promoting structural transformation in a way that promotes inequality reduction with a long-time horizon?

The inability of government to increase taxation is related to the strong relationship between wealth and political power.¹²⁸ As a result, the level of taxation has been

¹²⁶ Nidumolu, R., Prahalad, C. K., & Rangaswami, M. R. (2009). Why sustainability is now the key driver of innovation. *Harvard business review*, 87(9), 56–64.

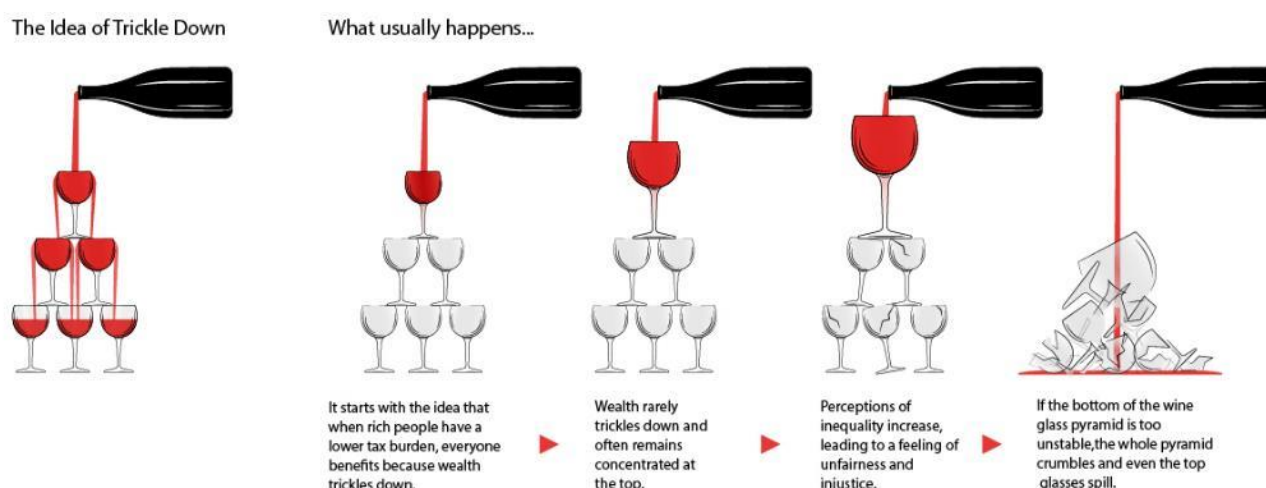
¹²⁷ Lebdioui (2020b). op. cit.

¹²⁸ Madriaga, A. (2020). *Neoliberal Resilience. Lessons in Democracy and Development from Latin America and Eastern Europe*. Princeton University Press

historically lower in Latin America than in other regions.¹²⁹ The political conditions needed for strategic state interventions to promote productive diversification usually include some degrees of autonomy of the state from rent-seeking private interests.¹³⁰ The ability of governments to impose their policies against business preferences depends on the power and influence of business elites vis-à-vis the state.¹³¹

Nevertheless, inequality reduction should be considered a priority for everyone, including the elite. There is sufficient evidence suggesting that income inequality has long-term negative effects that also impact the business elite and high-income groups. Several studies have shown that large numbers of Latin America's wealthy guarantee personal security through private means when public security services are under provided and selective and have relied on private guards and sometimes paramilitary forces to protect their lands and property (Pearce, 2018).¹³² However, the waves of social unrest across Latin America in 2019 (particularly in Chile and Ecuador) show the extent to which excessive income inequality can generate political instability, which in turns leads to a reduction in investment, revenues, and growth. Drops in investment and growth society, including the business elite. In other words, if the bottom of the wine glass pyramid is too unstable, and the top glass too heavy, it is the whole pyramid that will crumble. The quest for more inclusive development models is therefore timely across the region. As societies such as in Chile, Ecuador, and Colombia, look for a new social pact, understanding that the economy is as strong as its most vulnerable people is as urgent as ever.

Figure 16. The Collapsing Pyramid



Source: Lebdioui, Amir (2022). *Income Inequality and Trade Diversification: How Can Income Inequality in Latin America be reduced beyond Commodity Booms?* London: Canning House / LSE.

¹²⁹ Martorano (2018). Op. cit.

¹³⁰ Haggard, S. (2018). *Developmental states*. Cambridge University Press.

¹³¹ See Fairfield, T. (2015). *Private wealth and public revenue*. Cambridge University Press.

