

Working Paper No. 14, 2024

The Impact of the 21st Century Commodity Supercycle on Natural-Resource Dependent Economies: The Case of Bolivia and Peru

Daniel Agramont-Lechín



Working Paper Series



trAndeS Working Paper Series

Published by: Frauke Berg & Jonathan Rodríguez Rico

Lateinamerika-Institut (LAI), Freie Universität Berlin, Boltzmannstr. 1, 14195 Berlin, Germany.

The **trAndeS** Working Paper Series is a co-production between the Lateinamerika-Institut (LAI), Freie Universität Berlin and Pontificia Universidad Católica del Perú (PUCP) as part of **trAndeS** – Advanced Studies on Inequalities and Sustainable Development, supported by the Deutscher Akademischer Austauschdienst (German Academic Exchange Service, DAAD) with funding from the Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (German Federal Ministry for Economic Cooperation and Development, BMZ). The work of the program continues the research themes developed by *desiguALdades.net* – Research Network on Interdependent Inequalities (www.desigualdades.net).

All working papers are available without charge on the trAndeS website:

<http://www.programa-trandes.net/>

Copyright for this edition: Daniel Agramont-Lechín

Agramont-Lechín, Daniel 2024: "The Impact of the 21st Century Commodity Supercycle on Natural-resource Dependent Economies: The Case of Bolivia and Peru", *trAndeS Working Paper Series 14*, Berlin: Lateinamerika-Institut, Freie Universität Berlin.

The Lateinamerika-Institut, Freie Universität Berlin cannot be held responsible for errors or any consequences arising from the use of information contained in this Working Paper; the views and opinions expressed are solely those of the author or authors and do not necessarily reflect those of the Lateinamerika-Institut, its research projects or sponsors.

Inclusion of a paper in the **trAndeS** Working Paper Series does not constitute publication and should not limit publication in any other venue.

Cover photo: © Gisselle Vila Benites

The Impact of the 21st Century Commodity Supercycle on Natural-Resource Dependent Economies: The Case of Bolivia and Peru*

Abstract

In the early 21st century, Bolivia and Peru experienced remarkable economic growth, coupled with notable reductions in poverty and inequality. However, the subsequent economic slowdown triggered by declining international commodity prices raised concerns about the sustainability of their progress. Historically, both nations have been vulnerable to fluctuations in global commodity prices, often resulting in social unrest and political instability. This study examines whether the significant influx of resources to Bolivia and Peru from 2003 to 2013, attributed to the commodity boom, fostered structural transformation or, on the contrary, reinforced their dependence on the global economy. Analyzing macroeconomic and productivity data, the research indicates a strong correlation between their economic performance and the commodity supercycle trend. A primary finding suggests that rather than fostering a more self-reliant economic integration, the 21st-century economic boom exacerbated the reliance of both nations on natural resource extraction. However, a more nuanced examination reveals divergent medium-term impacts driven by each nation's development model. Peru, through diversification of international revenue streams and prudent macroeconomic policies, managed to mitigate the effects of declining commodity prices. In contrast, Bolivia's economy bore the brunt of diminishing income, not only due to the end of the commodity boom but also due to insufficient investments in productive sectors.

JEL codes: F14, P33

Keywords: extractivism, neoliberalism, post-neoliberalism, natural resource dependence

Biographical Notes

Daniel Agramont-Lechín is an economist with an M.A. in Globalization and an M.Sc. in International Relations. He is a career diplomat of the Plurinational State of Bolivia and a Ph.D. candidate in Political Science at the Goethe-Universität Frankfurt. Currently, he serves as the Director of the Social-Ecological Transformation Project at the Friedrich Ebert Stiftung Bolivia and as the Director of the Master's program in Sustainable Development at the Universidad Andina Simón Bolívar. Additionally, he is an associate researcher at trAndeS and a member of the CLACSO Working Group "China and the Map of World Power".

* The author would like to thank Dr. Bettina Schorr for the valuable comments on the paper.

Contents

1.	Introduction	1
2.	Extractivism in the 21st Century	3
3.	The Commodity Supercycle	5
4.	Deepening of Core-Periphery Relations	8
4.1	Productive Development	10
4.2	Macroeconomic Vulnerability	13
4.2.1	Expansive Phase of the Boom	14
4.2.2	Declining Phase	18
5.	Conclusions	21
6.	Bibliography	22
7.	Annex	30

1. Introduction

Since the beginning of the 21st century, Peru and Bolivia have faced significant domestic and international transformations in their political economies. In the 1980s, Latin America underwent a marked shift away from statism towards a new economic paradigm, known as neoliberalism, in response to the debt crisis and hyperinflation spiral. Governments across the region implemented structural adjustment programs aimed at stabilizing the economy and restoring efficiency (Wolff, 2020).

However, despite these reforms, by the early 2000s, the region experienced another economic slowdown. This downturn, coupled with growing popular discontent, led to the landslide electoral victories of leftist candidates (Cameron, 2009; Cameron & Sharpe, 2010; Castañeda, 2007; Stoessel, 2014), signaling a period of delegitimization for established political systems (Chodor, 2015; Bull, 2013).

The rise of the so-called new progressive leaders stemmed from widespread discontent with neoliberal policies amid uneven democratization processes (Panizza, 2009; Vilas, 2005, 2008; Wiesehomeier & Doyle, 2013; Pickup, 2019). Several governments deeply committed to neoliberalism, such as those in Venezuela, Brazil, Uruguay, Argentina, Bolivia, Ecuador, and Nicaragua, were ousted from power through elections, mass protests, or a combination of both. This wave of new left-leaning administrations, often termed the pink tide (Lievesley & Ludlam, 2009; Castañeda & Morales, 2006), veered away from free-market reforms (Panizza, 2009), while countries like Chile, Peru, and Colombia continued to adhere to the neoliberal model.

Latin America is presently undergoing a significant transition, characterized by the convergence of various processes that remain incompletely conceptualized. This transitional phase is termed as post-liberal or post-hegemonic, as indicated by a range of indicators suggesting a shift in the region's dynamics (Bonilla & Millet, 2015).

On the other hand, the international landscape for Latin America and the Caribbean (LAC) in the 21st century was influenced by two significant and interconnected phenomena: China's rise as a global power (Santiso, 2012; Dussel-Peters & Gallagher, 2014; Dussel-Peters, 2015; Jenkins, 2019; Fornes & Mendez, 2018; Jenkins, 2017) and the Commodity Supercycle (Lederman et al., 2009; Berg & Ostry, 2011; Baer & Soares, 2014). China's growth miracle, as some authors describe it (Huang, 2008; Wei et al., 2017; Kroeber, 2020), refers to the nearly double-digit growth rate China experienced since implementing the Deng Xiaoping reforms in the late 1970s. The

primary driver of China's remarkable economic growth was its industrialization process (Jenkins, 2018).

By 2018, China had become a major player in global manufacturing, producing over a quarter of the world's manufactured goods by value and being the world's largest exporter, accounting for 18% of manufactured exports (Kroeber, 2020: 67).

This had a significant impact on Latin America, not only due to China's increasing purchases of the region's natural resources (Nolte, 2013; Gallagher et al., 2016; Dussel-Peters & Gallagher, 2014; Da Rocha & Bielschowsky, 2018; Agramont & Bonifaz, 2018) but also, as will be explored in this paper, because of the resulting increase in international commodity prices.

Amidst these transformations, the 21st century marked one of the most prosperous periods for South America. Economic growth surged, accompanied by tangible improvements in people's living standards. This progress was observed under both progressive and liberal governments. However, much of this prosperity stemmed from external factors (Ocampo et al., 2015), and while it laid the groundwork for medium and long-term development, it also deepened the region's dependence on natural resource extraction, a phenomenon often referred to as extractivism (Svampa, 2013, 2019; Svampa & Slipak, 2015; Warnecke-Berger et al., 2023).

Building on this foundation, this paper aims to analyze the impact of the recent commodity boom on Bolivia and Peru's international integration into the global economy. Both nations experienced a period of unprecedented prosperity characterized by not only economic growth but also improvements in societal well-being (Gray, 2014). Drawing on the works of authors such as Svampa (2019), Gudynas (2011), and Kehoe et al. (2019), this paper has two specific objectives. Firstly, it seeks to explore whether the substantial financial resources flowing into both nations as a result of the commodity supercycle enhanced their position in the world economy or, conversely, increased their dependence. Secondly, the paper aims to understand the distinctions between classical extractivism (as observed in Peru) and neo-extractivism (in Bolivia), delving beyond immediate indicators like economic growth to focus on medium-term sustainability.

To address these inquiries, this study examines two key variables: (1) industrialization and (2) macroeconomic vulnerability. I posit that a nation enhances its standing in the global economy by making progress towards structural transformation of its industrial sector and bolstering its autonomy, indicated by a decrease in vulnerability to external

economic fluctuations. Conversely, if economic growth is accompanied by a greater reliance on extractive industries and heightened susceptibility to external shocks, then the nation is deemed to have further entrenched its peripheral position.

2. Extractivism in the 21st Century

The dependence on primary products has long been a defining characteristic of the political economy of numerous countries in Latin America and the Caribbean (LAC) since their integration into the global economy. This situation is particularly pronounced in South America, which is home to some of the world's largest mineral deposits (Altomonte et al., 2013). Scholars in the region have extensively examined this phenomenon over the past two decades using the concept of extractivism (Gudynas, 2011; Svampa, 2013, 2019; Acosta, 2011; Burchardt & Dietz, 2014). Extractivism is understood as a development model centered on the extraction and exploitation of natural resources, which sustains a limited diversification of the productive network and relies heavily on international trade as suppliers of raw materials (Gudynas, 2009: 188).

However, it is important to note that two distinct extractivist models have emerged in the 21st century, with the primary difference being the level of state involvement (Gudynas, 2009, 2011; Svampa, 2019). The first model, known as classical extractivism, involves the exploitation of natural resources by conservative governments. In this model, the private sector, particularly multinational companies (Seoane, 2012), oversee the entire extraction and export process and typically pay low percentages of royalties and taxes. State intervention is minimal, primarily limited to environmental and labor regulations. Policies are largely tailored to suit the needs of foreign investors (Gudynas, 2009). It is argued that the substantial benefits received by multinational corporations are redistributed to society through increased economic activity, often referred to as the trickle-down effect (Schuldt & Acosta, 2006). Classical extractivism was the prevailing development model during the neoliberal era in most countries in the region, and Peru and Colombia serve as examples of its continuation into the 21st century.

Conversely, neo-extractivism, in its original conception, denotes a new progressive extractivism (Gudynas, 2018), wherein left-wing governments aimed to regulate the extraction and exportation of resources by nationalizing companies and raw materials, revising contracts, and raising export duties and taxes. Additionally, they allocate surplus revenue towards bolstering social structures that promote development (Burchardt & Dietz, 2014: 470).

Setting aside the ideological leanings of governments in Latin America, the primary criticism, as highlighted by Maristella Svampa (2013), is that the region has transitioned into a new development paradigm known as the commodities consensus. Within this consensus, both left-wing and conservative administrations follow a similar development trajectory. Governments from both sides endorse integration into the global production and accumulation system as suppliers of low value-added products, capitalizing on high international prices. They prioritize the development and expansion of extractive mega-projects, serving as export enclaves to global manufacturing hubs. In some instances, the income generated from these activities is channeled by the state towards redistributive policies (Slipak, 2014: 112).

Bolivia became a pivotal part of the leftward political shift following MAS' victory in 2005. From the outset of the Morales administration, it was evident that the goal was not solely to enhance redistribution but to fundamentally refound the nation (Artaraz, 2012). Since 2003, MAS had pledged to eradicate neoliberalism in the country (Rochlin, 2007). The adoption of the new constitution in 2009 marked a significant milestone in this endeavor. Economically, the nation's restructuring relied heavily on an assertive role by the state (Wolff, 2011), aimed not only at redistributing income but also at leading economic organization. The official model, known as 'Productive Socialist Communitarian Economic (PSCM)' (Arce, 2020) embraced a new development vision centered on the concept of 'vivir bien' (living well)¹.

