

## Fictitious capital and extractivism: titles of ownership in extractive companies

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### Abstract

This study analyzes the role of fictitious capital in the titles of ownership of extractive companies in the context of extractivism, a function inherent to capitalism. As a source of external financing, these titles influence corporate management by prioritizing shareholder returns. The study also examines how this financing impacts extractive activities in peripheral countries, where the composition of capital reflects a short-term commitment to shareholders, affecting the pace of production and the search for future returns. It further explores the implications of finance on the organization of the extractive sector and its influence on the structure of dependent capitalism in peripheral countries within the framework of financialized capitalism.

**Keywords:** extractivism; financialization; fictitious capital; nature; companies.

### 1. INTRODUCTION

In recent years, the intensive exploitation of natural resources has tended to be reflected within the analytical framework of extractivism or neo-extractivism. By exposing a condition with colonial roots, committed to the production and export of raw materials with little or no added value, various authors from different disciplines have explained the process of the expansion of the extractive frontier and its multidimensional effects in order to express the depth of a substantial problem in the Latin American region.

This extractive effervescence —seen in terms of the contemporary structure of capital reproduction and its social-natural metabolic reproduction (Bellamy, 2004; Marx, 2006; Saito, 2017; Schmidt, 2014)— is located within the framework of the development of contemporary capitalism, characterized by a dominant fictitious capital that subordinates and contaminates the performance of the productive sphere (Durand, 2018). According to Marx (2006), this capital, derived from the credit system, has three primary forms: credit currency, public debt securities and shares. The latter have spread throughout the world since the 1970s, becoming a source of open capital for a group of transnational corporations in different sectors. Their presence has led to an interconnection between the financial and productive spheres and a concentration of capital in the development of business operations (Durand, 2018; Hilferding, 1971; Lapavistas, 2016) while strengthening a deep commitment between the company and its shareholders in the valuation of its shares and the generation of dividends.

Although it appears to represent a speculative quality whose value originates from the metaphysics of the market, there is no dependency on the productive sphere. Instead, it is related to it and influences its transformation by participating in the processes of real accumulation (Durand, 2018). This is possible because of the dialectical dimension of fictitious capital that allows it to unfold as real capital to unravel the cycle of capital reproduction but with the quality of generating revenue and transferring it to the holders of property titles.

In this respect, this paper seeks to analyze the underlying factors that enable the valuation of shares in non-financial companies that extract natural resources. To this end, it is understood that between the financial and productive spheres, there is a global relationship of interdependence between capital reproduction and asymmetrical economic relations where creation emanates from the productive materiality of the latter —in peripheral countries — and is transferred to the former —to the financial centers of central countries—. Pursuant to this extraction dynamic, the global asymmetries between the center and periphery allow the former to profit from the exploitation and appropriation of the two sources of wealth of the latter: labor and nature.

This analysis is based on a theoretical review from the perspective of the political economy critique of financialization and the concepts of interest-bearing capital and fictitious capital. Several relevant studies that have used these concepts interchangeably to understand specific elements of contemporary capitalism have been identified and analyzed. The case of fictitious capital in the form of equity in non-financial companies and its impact on the valuation of their shareholders' shares is highlighted. The quantitative review provided empirical evidence regarding the volume of shares traded on the world market since the 1970s. Information from economic and ecological statistics regarding exports of primary products and consumption of domestic material in the Latin American region was also collected to examine significant trends and patterns in the data.

This paper is divided as follows: after this introduction, the second part explores the concepts of extractivism and neo-extractivism to highlight their similarities and differences and to reflect on their relationship with financialized capitalism. The third part analyzes the concept of fictitious capital and its dynamics in contemporary capitalism, focusing on its relationship with the extraction of the labor force and nature. It also examines the role of shares in the financial management model of global extractive companies and their effects on the generation of dividends. The fourth section addresses the role of nature in the extractive processes, highlighting its influence on the valuation of shares and the generation of dividends. It also discusses the effects on the organization of the extractive sector and on the dependency structure of peripheral countries in the context of financialized capitalism. The last section of the paper discusses the conclusions of the analysis.