¹³² Pearce, J. (2018). *Elites and violence in Latin America: Logics of the fragmented security state*. Working Papers (1). London School of Economics and Political Science, London, UK. Accessible at: <http://www.lse.ac.uk/lacc/publications/PDFs/VSP1-Pearce-Elites-Violence-Latin-America-web.pdf>

Inequality reduction through structural transformation and export diversification should face lower political resistance from the elite than over reliance on redistributive taxation on its own, which additionally faces severe obstacles in the context of high capital mobility and risks of tax avoidance from higher income groups. Progressive taxes are often designed to collect a higher proportion of income from the rich relative to the poor. However, as the government increases tax rates, individuals may respond by taking steps to reduce their taxable income by either working less (productivity response) or reporting a smaller share of true income (tax evasion response), which is much more common in the upper echelons of the income distribution.¹³³ In addition, given how high pre-distribution income inequality rates are across Latin America, reducing inequality rates to OECD levels would require excessive redistributive taxation, which may result in loss of tax revenues and growth, as anticipated by the Ibn Khaldun curve (according to which high tax rates shrink the tax base because they reduce economic activity). In such context, the dynamic generation of tax revenues (through productive diversification to generate new taxable income) may be more politically feasible and pragmatic than the sole reliance static generation of tax revenues (extract more taxes from existing income).

Structural transformation would be a pragmatic approach to complement redistributive taxation, but requires a long-term vision, strong social coalitions, and state capacity to implement industrial policies. Some of the existing political systems do not favour the adoption of a long-term industrial policy.¹³⁴ An inclusive dialogue with the private sector and civil society representatives is also needed for the sustainability of a structural transformation agenda and defuse the resistance to economic change that is likely to come from those who would be negatively affected. At the regional level, stronger political cooperation would also be needed to enhance market integration and maximise the development and efficiency of regional supply chains, thereby allowing local firms to reach economies of scale.

¹³³ Feldstein, M. (1995). The effect of marginal tax rates on taxable income: a panel study of the 1986 Tax Reform Act. *Journal of Political Economy*, 103(3), 551-572; Sanchez-Ancochea (2019). Op. cit.

¹³⁴ Lebdioui, A. (2019b), op. cit.

Conclusion

This report has raised three essential questions about the future of inequality reduction in Latin America:

- A. Why has inequality reduction proved so challenging in Latin America?
- B. Would redistributive taxation suffice to sustainably reduce income inequality in the region?
- C. What are the public policies that can best sustain inequality reduction?

Although redistributive taxation should not be ignored, it offers limited prospects of reducing inequalities on its own in the Latin American context, which is characterised by high degrees of export concentration, high inequality rates, generally low technological sophistication of exports, and limited areas of comparative advantage, high capital mobility and tax avoidance, and a low absorption of low-income groups in the labour market. Important steps need to be taken to address pre-tax inequality through a broader structural economic transformation that will provide better employment opportunities, productivity gains, linkages and spillovers.

The fact that export diversification can contribute to both pre-distribution and post-distribution inequality reduction has important implications for the use of industrial policies. Export diversification requires active state interventions to stimulate the accumulation of new productive capabilities, which implies that policy advice to only fix market failures may not suffice in the Latin American context. Industrial policy is particularly necessary to coordinate the expansion of both the demand and the supply of unskilled and skilled labour, thereby ensuring the integration of low-income groups in the labour market.

Such findings have high relevance for contemporary Latin America, where the quest for a more inclusive model of development continues. As societies like in Chile, Colombia, Ecuador search for a new social pact, understanding that the economy is only as strong as its most vulnerable members is a lesson that must be learnt quickly. Nevertheless, it should be acknowledged that the promotion of structural transformation as an inequality reduction strategy is complex and inherently tied to a country's institutional characteristics. Structural economic transformation requires not only state capacity to implement industrial policies but also strong social coalitions with a long-term vision. Political economy considerations are key to understanding whether and how states intervene to address economic inequality. Across Latin America, the inability of governments to increase taxation is historically related to the strong relationship between wealth and political power. However, the cost of inequality has become increasingly high in the region and is becoming increasingly difficult to ignore, as illustrated by the wave of

social unrest in 2018 that led to political instability and a reduction in growth and investment, which is a problem for everyone, including the elite.