In contrast, Peru did not align with the pink tide and, unlike Bolivia's trajectory in the 21st century, deepened the neoliberal model initiated by Fujimori in the early 1990s. As noted by Vergara and Watanabe (2016: 152), "all presidents elected since 2000 called for change but adhered to the status quo." Consequently, Peru's economic policies have largely followed the export-led growth strategy imposed by the Washington Consensus since the 1990s (Ewig, 2011; Seclén-Luna & Carrasco, 2010; Jiménez, 2019; St John, 2017). This economic model has shaped what Crabtree & Durand (2017) terms a "Business Republic," where monopolies and oligopolies have proliferated across various sectors, shielded from the expansion of primary exports and the liberalization of the economy and labor markets. According to Gonzales de Olarte (2015), these

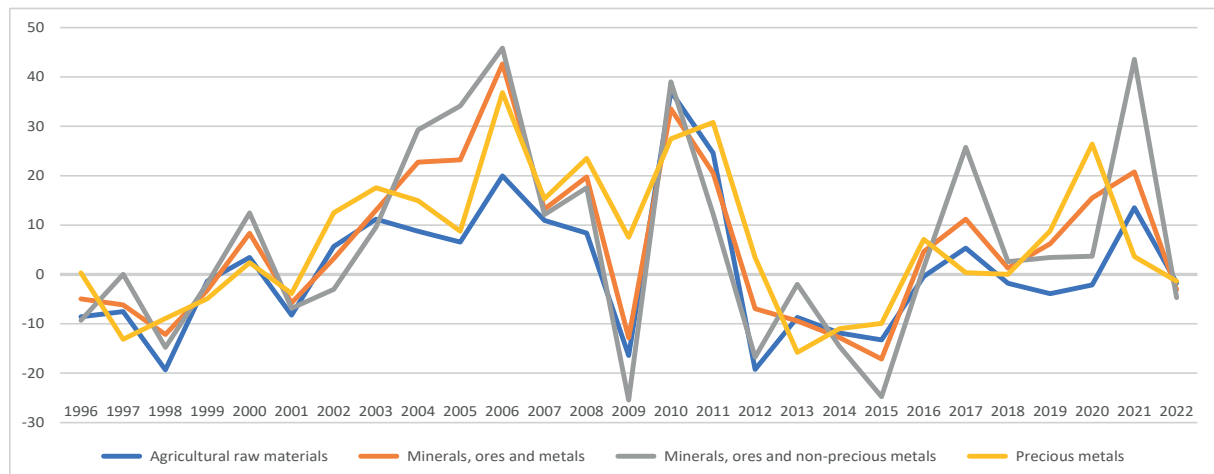
¹ This concept emerged as a highly publicized development proposal in this context. In contrast to the unlimited-growth pursuit, which was seen as a Western-led and neoliberal agenda, *vivir bien* recovered a historical indigenous life-style which aimed at achieving collective, as opposed to individual, wellbeing – and, most importantly, within certain limits. Without much accuracy about what live well meant or how to achieve it, it quickly became one of the flags of MAS. In the midst of the struggles of the Global South to emancipate from the North and its neoliberal policies, live well emerged as a very strong symbolism (Romero & Lanza, 2012). It tried to show that another way was possible. A way towards development, without following an individualist, capitalistic development one, but also letting go of the communist industrialist one.

reforms have engendered a new type of productive business and power structure, labeled as the primary-export and services model (PESER).

3. The Commodity Supercycle

Since the early 21st century, nations rich in natural resources have witnessed a substantial surge in international commodity prices. This surge is part of a cyclical pattern in commodity prices known as the commodity supercycle, as identified by authors such as Fernández et al. (2020), which occurs approximately every 20 to 30 years². Starting from the early 21st century, coinciding with China's entry into the World Trade Organization (WTO) in 2001, international commodity prices began to rise significantly, a trend that intensified with the onset of the global financial crisis in 2008 (Canuto, 2014; Fernández et al., 2020). This phase of increasing prices is commonly referred to as the boom phase or commodity boom (Wise, 2020), which has had substantial positive effects on economic indicators. However, following this cyclical pattern, since late-2014, as depicted in Figure 1, the commodity supercycle has entered a declining phase, during which all commodities exported by the region have experienced a sharp decrease in prices.

Figure 1: Commodity Price Index UNCTAD (United Nations Conference on Trade and Development)



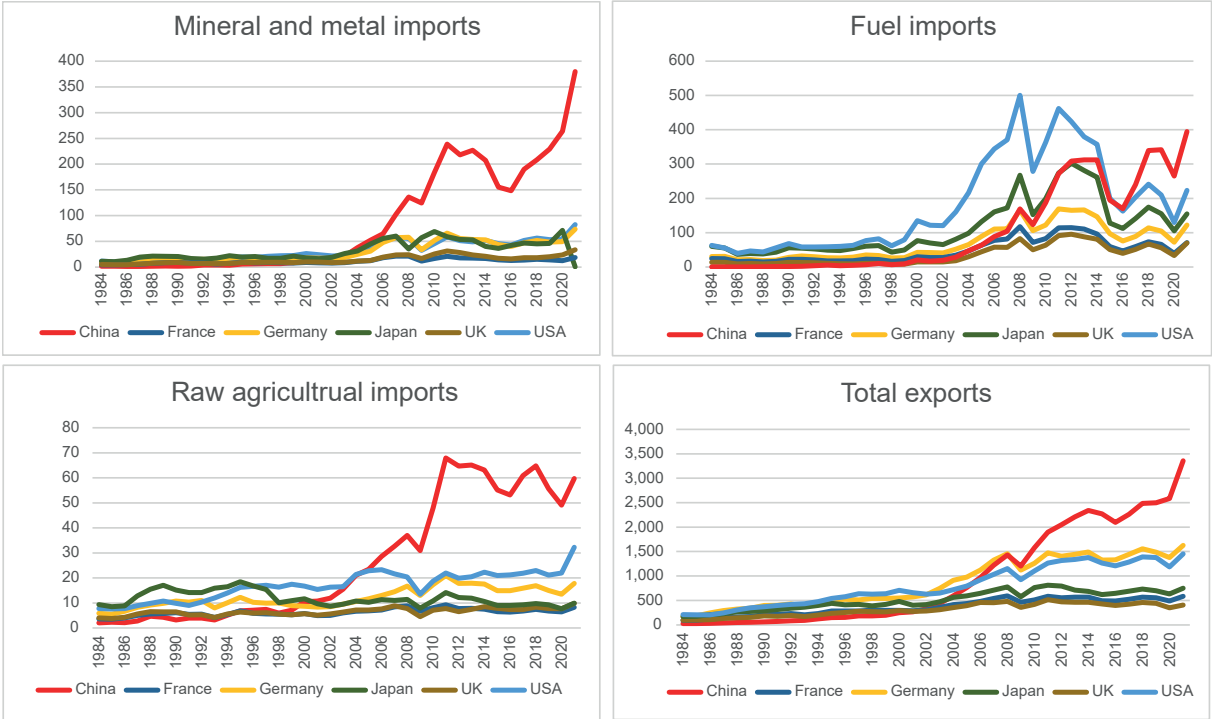
Source: Author's own elaboration with data from www.unctadstat.unctad.org

As previously mentioned, China played a pivotal role in the commodity boom. In current literature, the 21st-century commodity supercycle is often attributed to China's and

² For causes and impacts of commodity cycles, refer to Pindyck and Rotemberg (1990), Cuddington and Jerrett (2008), Erten and Ocampo (2013), Fernández et al. (2020), and Miyamoto and Nguyen (2017).

other Southeast Asian countries’ integration into the global market (Farooki & Kaplinsky, 2012). As depicted in Figure 2, the surge in prices for these commodities was a direct result of the remarkable increase in Chinese demand. This trend is particularly evident in agricultural and mineral commodities, which experienced exponential growth since around 2000 and 2005, respectively. Notably, China’s fuel purchases were significantly lower than those of the US and Japan until around 2015, when its imports surpassed those of all others.

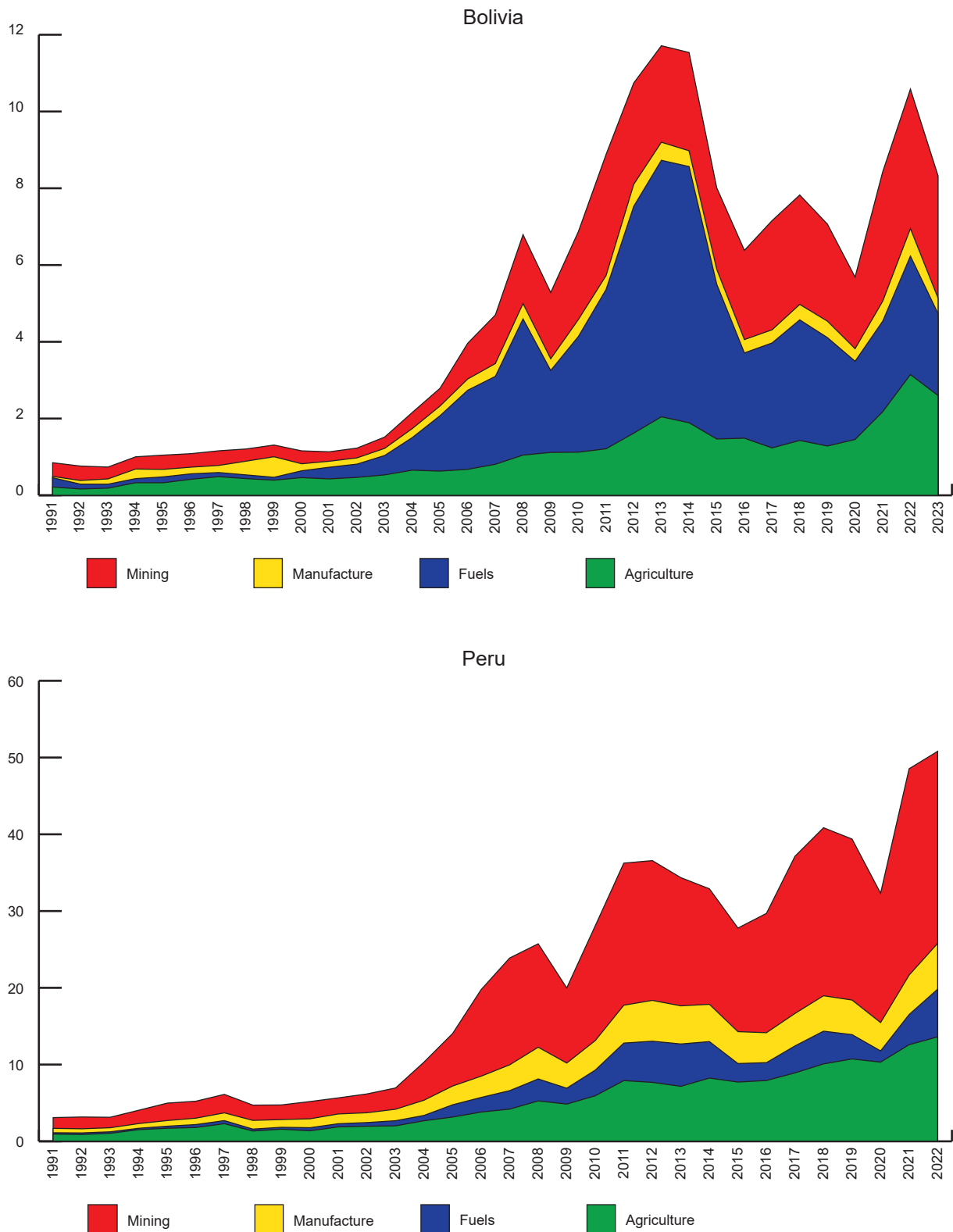
Figure 2: Commodity Imports, Selected Economies, by Value, 1984–2020, in Billion US\$



Source: Author’s own elaboration with data from www.data.worldbank.org

Considering their heavy reliance on primary exports, China’s sharply increasing demand for minerals and agricultural goods holds significant importance for analyzing the political economy of Bolivia and Peru. The onset of the boom can be traced back to 2002. As illustrated in Figure 2, albeit at different rates, prices of the most exported commodities from both nations have consistently risen, encompassing oil, mining, agriculture, and fisheries. Naturally, some products experienced more substantial increases than others, with varying impacts on the economies of both countries. However, as previously mentioned, after roughly a decade, the boom came to an end, and prices began to decline. These two periods have been categorized as the boom and post-boom phases.

Figure 3: Exports According to Sector, Bolivia and Peru, 1991–2019, in Thousand US\$



Source: Author's own elaboration based on data from www.wits.worldbank.org

The exports of Bolivia and Peru, as outlined in Table 1 and depicted in Figure 3 closely track the trajectory of the commodity supercycle from its peak to its decline. Total

exports surged during the boom phase, with Bolivia experiencing a remarkable 681% increase and Peru seeing a substantial 328% rise between 2004 and 2013. Notably, certain products such as natural gas, gold, and lead in Bolivia, and copper in Peru, witnessed nearly exponential growth rates exceeding 1400% over the course of a decade. However, in stark contrast, during the post-boom phase spanning from 2014 to 2022, Bolivia's exports declined by 28%, while Peru saw only a modest 6% growth in exports.