### 2. EXTRACTIVISM AND CAPITALISM: CONCEPTUAL FRAMEWORK

In recent years, the analysis of the expansion of the extractive frontier and its socio-ecological consequences has used the concepts of extractivism and neo-extractivism as an explanatory framework for a colonially rooted activity of production and export of natural resources —non-renewable— with little or no added value, destined for the world market. Both concepts have a substantial primacy in the Latin American region to clarify, when speaking of extractivism, a dynamic and inherent component of the metabolic reproduction of capital, whose matrix stems from the colonial process (Machado, 2015) or a form of accumulation that has subjected peripheral economies to the extraction of raw materials (Acosta, 2011; Gudynas, 2017). Therefore, extractivism refers to the activity of extraction of unprocessed or low value-added natural resources in high volumes and intensity for export to international markets.

However, referring to a contemporary vision in the context of the boom in the prices of raw materials and the emergence of progressive governments, focusing on South American countries, the concept of neo-extractivism was used as a contemporary reflection of a developmentalist vision based on the exploitation of raw materials (Gudynas, 2014 and 2017; Svampa, 2019; Svampa and Viale, 2014) in order to seek to differentiate the preceding moment from the contemporary one, from a point of view oriented more towards an interpretation of the socio-political moment as an underlying factor in the expansion of the extractive frontier than in discontinuous and differential structural elements of previous periods.

This approach, which stems from a South American tradition, reveals a particular process of expansion of extractive activities that emerged during the bonanza cycle of raw materials at the beginning of this century and the emergence of progressive governments. Within this trend, authors such as Gudynas (2017) seek to consolidate a "Latin American theory of extractivism" based on a qualitative representation of nature as an object of extraction. The representativeness of plural acts of extraction, manifested in different forms of appropriation of nature in time, space and intensity, leads to the deepening of irreparable economic, environmental and social setbacks (Gudynas, 2009, 2011 and 2014).

In the same vein, for authors such as Acosta (2011 and 2016), the historical act of extracting nature in the Latin American region is not excluded from the asymmetrical development structure of the central economy, led and dominated by the central countries. Instead, it responds to a colonial and neocolonial process of plunder and ecological devastation typical of modern capitalism, with pathological results typical of an unhealthy act that reproduces (economic) ailments, which generate illnesses such as Dutch disease, productive specialization, deterioration of trade terms and structural heterogeneity (Acosta, 2011 and 2016). The depth of the afflicted condition has led to the question of activities that are debated as either being a "curse" or a "blessing" (Acosta, 2011; Sanchez *et al.*, 2019; Sanchez, 2019).

The metastasis of the disease penetrates the central scenario of the encounter between the dynamics of extraction and the communities settled in its territory. In this prelude of conflictive tension, Svampa (2019), from an understanding of the depth of the acts of exploitation of nature, reveals the emergence of specific socio-ecological conflicts in a field of tension for the territory, the common goods and the rights of the affected communities. Thus, the intense advance of the exploitation of nature demonstrates specificities of socio-territorial affectation in its intentions to seize territories focusing on the enjoyment of capital profitability through the destruction of natural wealth and the imposition of a civilizing project —developmentalist— characterized by the hegemonic parameters of the Western world over other forms of organization of life (Svampa, 2011 and 2019; Svampa and Viale, 2014).

Thus, nature becomes the driving force of a development project. The described fact subscribes to the emerging moment of progressive governments in the South American region in the upcycle of raw materials when the State acquires substantial relevance in the management of natural resources as a way to redistribute generated revenue. The critical balance sheets of the Latin American contexts of the "progressive wave" show the deepening of a rentier model based on the —intensive— use of nature to disrupt economic structures and social conditions by undermining the social and natural wealth of the extraction territories. The centrality in this point, from different regional perspectives, shows a viewpoint that criticizes the development of the (neo)developmentalist national state as a mediator in the management, control and use of excess natural resources for social programs as a means of political legitimization (Acosta, 2011; Gudynas, 2009; Lander, 2016; Svampa and Viale, 2014).