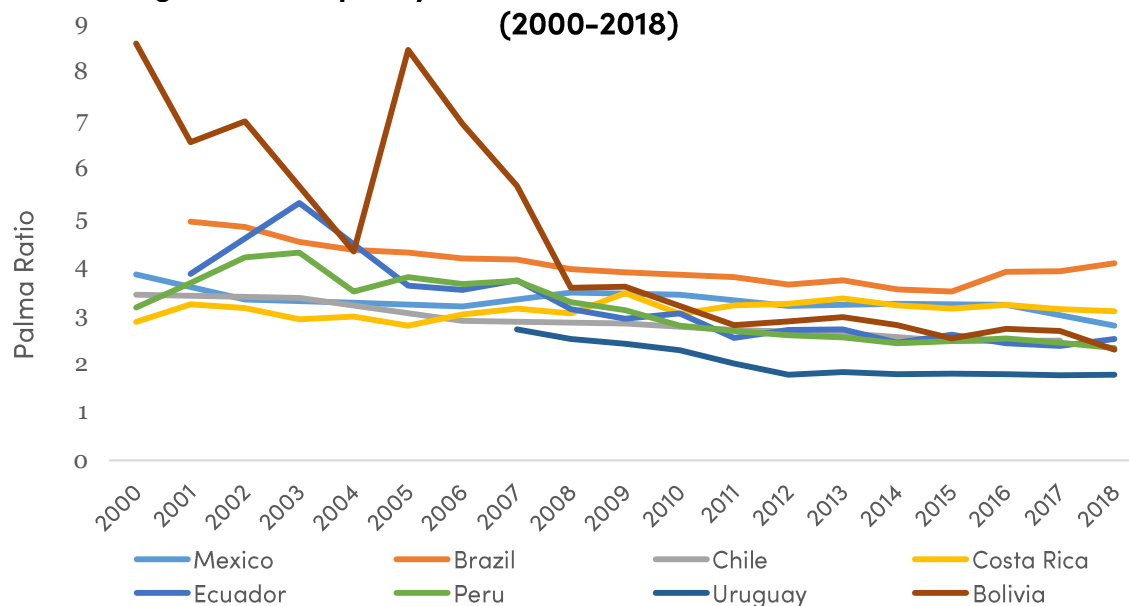
Rather than only redistributing existing wealth, reformers should implement policies to generate new wealth that will be more evenly distributed. In the context of increasing pressure on policy makers to find ways to reduce income inequality, the adoption of industrial policies for long term structural transformation should face lower degrees of elite resistance than redistributive taxation alone, which would anyway be insufficient because the initial levels of market inequality are too high.

The COVID-19 crisis also represents a critical juncture for rethinking industrial policy in the region. The resulting disruptions of global supply chains in 2020/2021 have further shown the vulnerability of many Latin American countries that overly depend on commodity exports, tourism, and the imports of manufactured goods. As global trade declined, and as governments imposed lockdowns as well as travel restrictions, commodity prices collapsed, and tourism revenues dried up. The resulting economic crises disproportionately affected the bottom income quintiles that worked in service industries such as restaurants, hotels, transportation, and retail that to a large extent could not be moved to work from home, while the impact for sophisticated services and high-skilled work was much lower.¹³⁵ Against this backdrop, there is an urgent need to rethink the importance of diversification and strengthen productive capacities in strategic sectors to achieve both resilience, competitiveness, and productive employment that can reshape the inequality mould for the years to come.

¹³⁵ Aghion et al., op. cit.