Table 1: Top 10 Exports at 6-Digit Level

Bolivia				Peru			
Code	Product	Boom growth	Post-boom growth	Code	Product	Boom growth	Post-boom growth
	Total	681%	-28%		Total	328%	6%
271121	Natural gas	1474%	-56%	260300	Copper ores	1538%	56%
260800	Zinc ores	699%	75%	710812	Gold, unwrought,	176%	-18%
710812	Gold, unwrought	1793%	426%	260800	Zinc ores	171%	55%
230400	Oilcake	217%	27%	740311	Copper, refined	137%	-26%
261610	Silver ores	891%	-41%	271019	Medium oils	383%	-10%
800110	Tin, unwrought	496%	-15%	230120	Fish flours, meals	83%	8%
260700	Lead ores	3643%	2%	271012	Petroleum light oils	n.a.	-50%
80122	Brazil nuts	371%	20%	271111	Natural gas, liquefied	n.a.	-55%
150710	Soy-bean oil	188%	-22%	260700	Lead ores	642%	-20%
711319	Jewelry	64%	20%	80610	Fresh grapes	2662%	83%

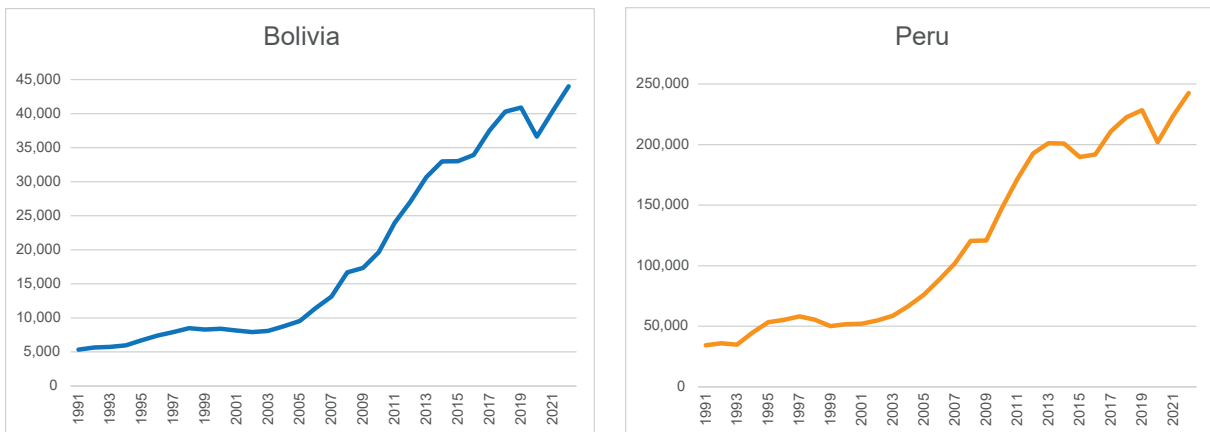
Source: Author's own calculation based on data from UN-Comtrade

4. Deepening of Core-Periphery Relations

Throughout the 21st century, Bolivia and Peru, despite employing contrasting economic strategies (liberal versus state-led), exhibited noteworthy economic performance, earning them the designation of “unexpected leaders” by George Gray (2014), Chief Economist at the United Nations Development Program in New York (UNDP). During the boom phase, both countries achieved impressive growth rates, averaging 5.9% in Peru and 5.4% in Bolivia. Despite a slowdown in GDP growth during the post-boom phase, it remained higher than that of the 1980s and 1990s, with both nations securing top positions in the region. Notably, their growth rates during this period rival those

achieved during the commodity boom of the 1970s (refer to Annex 1). As illustrated in Figure 4, there is a significant departure from the trends of the 1990s, with Bolivia and Peru experiencing remarkable economic growth of 320% and 242%, respectively, from 2006 to 2019. Additionally, this economic expansion was accompanied by substantial improvements in living conditions, as evidenced by various social indicators such as increased life expectancy, reduced undernourishment, lower mortality rates, improved sanitation, and enhanced access to basic services (refer to Annex 2).

Figure 4: Nominal Gross Domestic Product, 1991–2022, in Current Million US\$



Source: Author's own elaboration with data from www.data.worldbank.org

It's important to note that the vulnerability to external shocks due to dependence on natural resource extraction is not a new challenge for the Andean nations (Kehoe et al., 2019). Historically, periods of robust economic growth have often been followed by economic slowdowns, triggering social unrest and political instability (Wolff, 2020). This phenomenon, termed 'narrow-base growth' by Gray (2007), describes significant economic expansion driven by price-induced factors and primarily reliant on the revenues from extractive industries.

The subsequent sections of this paper aim to assess the impact of the 21st-century commodity boom on the international integration of Bolivia and Peru into the global economy. Throughout the 21st century, several positive external factors have enhanced economic conditions in the region, including rapid growth in international trade, the commodity price surge, increased access to external financing, and rising remittances (Ocampo et al., 2015). However, the pertinent question arises regarding the benefits derived from these external conditions.

Overcoming the extractivist paradigm poses a significant challenge, considering the region's long-standing reliance on its traditional comparative advantages, namely

natural resources (Bodemer, 2017). This paper, beyond examining indicators such as economic growth rates and improvements in social indicators, aims to empirically determine whether the substantial external revenues received by both nations, primarily due to price increases, translated into short-term gains or contributed to their medium-term performance enhancement. This assessment is conducted by analyzing two key variables: industrial development and macroeconomic vulnerability.

4.1 Productive Development

Both Peru and Bolivia historically have had relatively small manufacturing sectors, primarily focused on basic goods. However, a trend of reprimarization in exports emerged during the 21st century. This shift occurred because, during the neoliberal era, both countries diversified their production and ventured into value-added manufacturing.

In Bolivia, manufacturing exports experienced growth from the early 1990s and constituted a significant portion of total exports until 2003, averaging around 19% of the total. A notable milestone occurred in 1999 when non-traditional exports accounted for 40% of the total. Subsequently, there was a decline, both in absolute and relative terms, with manufacturing exports averaging roughly 6% of total exports from 2004 to 2019.

In contrast, Peru's case differs. Manufacturing exports consistently maintained a minimum of 10% of total exports since the late 1970s, increasing from 12% in 1982 to 22% in 1999. The average share from 1980 until the commodity price surge in 2003 was 19%. However, since then, manufacturing exports declined in significance, averaging 13% from 2004 to 2019. Although Peru cannot be classified as an industrialized nation, the disparity with Bolivia is noteworthy. Peru boasts 11 products (at the 6-digit level of HS classification³) with exports exceeding US\$1 billion, four of which are not related to extractive sectors.

3 The Harmonized System (HS) is a universally recognized system of names and numbers utilized for the classification of traded goods. Developed and maintained by the World Customs Organization (WCO), it categorizes products using a six-digit code, which is uniform across all countries. At the 2-digit level, it categorizes goods into 99 chapters, each defining a specific category of product: Live animals and animal products (Chapters 1-5), vegetable products, (Chapters 6-15), Food products (Chapters 16-24), Minerals (Chapters 25-26), Fuels (Chapter 27), Chemicals (Chapters 28-38), Plastics and rubber (Chapters 39-40), Hides and skins (Chapters 41-43), Wood (Chapters 44-49), Textile and clothing (Chapters 50-63), Footwear (Chapters 64-67), Stone and glass (Chapters 68-71), Metals (Chapters 72-83) Machinery and mechanical appliances; electrical equipment (Chapters 84-85), Transport equipment (Chapters 86-69), Miscellaneous (Chapters 90-99).

A more detailed analysis shows that over the 20-year span, Bolivia's product composition has remained largely unchanged, whereas Peru has experienced slight diversification, particularly in agriculture (Table 2). In Bolivia, the primary processed goods include agro-industrial products, unwrought tin, and relatively smaller-value exports like alcohol, sugar, and chipped wood. The most notable diversification in Bolivia includes fertilizers and frozen bovine meat. In Peru, refined minerals remain the largest manufacturing exports, followed by textiles and apparel. In agriculture, four products have surpassed US\$1 billion in exports: fish flour, grapes, berries, and avocado. Lastly, the share of manufacturing goods exports as a proportion of the total has decreased. In Bolivia, soy and sunflower oil and their derivatives, still the main industrial exports, decreased in importance from 23% of the total in 2002 to 16% in 2022.

Table 2: Top 10 Non-Extractive Exports, Bolivia and Peru, in Thousand US\$ and Percentage, 2002 and 2022

Bolivia							
Code	Product label	2002	%	Code	Product label	2022	%
TOTAL	All products	1,674,001		TOTAL	All products	13,652,813	
2304	Oil cake	215,888	13%	2304	Oil cake	980,825	7%
1507	Soy-bean oil	113,832	7%	1507	Soy-bean oil	856,506	6%
8001	Unwrought tin	58,141	3%	8001	Unwrought tin	511,282	4%
7113	Jewelry	54,389	3%	1201	Soy beans	334,479	2%
0801	Brazilian nut	37,707	2%	0801	Brazilian nut	197,434	1%
1201	Soy beans	25,460	2%	3102	Nitrogenous fertilizers	194,409	1%
1701	Cane sugar	23,669	1%	1512	Sunflower-seed	132,326	1%
4407	Wood saw	22,276	1%	0202	Bovine meat	120,069	0.9%
4104	Hides and skins	15,663	0.9%	7106	Silver	114,766	0.8%
1208	Soy flour	14,583	0.9%	7113	Jewelry	87,543	0.6%
Total		581,608	35%	Total		3,529,639	26%

Peru							
Code	Product label	2002	%	Code	Product label	2022	%
TOTAL	All products	9,026,639		TOTAL	All products	58,172,424	
7403	Refined copper	791,870	9%	7403	Refined copper	2,488,924	4%
2301	Fish flour, meals	743,850	8%	2301	Fish flours, meals	1,785,349	3%
6109	T-shirts, singlets	240,776	3%	0810	Strawberries, raspberries	1,435,275	2%
8001	Unwrought tin	211,242	2%	0806	Grapes	1,296,674	2%
7106	Unwrought silver	191,580	2%	0804	Avocados	1,199,408	2%
0901	Coffee	181,130	2%	0901	Coffee	1,188,902	2%
6105	Men's or boys' shirts	142,444	2%	7901	Unwrought zinc	932,802	2%
7901	Unwrought zinc	129,022	1%	8001	Unwrought tin	734,240	1%
2005	Vinegar	118,624	1%	1504	Fish fats and oils	561,608	1%
0709	Fresh vegetables	108,618	1%	0307	Molluscs for consumption	542,969	1%
Total		2,859,156	32%	Total		12,166,151	21%

Source: Author's own elaboration based on data from UN-Comtrade

In addition, to formally assess advances and setbacks in industrial development, there is a concept that is commonly used in development studies, particularly when discussing shifts in the composition of a country's exports and production toward primary goods or commodities, reprimarization (Cooney, 2021). The process of reprimarization involves a shift in an economy's production and export structure towards a greater reliance on primary goods or commodities, often at the expense of value-added manufacturing or service sectors (Cooney, 2016). This phenomenon typically involves a reversal of earlier diversification efforts and a renewed emphasis on extractive or agricultural activities (Estay, 2018).

Then, to seek for reprimarization in Bolivia and Peru, it is worth noting that neither of them have medium or high-tech production and manufacturing can be more accurately described as "resource-based manufacturing," referring to products that undergo minimal transformation processes. Based on this the first observation supporting the notion of reprimarization in Bolivia in this period is the increased share of extractive sector exports in total exports, rising from 55% in 2002 to 70% in 2022. Conversely, in Peru, the proportion of extractive exports remained relatively stable at around 48% over the same period.

This can be complement with the economic complexity concept, as developed by Hausmann et al. (2013) for more robust conclusions. Data from this index show that Bolivia and Peru export products mostly from the least complex categories. That is, products that have lower added value. As can be seen in Annex 6, exports of both countries belong to the lowest levels of complexity. There are only tiny fractions of goods that required a complex production process, and accordingly have a higher added-value.

Then, following Hausmann et al. (2013) it can be concluded that there has been a setback in added-value production in both nations during the 21st century. Specifically, as the Atlas of Economic Complexity mentions⁴,

Bolivia ranks as the 110th most complex country in the Economic Complexity Index (ECI) ranking. Compared to a decade prior, Bolivia's economy has become less complex, worsening 4 positions in the ECI ranking. Bolivia's worsening complexity has occurred in spite of the increasing diversification of its exports, as the country has diversified into lower complexity products. Moving forward, Bolivia is positioned to take advantage of few opportunities to diversify its production using its existing knowhow.

Peru ranks as the 105th most complex country in the Economic Complexity Index (ECI) ranking. Compared to a decade prior, Peru's economy has become less complex, worsening 10 positions in the ECI ranking. Peru's worsening complexity has been driven by a lack of diversification of exports. Moving forward, Peru is positioned to take advantage of a moderate number of opportunities to diversify its production using its existing knowhow.

4.2 Macroeconomic Vulnerability

Unequal exchange in the global economy leads to persistent imbalances in peripheral economies, with significant ramifications. All nations require foreign exchange reserves to engage in international trade. However, the continual decline in terms of trade results in a consistent depletion of these reserves, particularly impacting developing nations. This phenomenon is structural in nature and often manifests as external balance deficits in peripheral countries. These deficits, in turn, influence internal balance dynamics. Notably, there exists a strong causal relationship between a nation's government

⁴ The Growth Lab at Harvard University. The Atlas of Economic Complexity. <http://www.atlas.cid.harvard.edu>.

budget balance and its current account balance, commonly referred to as the twin deficit phenomenon (Cavallo, 2005).

When international prices for commodities exported by Bolivia and Peru plummeted, it triggered a decline in capital flows, including foreign direct investment and foreign currency inflows. Consequently, there was a sharp reduction in government revenue. In response, governments faced the challenge of securing funding for public expenditure and exploring alternative measures to acquire foreign reserves.

Historically, Bolivia and Peru addressed this issue by resorting to external borrowing. In addition to conventional domestic measures like tax hikes and expenditure cuts, they relied on expanding foreign debt. Although foreign direct investment (FDI) inflows serve as an alternative to borrowing, they have historically been cyclical, relatively modest, and primarily directed towards natural resource sectors. Moreover, during previous commodity booms, such as the one in the 1970s, the external surplus did not translate into an internal surplus, largely due to substantial funding requirements to sustain state-owned enterprises (SOEs). Therefore, as commodity prices declined after the significant economic expansion in both countries, the situation rapidly deteriorated.

This predicament was particularly severe during the 1990s when the budgets of most peripheral nations relied heavily on loans from international financial institutions (IFIs) like the International Monetary Fund (IMF) and the World Bank (WB). The escalating indebtedness invariably led to unsustainable conditions in preceding periods.

4.2.1 Expansive Phase of the Boom

During the boom's expansion phase from 2003 to 2013, the surge in prices resulted in a substantial influx of resources for both nations. Bolivian exports skyrocketed sixfold, from US\$ 2 billion to US\$ 12 billion, while Peruvian exports grew fivefold, from US\$ 7 billion to US\$ 35 billion (see Figure 3). Consequently, both countries experienced trade surpluses (see Figure 5). In Bolivia, the trade surplus averaged 5.8% of GDP from 2004 to 2014, whereas in Peru, it averaged 4.4% from 2003 to 2012. Additionally, FDI played a significant role in Peru (refer to Annex 3). Between 2005 and 2009, Peru's average FDI inflows were US\$ 4.9 billion, steadily increasing to US\$ 13.6 billion in 2013, equivalent to one-third of that year's export value. Although Bolivia saw a consistent rise in FDI inflows since 2005, the amounts were relatively modest, peaking at US\$ 1.7 billion in 2013, which accounted for only 14% of exports that year (refer to Annex 3).

A significant distinction in public finances during the 21st century, unlike the 1970s and 1980s, is the reduced reliance on foreign debt as a primary income source (see Figure 6c and 6d). In Peru, starting from the 1990s, the government increasingly borrowed, causing the debt stock to climb from 27 billion in 2003 to 56 billion in 2013. However, in relative terms, there was a consistent decline during this period. As a percentage of Gross National Income (GNI), Peru's external debt decreased from 53% to 33% from 2003 to 2013. In Bolivia, nominal external debt saw only a slight uptick in this timeframe. This is attributed to two main factors. Firstly, the Bolivian government secured minimal multilateral loans, primarily from institutions like CAF and the World Bank. Secondly, multilateral debt decreased due to various debt relief initiatives (refer to Annex 7). Starting from US\$ 5.1 billion in 2003, Bolivia's debt dropped to US\$ 2.9 billion in 2009 before rising again to US\$ 5.5 billion in 2013. Relative to GNI, Bolivian debt stocks experienced a sharp decline, plummeting from 72% in 2000 to 28% in 2013.

During this period, both nations achieved an unprecedentedly robust position in the global economy. Foreign exchange reserves consistently expanded, reaching \$14 billion in Bolivia and \$65 billion in Peru by 2013 (see Figure 6). This advantageous standing is further underscored by an index that compares reserve levels to foreign debt (refer to Figure 6c). In Peru, reserves represented 50% of its foreign debt in 2003, increasing to over 100% by 2013. This trend was even more pronounced in Bolivia, where reserves surged from 40% of the debt in 2003 to nearly 250% in 2013. Consequently, Bolivia was able to implement a fixed exchange rate in 2011, aiming to reduce the extensive use of dollars in the economy and regain control over monetary policy⁵. As a result, the exchange rate gradually appreciated. Conversely, Peru adopted a flexible exchange rate model in the 2000s to enhance export competitiveness⁶.

As a direct consequence, internal balance in both nations saw a significant improvement (refer to Figure 5). For the first time since the 1970s, both Bolivia and Peru enjoyed more than eight consecutive years of fiscal surplus. In Bolivia, the average yearly fiscal deficit stood at 5.2% of GDP between 1995 and 2005, whereas it averaged almost 2% surplus annually from 2006 to 2013. Similarly, in Peru, following nearly a decade of

5 During the 21st century, Bolivia's exchange rate system continued the crawling peg mechanism initiated during the late 1980s structural adjustments. In a crawling peg system, currency values are adjusted gradually in small increments relative to a specific benchmark or anchor currency, typically in response to economic shifts. However, in 2011, Bolivia effectively transitioned to a fixed exchange rate system, where the currency's value remained constant without fluctuations ever since.

6 This is clearly explained by Dancourt & Mendoza (2016: 1) who asserts that, since the early 2000s, "the Central Reserve Bank of Peru (BCRP) has applied an inflation targeting scheme where there are two basic monetary policy instruments: a short-term interest rate is set, which is done by many central banks, and systematic sterilized foreign exchange intervention is carried out, which very few central banks do"

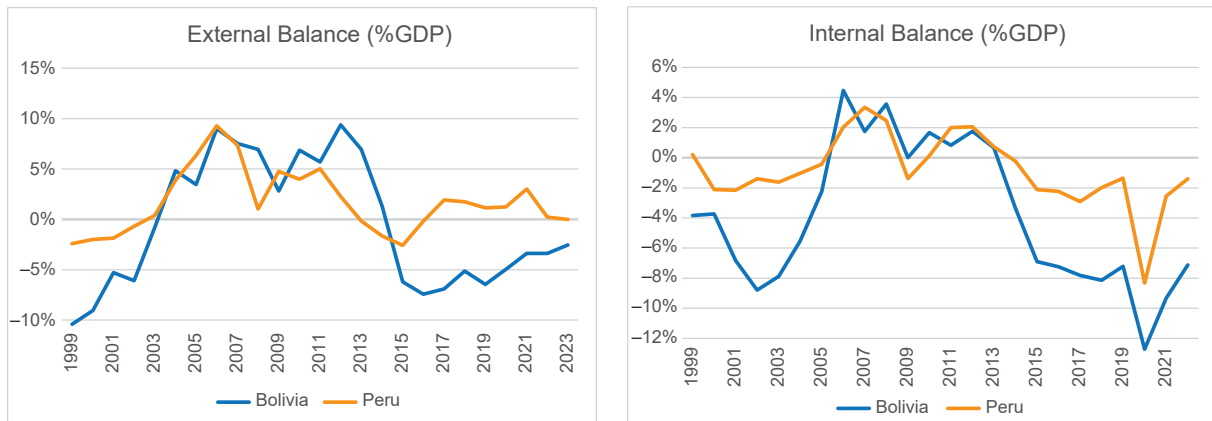
nearly 8% yearly fiscal deficit, the country experienced an average yearly surplus of 1.5% of GDP since 2005.

Considering their divergent development models, it's important to examine how the political economy trajectories of both nations influenced the capture of rents and the transfer of surplus into the economy. Firstly, in Bolivia, a significant portion of external income was directly controlled by the state due to the nationalization of hydrocarbons. Gas exports constituted half of total exports during this period, with revenues owned by state-owned enterprises like Yacimientos Petroliferos Fiscales Bolivianos (YPFB). The government's share of revenue reached 82% in several years. Consequently, according to some estimates, if Bolivia had not implemented the nationalization of hydrocarbons, the state could have lost up to US\$ 74 billion in income from 2006 to 2017 (CELAG, 2019). In contrast, the mining sector contributed only 9% of its revenue to the government, with the primary focus of the MAS government being on employment generation rather than extraction rents.

The Peruvian government utilized various mechanisms to capture rents from the hydrocarbon and mining sectors, including taxes, royalties, and production-sharing agreements. In the hydrocarbon sector, companies granted exploration and production rights were required to pay royalties to the government. Additionally, income taxes were levied on profits earned from hydrocarbon operations, and in certain cases, the government received a share of production through production-sharing agreements. Similarly, in the mining sector, companies were subject to taxes on profits and royalties on extracted minerals. The government also employed production-sharing agreements to capture rents, wherein it received a portion of production in exchange for granting mining rights.

Furthermore, the Peruvian government implemented policies to enhance its share of profits from these sectors. For instance, in 2011, it passed legislation increasing the mining royalty rate from 1% to 12% for companies extracting copper, gold, and silver. This adjustment aimed to secure a larger portion of the profits generated by the mining industry.

Figure 5: Bolivia and Peru, External and Internal Balance, as Percentage of Gross Domestic Product, 1999–2022



Source: Author's own elaboration based on data from www.data.worldbank.org

Despite differing perspectives on the extent of state intervention in economic affairs, it's important to highlight that in both countries, the substantial increase in external income led to a shift in the financing of public investment from foreign savings to domestic savings (Morales, 2018). Specifically, significant public investments, particularly in infrastructure, and social policies were funded using the foreign reserves they amassed. Empirical studies, such as Burchardt (2017), demonstrate that the implementation of new conditional cash transfer programs played a crucial role in significantly reducing poverty rates and improving access to education and healthcare.

In Bolivia, social policies were primarily geared towards leveraging revenue from the country's gas reserves to combat poverty and inequality. Under the Morales administration, a range of social programs were introduced, including cash transfers, subsidies for food and essential services, and the development of new infrastructure like hospitals, schools, and roads. These initiatives specifically targeted the needs of impoverished and marginalized communities, particularly in rural areas. Notably, the government heavily subsidized energy costs, despite the significant expense, to benefit all citizens.

In Peru, social policies were largely funded by revenues from the mining industry. The government implemented programs aimed at poverty reduction, enhancing access to education, and improving healthcare services. Additionally, environmental regulations and social responsibility initiatives were introduced to address the adverse effects of mining on communities and the environment.

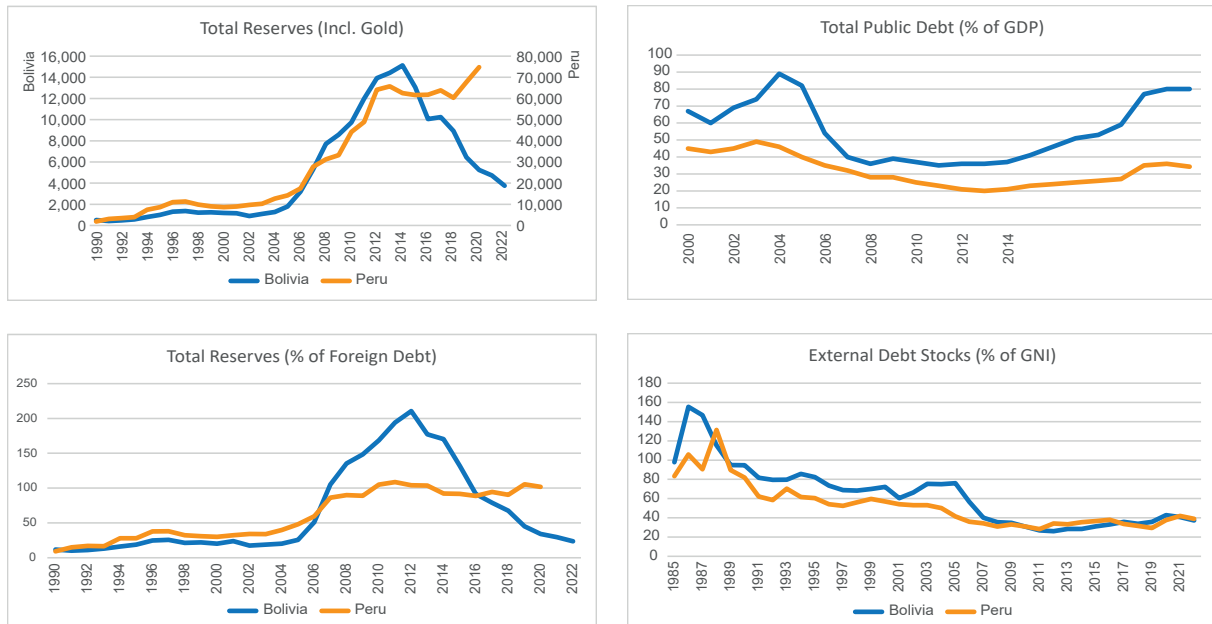
4.2.2 Declining Phase

The improvement in income proved to be short-lived and followed the typical trajectory of the commodity cycle. As international commodity prices declined, several economic indicators began to deteriorate. Initially, this decline affected external income. Peru saw a decline in its external balance starting in 2012, while Bolivia experienced a similar trend starting in 2013. By 2015, both countries had transitioned from a surplus to a deficit in their external balances.

However, there is a significant disparity between Bolivia and Peru in terms of the impact of falling international prices. It can be argued that Bolivia experienced a more pronounced and escalating macroeconomic imbalance due to the price drop, whereas Peru's imbalance was comparatively smaller. Consequently, Bolivia faced a heightened level of macroeconomic vulnerability during the post-boom phase, while Peru managed to navigate this phase more successfully.

The first variable analyzed for vulnerability is the external balance. After 2015, Bolivia's balance turned negative and never recovered, remaining at around -5% of GDP. In contrast, Peru's external balance turned positive again by 2017, reducing the macroeconomic imbalance. Bolivia's adherence to a de facto fixed exchange rate since 2011 had a significant impact on foreign reserves, which plummeted from their historical peak of almost US\$ 15 billion in 2015 to US\$ 4.1 billion by December 2022. On the other hand, Peru's flexible exchange rate resulted in a slight decrease in reserves at the Central Bank, which amounted to US\$ 74 billion by 2020, surpassing the previous peak achieved in 2013.