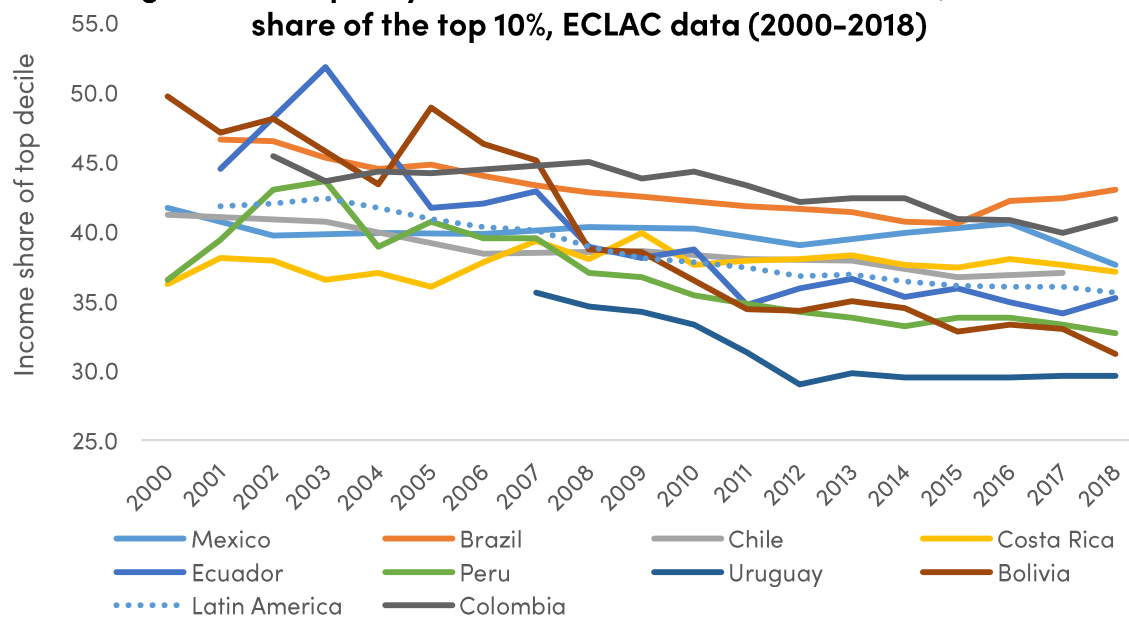
Annex

Figure A1: Inequality trends across Latin America, Palma Ratio (2000–2018)

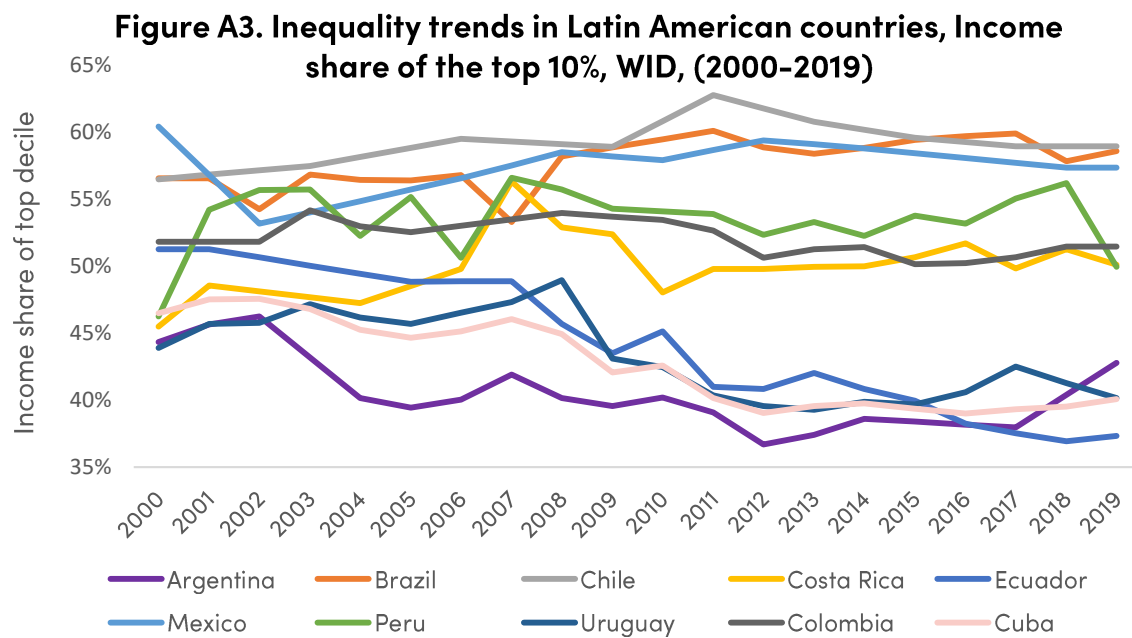


Source: Author's compilation based on ECLAC data

Figure A2: Inequality trends in Latin American countries, Income share of the top 10%, ECLAC data (2000–2018)



Source: Author's compilation based on ECLAC data



Source: Author's compilation based on data from the World Inequality Database (WID).

Related research outputs

Other publications by this author

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The Multidimensional Indicator of Extractives-based Development (MINDEX): A new approach to measuring resource wealth and dependence. *World Development*, 147. 2021

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[Local content in extractive industries: Evidence and Lessons from Chile and Malaysia](#), *The Extractive Industries and Society*. 7(2). 2019.

Outputs based on this report

LSE Public Event Video Recording: '[Breaking the Mould of Inequality in Latin America](https://www.lse.ac.uk/Events/LSE-Festival/Post-Covid-World/Events/20210304/latin-america)' (March 4th, 2021). Accessible at: <https://www.lse.ac.uk/Events/LSE-Festival/Post-Covid-World/Events/20210304/latin-america>

Blog Post: "[Forever unequal? Mould-breaking strategies to reduce inequality in Latin America](https://blogs.lse.ac.uk/latamcaribbean/2021/04/29/forever-unequal-mould-breaking-strategies-to-reduce-inequality-in-latin-america/)" LSE LACC blog (April 6th 2021). Accessible at: <https://blogs.lse.ac.uk/latamcaribbean/2021/04/29/forever-unequal-mould-breaking-strategies-to-reduce-inequality-in-latin-america/>