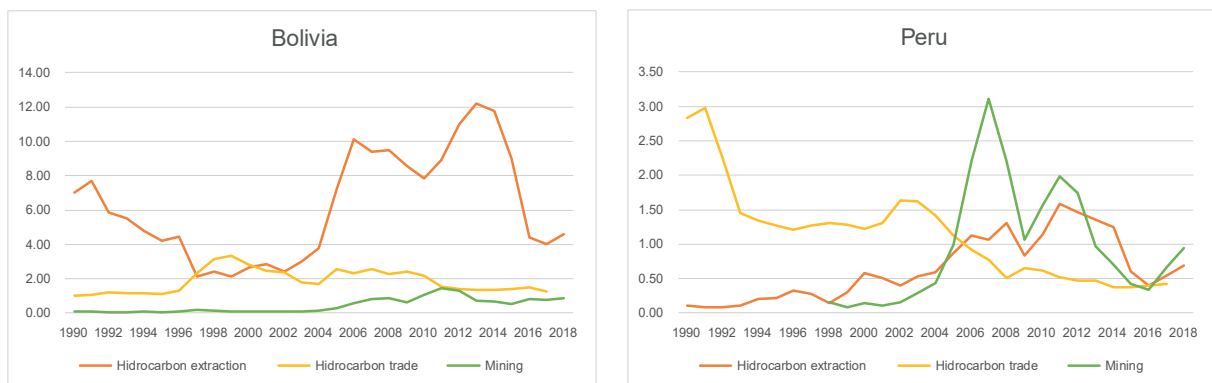
These developments heavily influenced the stability of government finances. After nearly nine years of fiscal surplus, both nations returned to a situation of deficit, a common trend in their history. However, the difference between Bolivia and Peru is notable. Bolivia experienced a public deficit of almost 7% of GDP per year during this period, while Peru's deficit remained lower than 2% yearly, on average.

Figure 6: Reserves and Debt, Bolivia and Peru, Several Indicators

Source: Author's own elaboration based on data from www.data.worldbank.org

This phenomenon can be partly explained by the significant dependence of the Bolivian government on extractive rents. Public revenue from hydrocarbons was particularly critical in Bolivia, averaging 10% of total revenue from 2006 to 2015. In contrast, Peru had more diversified public revenues, with extractive rents accounting for barely 3% of the total on average during the same period. While mining rent was more important than hydrocarbons in Peru, it still only reached 3% of total revenue at its peak in 2007. With the fall in commodity prices, extractive rents declined accordingly.

Therefore, the large public deficit in Bolivia can be best understood by the sharp decline in hydrocarbon rents. As depicted in Figure 7, public revenue from this sector experienced a significant drop from 11% in 2014 to 4% in 2018.

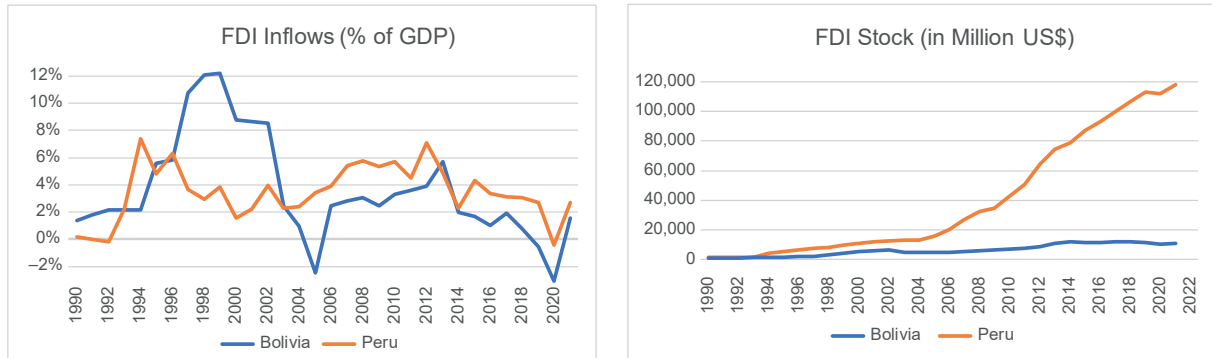
Figure 7: Public Revenues From Non-Renewable Natural Resources (% of GDP)

Source: Author's own elaboration based on data from www.statistics.cepal.org

In addition, the responses of the Peruvian and Bolivian governments to the crisis differed significantly. In Bolivia, the substantial size of internal and external deficits was offset by a massive depletion of reserves from the Central Bank. As illustrated in Figure 6a, reserves plummeted from almost US\$ 15 billion in 2014 to US\$ 4 billion by December 2022, declining at an average rate of almost US\$ 1.37 billion per year. This gradual depletion of reserves eventually led to a return to historical financing mechanisms, particularly debt. Since 2011, there has been a rapid increase in debt, rising from 40% to 80% of GDP by 2021. One notable difference from the economic downturn of the early 1980s is the availability of reserves from the Central Bank, which enabled the financing of the external imbalance, resulting in the majority of this debt being internal. Foreign debt increased slowly for most of this period, but a clear acceleration occurred in 2018, with external indebtedness doubling from US\$ 14.26 billion in 2020 (Figure 6d).

The situation in Peru contrasts sharply with that in Bolivia. Despite controlling internal and external deficits within two years after the fall in international prices, Peru experienced a slower increase in external debt during this period. Peru's relatively better position is evident in several indicators in Figure 6. First, public debt remained at a low level, reaching 35% of GDP in 2021 (Figure 6b). Second, foreign reserves stabilized after the commodity price fall and resumed their growth trajectory, reaching an all-time high in 2022, with almost US\$ 75 billion (Figure 6a and 6c). Third, foreign debt remained at low levels, barely reaching 40% of GNI in 2022 (Figure 6d).

Another variable explaining the differences between Bolivia and Peru is foreign direct investment (FDI). This aspect underscores the significant impact of the divergent development models of Bolivia and Peru on their international market integration (refer to Figure 8). In Bolivia, with a statist economic model, foreign capital had to comply with Bolivian regulations and pay their fair share. As former President Evo Morales asserted, Bolivia sought partners, not owners. This stance was reflected in the enactment of a new framework that removed all privileges previously enjoyed by foreign investment. The nationalization of hydrocarbons, public services, and even mines, coupled with frequent conflicts and community invasions of mining concessions, created a high-risk business environment, as evident in the data presented in Figure 8. FDI in Bolivia during the 21st century was significantly lower compared to the neoliberal period. Moreover, since the approval of the new investment law in 2014, FDI declined even further, reaching negative levels for the past three years.

Figure 8: FDI Flows and Stock, Bolivia and Peru

Source: Author's own elaboration based on data from www.statistics.cepal.org.

In turn, Peru continued to implement measures to attract more foreign direct investment (FDI), with varying results. Since 2002, Peru has managed to attract significant amounts of FDI, as depicted in Figure 8, amounting to nearly 12 times the stock seen in Bolivia by the year 2020. Additionally, as shown in Annex 7, Bolivia followed a typical core-periphery pattern in FDI, with the majority of investments flowing into extractive sectors, namely mining until 2008 and then hydrocarbons. In contrast, Peru's FDI landscape was not only larger but also more diversified. While mining consistently received a substantial portion of FDI, ranging between 10% and 15%, four other sectors also attracted considerable investment: communications, energy, finance, and industry.

5. Conclusions

During the 21st century, Bolivia, and Peru took divergent paths in their development trajectories. Peru adhered to neoliberal policies, whereas Bolivia underwent a leftward shift, embracing statism. Despite these ideological disparities, both countries witnessed the highest growth rates in the region for much of the analysis period. These economic booms coincided with reductions in poverty, decreases in inequality, and enhancements in various welfare indicators. However, rather than being solely attributed to specific policies within each nation, these outcomes were primarily driven by substantial increases in international commodity prices.

There are notable differences between Bolivia and Peru following the decline in commodity prices. In Peru, the fiscal and monetary situation deteriorated briefly before swiftly recovering, whereas Bolivia's macroeconomic indicators continued to worsen. Peru's external balance returned to a surplus in 2016, and its reserves stabilized and even increased by 2019. Despite a negative internal balance, it remained relatively low, averaging around 2% and almost reaching zero in 2018. Conversely, Bolivia reverted

to historical levels of vulnerability. Since 2015, it has maintained an average external deficit of nearly 6% and an internal deficit of around 8% since 2016. Additionally, adverse conditions for foreign investment and a fixed exchange rate led to a substantial decrease in Bolivia's foreign reserves, decreasing by approximately \$1 billion annually.

To counter the income loss, Bolivia turned to both internal and external borrowing once again. While external debt as a percentage of Gross National Income (GNI) remains manageable at 40%, Bolivia's combined public debt soared to 60% of GDP in 2019 and 80% in 2021. In contrast, Peru's public debt stands at 30% of GDP, marking one of its lowest historical values.

Based on these observations, one main conclusion is that the aftermath of the commodity boom revealed distinct development trajectories between Bolivia and Peru, resulting in varying short-term economic outcomes. This finding is significant as it challenges previous studies such as Svampa (2013) and Gray (2014), which argued that both neoliberal and statist approaches led to successful outcomes by further entrenching their extractivist models. While it is true that both Bolivia and Peru experienced improvements in well-being during the commodity boom phase, the novelty lies in the medium-term perspectives.

Accordingly, it can be inferred that during the 21st century, Peru enhanced its position in the global economy by effectively managing macroeconomic imbalances during the downturn. Despite increased reliance on natural resources, incoming capital was utilized to bolster productive capacities, thereby securing future income streams. In contrast, Bolivia's peripheral status was exacerbated during the boom, and the subsequent drop in international prices precipitated familiar challenges: internal and external deficits, depletion of foreign reserves, and escalating indebtedness as a remedy.

Furthermore, the lack of foreign investment and technology transfer in Bolivia is exacerbating the decline in hydrocarbon and mining exports, directly contributing to a sharp reduction in extractive rents.

6. Bibliography

Acosta, A. (2011): "Extractivismo y neoextractivismo: dos caras de la misma maldición", in: *Más allá del desarrollo*, 1, 83–118.

- Agramont, D. & Bonifaz, G. (2018): “The Growing Chinese Presence in Latin America and its (Geo) Political Manifestations in Bolivia”, *LSE Global South Unit Working Paper Series*, No. 2, London: London School of Economics and Political Science.
- Altomonte, H., Lardé, J., Arroyo, A. & Acquatella, J. (2013): “Rentas de recursos naturales no renovables en América Latina y el Caribe: evolución y participación estatal, 1990-2010”, Santiago de Chile: *CEPAL – Serie de Seminarios y conferencias 72*.
- Arce, L. (2020): *Un modelo económico justo y exitoso: La economía boliviana, 2006-2019*. México: Fondo de Cultura Económica.
- Artaraz, K. (2012): *Bolivia: Refounding the Nation*. London: Pluto Press.
- Baer, W. & Soares, F. V. (2014): “Economic Growth, Commodity Prices, and the Natural Resource Curse: Revisiting the Evidence”, in: *Journal of International Development*, 26, 5, 589–608.
- Berg, A. & Ostry, J. D. (2011): “Inequality and Unsustainable Growth: Two Sides of the Same Coin?”, in: *IMF Staff Discussion Notes*, 11, 08, 1–23.
- Bodemer, K. (2017): “Beyond Neo-Extractivism: Challenges and Opportunities for Active International Insertion in Latin America”, *Analysis, Proyecto Regional Transformación Social-Ecológica*, Ciudad de México: Friedrich Ebert Stiftung.
- Bonilla, A. & Milet, P. (2015): “Introducción: Los impactos de China en las relaciones internacionales de América Latina y el Caribe”, in: Bonilla, A. & Milet, P. (eds.): *China en América Latina y el Caribe: escenarios estratégicos subregionales*, San José: FLACSO & Corporación Andina de Fomento CAF, 9–22.
- Bull, B. (2013): “Social Movements and the ‘Pink Tide’ Governments in Latin America: Transformation, Inclusion and Rejection”, in: Stokke, K & Törnquist, O. (eds.): *Democratization in the Global South: The Importance of Transformative Politics*, 75–99.
- Burchardt, H. J. & Dietz, K. (2014): “(Neo-) Extractivism – A New Challenge for Development Theory from Latin America”, in: *Third World Quarterly* 35, 3, 468–486.
- Burchardt, H. J. (2017): “La crisis actual de América Latina: causas y soluciones”, in: *Nueva Sociedad*, 267, January, 2017, at: <https://nuso.org/articulo/la-crisis-actual-de-america-latina-causas-y-soluciones/> (Last access: 27.05.24).

- Cameron, M. A. (2009): “Latin America’s Left Turns: Beyond Good and Bad”, in: *Third World Quarterly*, 30,2, 331–348.
- Cameron, M. A. & Sharpe, K. E. (2010): “Andean Left Turns: Constituent Power and Constitution Making”, in: Cameron, M. A. & Hershberg, E. (eds.): *Latin America’s Left Turns: Politics, Policies, and Trajectories of Change*, London: Lynne Rienner Publishers, 61–78.
- Canuto, O. (2014): “The Commodity Supercycle: is this Time Different?”, in: *World Bank – Economic Premise*, 150, 1–3.
- Castañeda, J. G. & Morales, M. A. (2006): “The Left Turn Continues”, in: Brown J. *World Aff.airs*, 13, 201.
- Castañeda, J. G. (2007): *Lo que queda de la izquierda: Relatos de las izquierdas latinoamericanas*. México: Taurus.
- Cavallo, M. (2005): “Understanding the Twin Deficits: New Approaches, New Results”, San Francisco: *FRBSF Economic Letter* 16.
- CELAG (2019): “¿Qué sería de Bolivia sin su política de nacionalizaciones?”, in: *celag DATA*; May 1, 2019, at: <https://www.celag.org/que-seria-de-bolivia-sin-su-politica-de-nacionalizaciones/> (Last access 13.05.2024).
- Chodor, T. (2015): *Neoliberal Hegemony and the Pink Tide in Latin America: Breaking up with TINA?* New York: Palgrave Macmillan.
- Cooney, P. (2016): “Reprimarization: Implications for the Environment and Development in Latin America: The Cases of Argentina and Brazil”, in: *Review of Radical Political Economics*, 48, 4, 553–561.
- Cooney, P. (2021): *Paths of Development in the Southern Cone: Deindustrialization and Reprimarization and Their Social and Environmental Consequences*. Cham: Palgrave Macmillan.
- Crabtree, J. & Durand, F. (2017): *Perú: élites del poder y captura política*. Lima: Red para el Desarrollo de las Ciencias Sociales en el Perú.
- Da Rocha, F. F. & Bielschowsky, R. (2018): “La búsqueda de China de recursos naturales en América Latina”, in: *Revista CEPAL*, 126, 9–30.
- Dancourt, O. & Mendoza, W. (2016): “Intervención cambiaria y política monetaria en el Perú”, *Documento de Trabajo*, No. 22, Departamento de Economía: Pontificia Universidad Católica del Perú.

- Dussel-Peters, E. & Gallagher, K. P. (2014): "China and the Latin American Commodity Boom: Elements of a New Structuralist Approach", in: *Journal of Post Keynesian Economics*, 37, 2, 199–226.
- Dussel-Peters, E. (2015): "Comercio y relaciones estratégicas entre América Latina y el Caribe y la República Popular China. China en América Latina y el Caribe: Escenarios estratégicos subregionales", in: Bonilla Soria, A. & Milet García, P. (eds.): *China en América Latina y el Caribe: escenarios estratégicos subregional*, San José: FLACSO/CAF, 23–50.
- Erten, B. & Ocampo, J. A. (2013): "Super-Cycles of Commodity Prices since the Mid-nineteenth Century", in: *World development*, 44, 14–30.
- Estay, J. (2018): "Past and Present of Latin American Regionalisms, in the Face of Economic Reprimarization", in: Vivares, E. (ed.): *Regionalism, Development and the Post-Commodities Boom in South America*, Cham: Palgrave Macmillan, 47–76.
- Ewig, C. (2011): *Second-Wave Neoliberalism: Gender, Race, and Health Sector Reform in Peru*, Pennsylvania: Penn State University Press.
- Farooki, M. & Kaplinsky, R. (2012): *The Impact of China on Global Commodity Prices: The Global Reshaping of the Resource Sector*. Routledge Studies in Global Competition, London: Routledge.
- Fernández, A., Schmitt-Grohé, S. & Uribe, M. (2020): "Does the Commodity Super Cycle Matter?", *NBER Working Paper*, No. 27589, Cambridge: National Bureau of Economic Research.
- Fornes, G. & Mendez, A. (2018): *The China-Latin America Axis. Emerging Markets and their Role in an Increasingly Globalised World*. Cham: Palgrave Macmillan.
- Gonzales de Olarte, E. (2015): *Una economía incompleta. Perú 1950-2007: Análisis estructural*, Lima: Fondo Editorial PUCP.
- Gray, G. (2007): "El reto posneoliberal de Bolivia", in: *Nueva sociedad*, 209, May-Juni, 2007, at: <https://biblat.unam.mx/hevila/Nuevasociedad/2007/no209/9.pdf> (Last access: 27.05.2024).
- Gray, G. (2014): "Peru y Bolivia, líderes insospechados. América Economía", in: *América economía*, Lima, May 17, 2014, at: <https://www.americaeconomia.com/analisis-opinion/peru-y-bolivia-lideres-insospechados> (Last access 16.05.2024).

- Gudynas, E. (2009): “Diez tesis urgentes sobre el nuevo extractivismo. Extractivismo, política y sociedad”, in: Centro Andino de Acción Popular (CAAP) & Centro Latinoamericano de Ecología Social (CLAES) (eds.): *Extractivismo, Política y Sociedad*, Quito: Cuadernos de Capacitación.
- Gudynas, E. (2011): “Buen Vivir: Today’s tomorrow”, in: *Development*, 54, 4, 441–447.
- Gudynas, E. (2018): “Extractivism: Tendencies and Consequences”, in: Munk, R. & Delgado Wise, R. (eds.): *Reframing Latin American Development*. London: Routledge.
- Hausmann, R., Hidalgo, C. A., Bustos, S., Coscia, M. & Simoes, A. (2013): *The Atlas of Economic Complexity: Mapping Paths to Prosperity*. Cambridge/London: MIT Press.
- Huang, Y. (2008): *Capitalism with Chinese Characteristics: Entrepreneurship and the State*. Cambridge: Cambridge University Press.
- Jenkins, R. (2018): “China and Latin America”, in: Santino Regilme, S. & Parisot, J. (eds.): *American Hegemony and the Rise of Emerging Powers. Cooperation or Conflict*, New York: Routledge, 191–194.
- Jiménez, F. (2019): *Repensando la Política Económica para el Perú del siglo XXI*. Lima: Pontificia Universidad Católica del Perú.
- Kehoe, T. J., Machicado, C. G. & Peres-Cajías, J. (2019): “The Monetary and Fiscal History of Bolivia, 1960–2017”, *NBER Working Paper*, No. 25523, Cambridge: National Bureau of Economic Research.
- Kroeber, A. R. (2020): *China’s Economy: What Everyone Needs to Know*. New York: Oxford University Press.
- Lederman, D., Olarreaga, M., & Perry, G. E. (2009): “Latin America’s Response to China and India: Overview of Research Findings and Policy Implications”, in: Lederman, D., Olarreaga, M., & Perry, G. E. (eds.): *Introduction: China’s and India’s Challenge to Latin America: Opportunity or Threat?*, Washington, D.C: World Bank Publications, 3–35.
- Lievesley, G., & Ludlam, S. (2009): “Conclusion: Nuestra América—the Spectre Haunting Washington”, in: Lievesley, G., & Ludlam, S. (eds.): *Reclaiming Latin America: Experiments in Radical Social Democracy*. London/New York: Zed Books.

- Morales, J. A. (2018): “Bolivia y los grandes ciclos históricos en los siglos XX y XXI”, in: Velásquez-Castellanos, I. & Pacheco Torrico, N. (eds.): *Un siglo de economía en Bolivia (1900-2015)*, Tomo II, La Paz: Konrad Adenauer Stiftung, 97–136.
- Nolte, D. (2013): “The Dragon in the Backyard: US Visions of China’s Relations Toward Latin America”, in: *Papel Político*, 18, 2, 587–598.
- Ocampo, J. A., Stallings, B., Bustillo, I., Beloso, H. & Frenkel, R. (2015): *La crisis latinoamericana de la deuda desde la perspectiva histórica*, Santiago de Chile: Comisión Económica para América Latina y el Caribe (CEPAL).
- Panizza, F. (2009): *Contemporary Latin America: Development and Democracy beyond the Washington Consensus*, London: Zed Books.
- Pickup, M. (2019): “The Political Economy of the New Left”, in: *Latin American Perspectives*, 46,1, 23–45.
- Rochlin, J. (2007): “Latin America’s Left Turn and the New Strategic Landscape: The Case of Bolivia”, in: *Third World Quarterly*, 28, 7, 1327–1342.
- Santiso, J. (2012): “The Visible Hand of China in Latin America”, in: *Global Policy*, 3,3, 286–295.
- Schuldt, J. & Acosta, A. (2006): “Petróleo, rentismo y subdesarrollo: ¿una maldición sin solución”, in: *Nueva Sociedad*, 204, July-August, 2006, at: <https://nuso.org/articulo/petroleo-rentismo-y-subdesarrollo-una-maldicion-sin-solucion/> (Last access: 27.05.2024).
- Seclén-Luna, J. P. & Carrasco, C.A. (2010): “Institutions, Regional Innovation Systems and Economic Growth in Latin America”, *Conference Paper*, Bilbao: Seventh International Conference on Developments in Economy Theory and Policy.
- Seoane, J. (2012): “Neoliberalismo y ofensiva extractivista. Actualidad de la acumulación por despojo, desafíos de Nuestra América”, in: *Theomai*, 26, at: <https://www.redalyc.org/articulo.oa?id=12426097006> (Last access: 23.05.2024).
- Slipak, A. (2014): “América Latina y China: ¿cooperación Sur-Sur o ‘Consenso de Beijing’?”, in: *Nueva Sociedad*, 250, March-April, 2014, at: <https://nuso.org/articulo/america-latina-y-china-cooperacion-sur-sur-o-consenso-de-beijing/> (Last access: 27.05.2024).

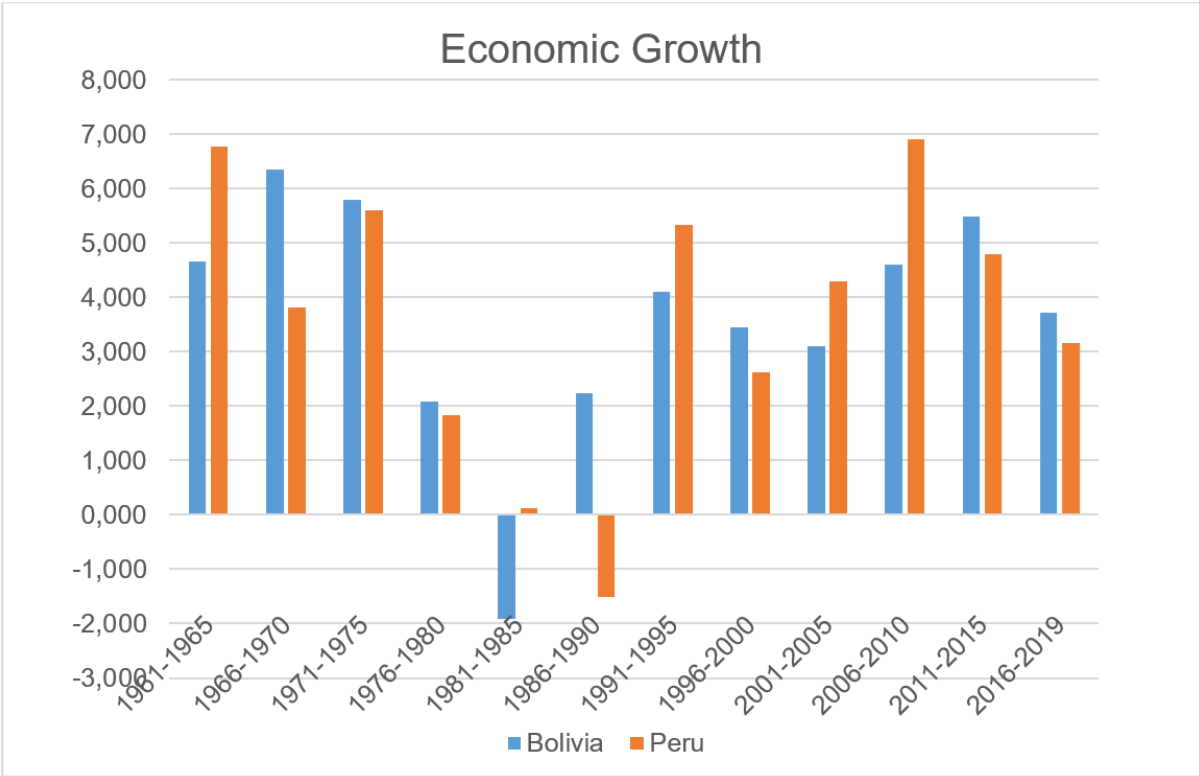
- St John, R. B. (2017): “Peruvian Foreign Policy in the New Millennium: Continuity and Change”, in: *Revista del Instituto Riva-Agüero*, 2, 2, 65–119.
- Stoessel, S. (2014): “Giro a la izquierda en la América Latina del siglo XXI. Revisitando los debates académicos”, in: *Polis. Revista Latinoamericana*, 13, 39, at: <https://www.memoria.fahce.unlp.edu.ar/library?a=d&c=arti&d=Jpr13920> (Last access: 23.05.2024).
- Svampa, M. (2013): “Consenso de los commodities y lenguajes de valoración en América Latina”, in: *Nueva Sociedad*, 244, March–April, 2013, at: <https://nuso.org/articulo/consenso-de-los-commodities-y-lenguajes-de-valoracion-en-america-latina/> (Last access: 23.05.2024).
- Svampa, M., & Slipak, A. M. (2015): “China en América Latina: del consenso de los commodities al consenso de Beijing”, in: *Revista Ensamblés*, 2, 3, 34–63.
- Vergara, A. & Watanabe, A. (2016): “Delegative Democracy Revisited: Peru Since Fujimori”, in: *Journal of Democracy*, 27, 3, 148–157. DOI: <https://doi.org/10.1353/jod.2016.0054>
- Vilas, C. (2005): “La izquierda latinoamericana y el surgimiento de regímenes nacional-populares”, in: *Nueva Sociedad*, 197, May–Juni, 2005, at: <https://nuso.org/articulo/la-izquierda-latinoamericana-y-el-surgimiento-de-regimenes-nacional-populares/> (Last access: 27.05.2024).
- Warnecke-Berger, H., Burchardt, H. J. & Dietz, K. (2023): “The Failure of (Neo-) Extractivism in Latin America – Explanations and Future Challenges”, in: *Third World Quarterly*, 44, 8, 1825–1843.
- Wei, S. J., Xie, Z. & Zhang, X. (2017): “From ‘Made in China’ to ‘Innovated in China’: Necessity, Prospect, and Challenges”, in: *Journal of Economic Perspectives*, 31, 1, 49–70, at: <https://www.aeaweb.org/articles?id=10.1257/jep.31.1.49> (Last access: 27.05.2024).
- Wiesehomeier, N. & Doyle, D. (2013): “Discontent and the Left Turn in Latin America”, in: *Political Science Research and Methods*, 1, 2, 201–221.
- Wise, C. (2020): *Dragonomics: How Latin America is Maximizing (or Missing Out on) China’s International Development*, New Haven: Yale University Press.
- Wolff, J. (2011): *Challenges to Democracy Promotion: The Case of Bolivia, The Carnegie Papers*, Washington DC: Carnegie Endowment for International Peace, online at: <https://carnegie-production-assets.s3.amazonaws.com/>

static/files/democracy_bolivia.pdf

Wolff, J. (2020): "What Do We Know About Struggles Over Neoliberal Reforms? The Political Economy and the Contentious Politics of Stabilization and Structural Adjustment", in: *Latin America and Beyond, PRIF Working Papers*, No. 51, Frankfurt am Main: Peace Research Instituto Frankfurt, online at: https://www.prif.org/fileadmin/HSFK/hsfk_publicationen/PRIF-WP_51.pdf

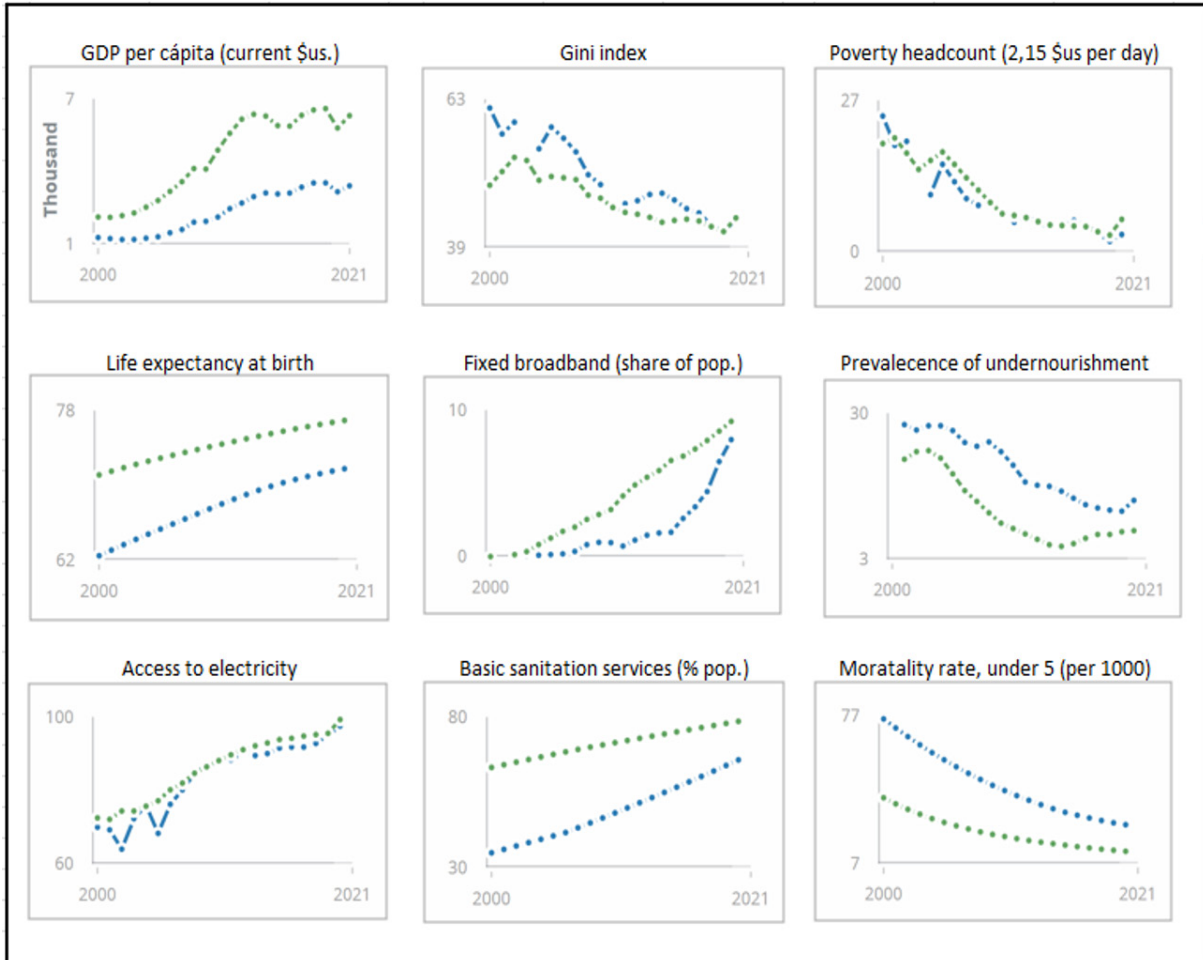
7. Annex

Annex 1: Bolivia and Peru, Gross Domestic Product (GDP) Growth



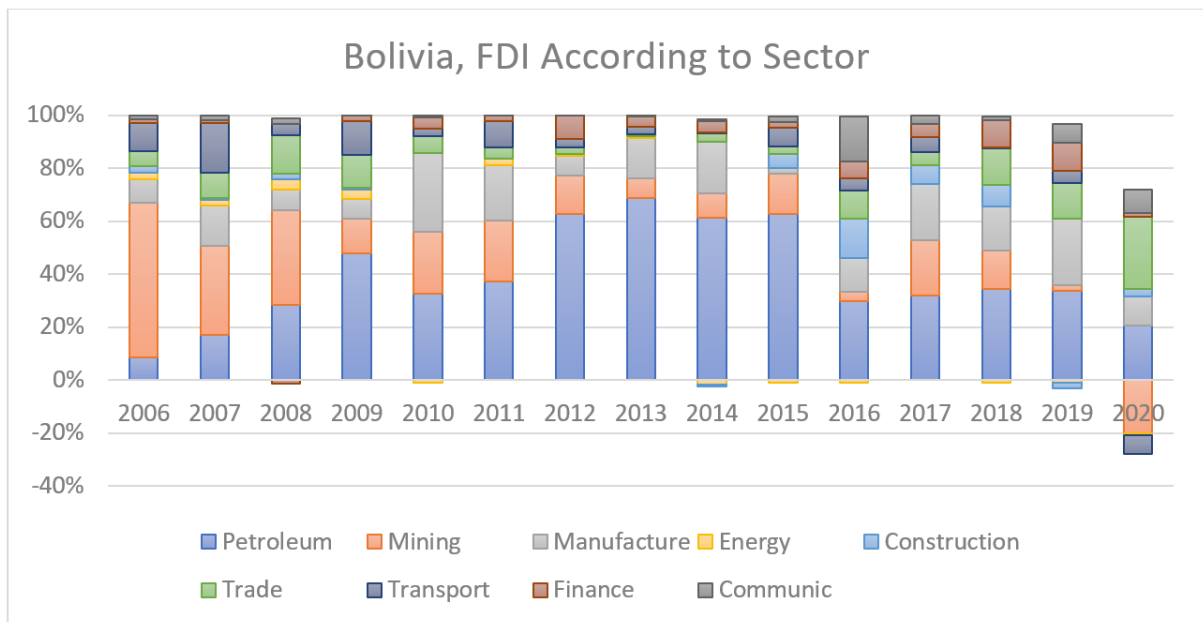
Source: Author's own elaboration with data from www.data.worldbank.org

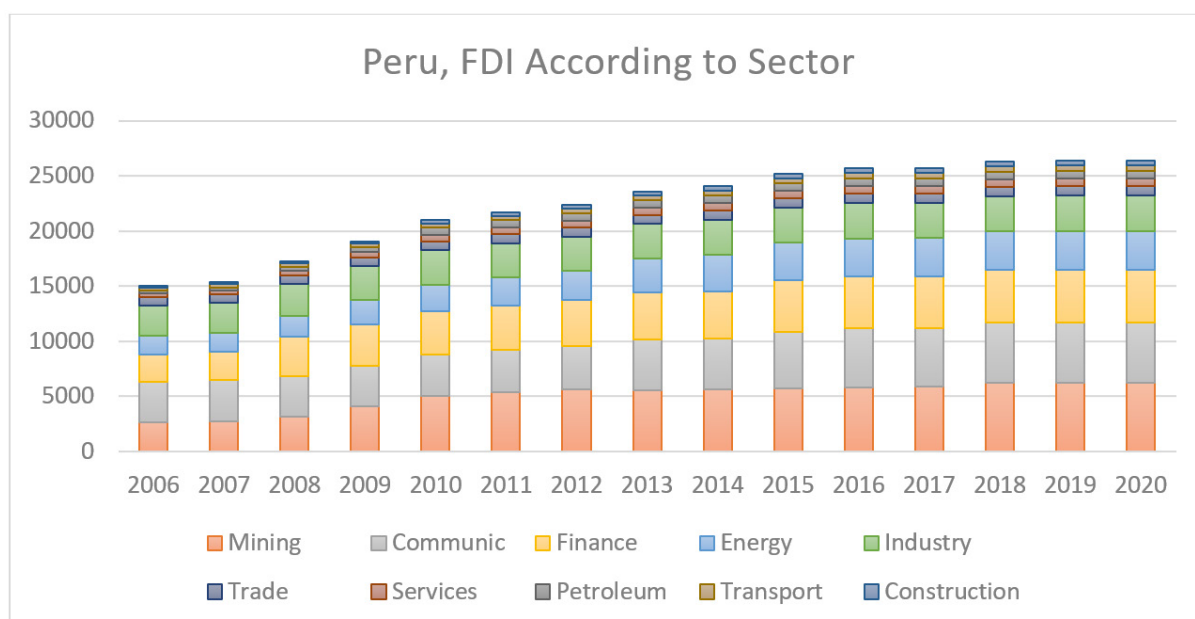
Annex 2: Economic and Social Indicators, Bolivia (blue) and Peru (green)



Source: Author's own elaboration with data from www.data.worldbank.org

Annex 3: FDI Inflows as Percentage of Total, 2006–2020





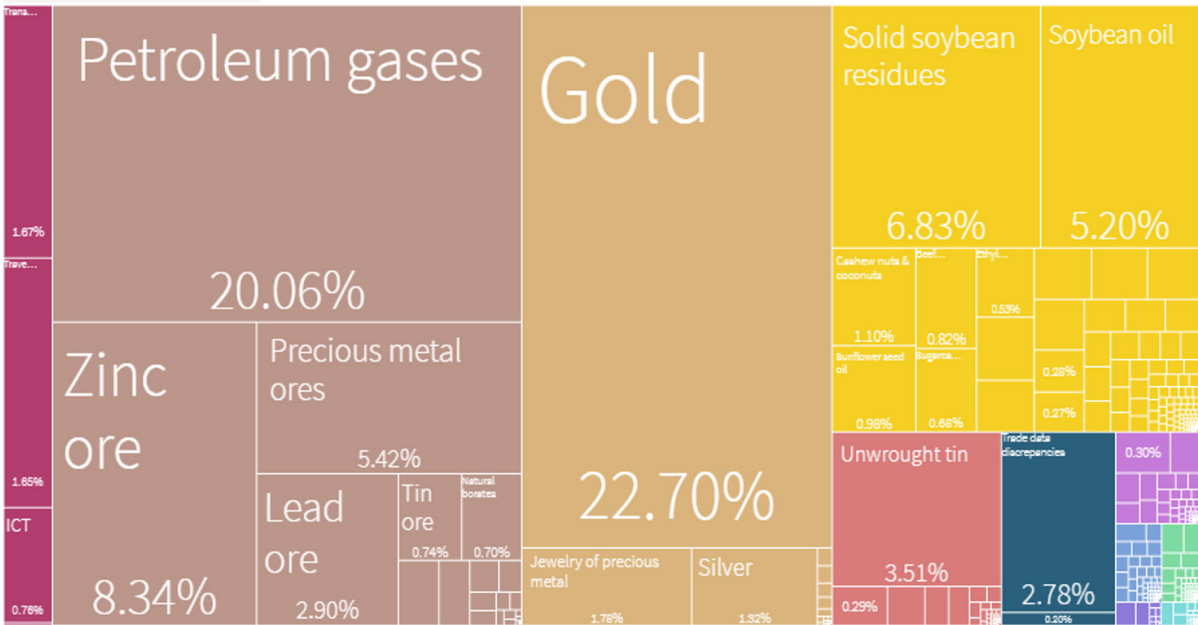
Source: Author's own elaboration with data from ECLAC (2021)

Annex 4: GDP Growth Rates in South America, 2001–2019

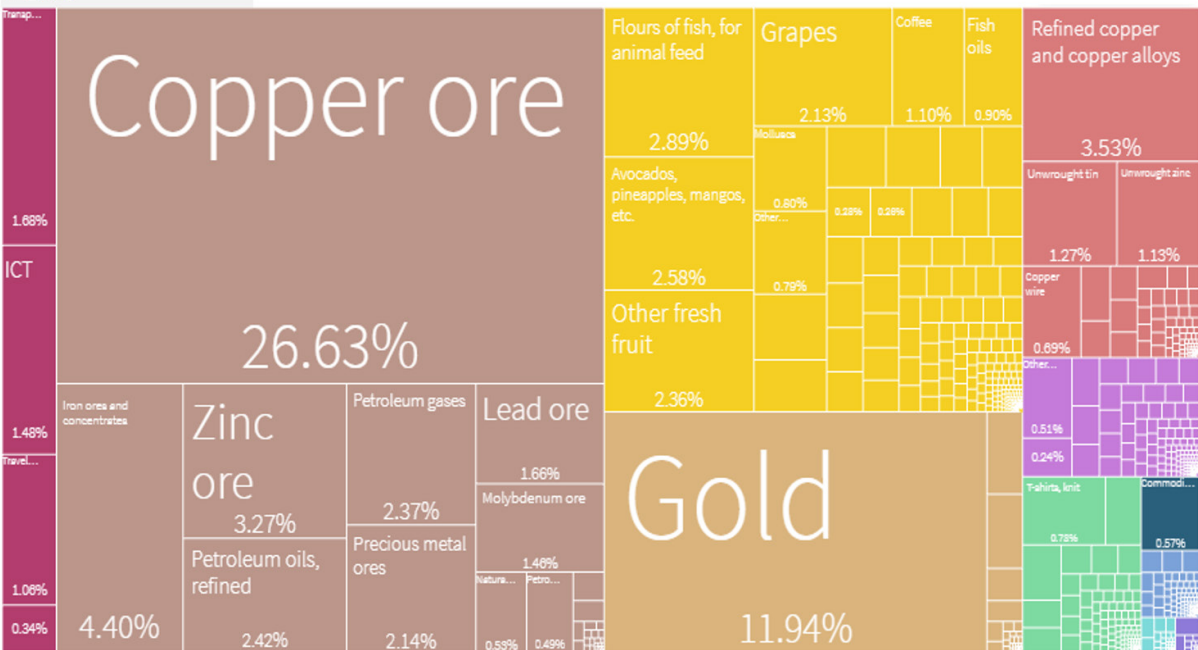
2001–2005		2006–2010		2011–2015		2016–2021		2016–2019	
Ecuador	4.87	Peru	6.92	Bolivia	5.49	Paraguay	2.54	Bolivia	3.72
Chile	4.72	Uruguay	5.97	Peru	4.79	Peru	2.51	Peru	3.17
Peru	4.30	Paraguay	5.51	Colombia	4.69	Chile	2.26	Paraguay	2.97
Colombia	3.65	Argentina	5.06	Ecuador	4.47	Colombia	2.12	Colombia	2.30
Bolivia	3.10	Bolivia	4.60	Paraguay	4.03	Bolivia	2.04	Chile	1.97
Brazil	2.91	Brazil	4.51	Chile	3.93	LAC	0.65	Uruguay	1.04
LAC	2.53	Colombia	4.47	Uruguay	3.39	Uruguay	0.40	LAC	1.01
Argentina	2.28	Chile	3.95	LAC	2.30	Brazil	0.30	Ecuador	0.61
Paraguay	1.93	LAC	3.82	Argentina	1.52	Ecuador	-0.18	Brazil	0.26
Uruguay	0.34	Ecuador	3.41	Brazil	1.17	Argentina	-0.59	Argentina	-0.98

Annex 5: Bolivia and Peru, Exports per Sector, According to the Economic Complexity Methodology

BOLIVIA

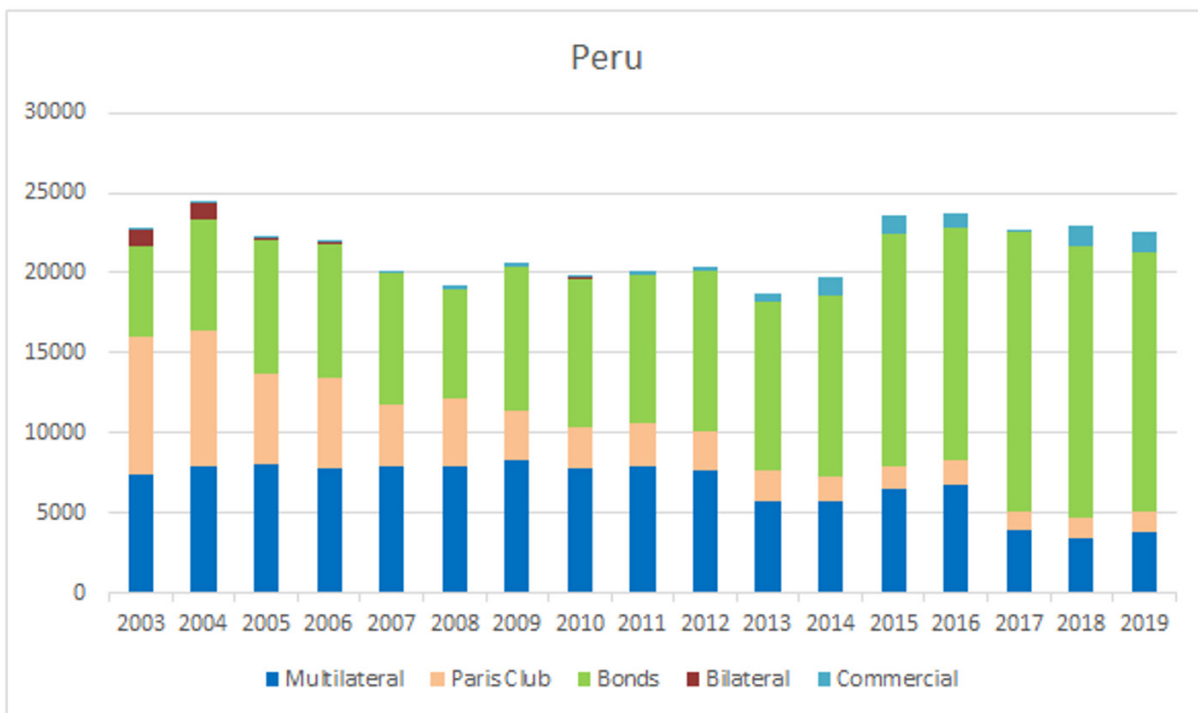
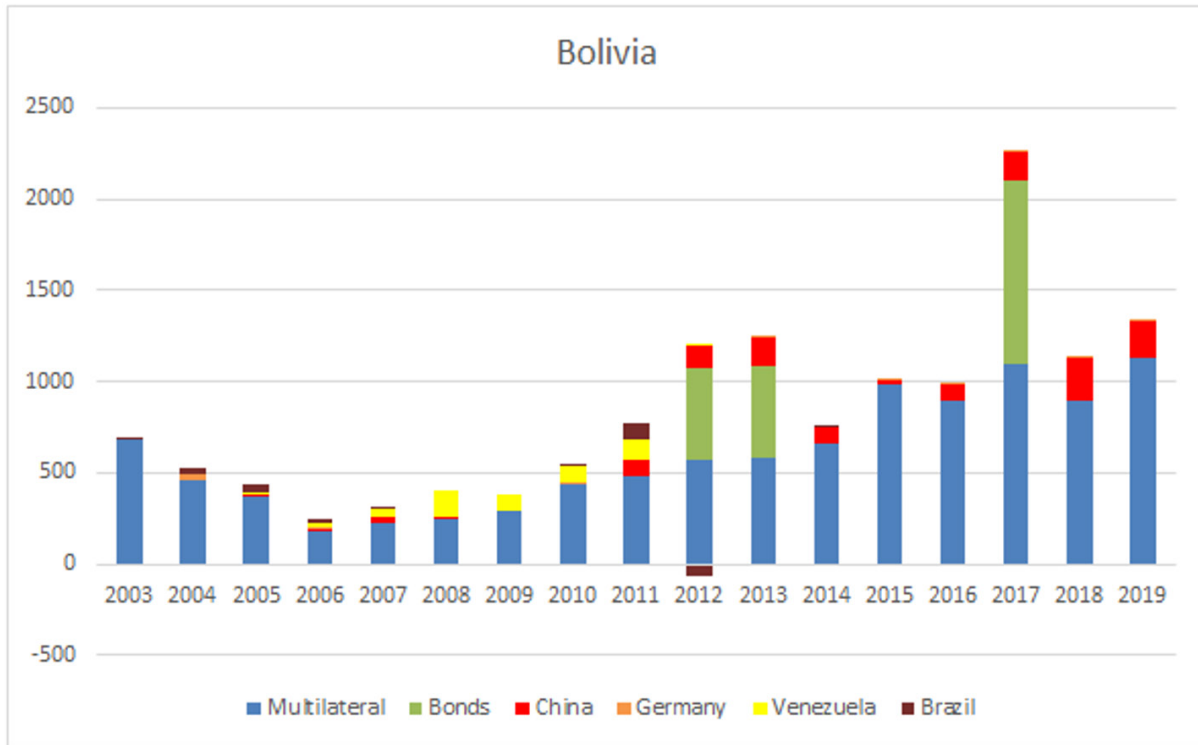


PERU



Source: www.atlas.mit.edu

Annex 6: Composition of Foreign Debt per Source, Bolivia and Peru



Source: Author's own elaboration based on data from data.worldbank.org

Working Papers published since 2018:

1. Schorr, Bettina 2018: "How Social Inequalities Affect Sustainable Development. Five Causal Mechanisms Underlying the Nexus".
2. Alcalde, Gonzalo 2018: "Unpacking the 2030 Agenda as a Framework for Policy-Making".
3. Cárdenas, Julián 2018: "The Role of Business Elites in Sustainable Development: A "Networked" Research Agenda".
4. Neyra, Raquel 2018: "Conflictos socioambientales en el Perú, extractivismo, colonialidad y violencia: La colonialidad como elemento vector del extractivismo".
5. Gonzales, Isabel E. 2018: "Aproximaciones conceptuales para el estudio de riesgos en la región Andina".
6. Linartas, Martyna Berenika 2018: "Inequality in the Twenty-First Century: A Review on Rockstars of the Realm".
7. Schlieben, Marie von 2019: "Interdependencias transnacionales y desigualdades sociales en el sector sanitario chileno: el caso del Ontario Teachers' Pension Plan (OTPP)".
8. Durand, Francisco 2019: "La captura corporativa del Estado en América Latina".
9. Díaz, Belén 2019: "'Sí podemos vivir mejor': Estrategias de la nueva derecha ecuatoriana para interpelar a las clases medias".
10. Zuazo, Moira 2019: "Adaptación al cambio climático y sostenibilidad en ciudades: Los casos de Lima y La Paz".
11. Damonte, Gerardo 2019: "Hybrid Institutions: Institutionalizing Practices in the Context of Extractive Expansion".
12. Agramont Lechín, Daniel 2022: "China's increased presence in Latin America. Win-win relations or a new dependency?".
13. Talcott, Paul 2022: "How to Write a Research Paper (With an eye on publication)".
14. Agramont-Lechín, Daniel 2024: "The Impact of the 21st Century Commodity Supercycle on Natural-Resource Dependent Economies: The Case of Bolivia and Peru".

About trAndes

trAndeS – Advanced Studies on Inequalities and Sustainable Development is a joint initiative by the Freie Universität Berlin and the Pontificia Universidad Católica del Perú. It is supported by the German Academic Exchange Service (Deutscher Akademischer Austauschdienst, DAAD) with funds from the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ).

trAndeS seeks to create and promote knowledge that can contribute to the realization of the United Nations' Sustainable Development Goals in the Andean Region. It focuses its efforts linking two dimensions: sustainable development as addressed by the 17 Sustainable Development Goals (SDGs) that the United Nations established for the year 2030, and the serious socioeconomic, sociopolitical and socioecological inequalities that persist in the Andean region. Our goal is to identify how these inequalities present challenges to achieving the SDGs and how progress toward the SDGs can contribute to reduction of these inequalities.

For more information, see the program website at www.programa-trandes.net.



Contact:

trAndeS - Estudios Avanzados en Desigualdades
y Desarrollo Sostenible

Freie Universität Berlin
Boltzmannstr. 1
14195 Berlin, Germany
contacto@programa-trandes.net
+49 30 838 62210



Deutscher Akademischer Austauschdienst
German Academic Exchange Service

With the financial support of



Federal Ministry
for Economic Cooperation
and Development