In this broad conceptual universe, a multidimensional and interdisciplinary analytical contribution exists in order to understand the current events in the South American region. However, the relevance of a substantial problem expanded in various areas of the region, resulted in an analytical framework that obscured the historical specificities of the development of extractive activities in particular contexts of each country, integrating and grouping them without questioning the historical processes of insertion and development of primary export activities prior to the context in which the discussion and conceptual contributions emerge. From this critical perspective in relation to progressive projects, the concepts of extractivism and neo-extractivism as "two parts of the same curse" (Acosta, 2011) began to be used from a homogeneous point of view that ignored the specific historical depth of extractive activities in each country. The management and governance of natural resources in their historical evolution shows substantial differences and prior moments of action by Latin American states in cyclical periods of price bonanzas or global demand for natural resources, which intensified extractive activities in different Latin American countries (Bértola and Ocampo, 2013; Sánchez, 2019). This calls into question the conceptual delineation of a new historical moment of extractivism generated with the arrival of the Latin American pink tide or the bonanza of prices of raw materials.

Nevertheless, to examine the phenomenon of the contemporary expansion of the extractive frontier, it is necessary to consider the underlying interpretations derived from the global viewpoint of the evolution of capital. The first is that of the school of regulation, which identifies the practice of intensive extraction of natural resources as a phenomenon occurring in various contexts across the globe. These practices are inherent to the global process of capital reproduction. However, there is a heterogeneous unfolding process of these dynamics between the North and the Global South. In this respect, Brand *et al.* (2016) subscribe to the view that the relationship between society and nature can be understood as a dynamic historical process in which the regime of accumulation, the mode of regulation and the technological pattern are intertwined.

The historical framework of the appropriation of nature has its roots in a process inherent to capitalism but with the distinction of subscribing to historical periods and particularities. Accordingly, shifts in capitalism have led to the emergence of neoextractivism as a development model that has unfolded over two periods: the first, neoliberal (1970-2000), characterized by a trend of liberalization and deregulation of the economy and the second (2000-present day), a period of reprimarization or increase in extractive activities (Brand *et al.*, 2016). The intensity of extraction in countries in the Global South establishes a relationship that supports the social, productive and consumptive reproduction of capitalism in general, but mainly in countries in the Global North, whose adherence to the "imperial way of life" (Brand and Wissen, 2013 and 2021) has a direct impact on the advance of the extractive frontier.

From a political-economic perspective, linked to the asymmetric analysis of the international division of labor, Veltmeyer (2013) studies global asymmetries as a practical solution to the imperialism exercised by the central countries, whose evolutionary dynamics involve reconditioning and modifications in the face of capitalist development. Therefore, the contemporary extraction of natural resources, with historical roots, refers to the constant and changing dynamics of "extractive imperialism" (Petras and Veltmeyer, 2014). The different historical trajectory of the dynamics of natural resource extraction makes it possible to identify the contemporary process of precedents in the organization of extractive activities. The activities —led by foreign direct investment— articulate the economic development strategy in different countries with different economic-political projects (Petras and Veltmeyer, 2014; Veltmeyer, 2013).

In a general framework of capitalist behavior, encompassing extractivism in the generality of capital is to deny its operational diversity in the face of the centrality of a non-exclusive activity in peripheral economies. This is why, for authors such as Canterbury (2018), the analysis of the nature extraction process requires us to observe the transcendent axis in the production of economic surplus and the social relations interwoven in the acts of extraction. The economic heterogeneity of Latin American economies shows differentiated weights in financial performance and the types of nature extraction activities performed in the historical process of capital accumulation.

Thinking about the generation of surplus and extractive activities refers to establishing the financialized characteristics of capitalism in two key elements: 1) in nature and the pressure it exerts on the commodification and privatization of the natural resources of the periphery (Günther *et al.*, 2020) and 2) in the change in the behavior of non-financial companies that disrupts decision-making, productive behavior and the appropriation of nature (López *et al.*, 2022), in order to analyze the socio-natural metabolic development of contemporary capitalism, conditioned by the centrality of fictitious capital. Therefore, it is essential to identify the contemporary characteristics of financialized capitalism in order to contribute to the analysis of extractivism —as an inherent and substantial act for the reproduction of capital on a global scale—, the effects on its development and on the management of key participants in the extraction processes as acts that reveal discontinuities and singularities that explain its deployment in the mechanisms of reproduction and contemporary accumulation of capitalism.

From this point of view, highlighting the concept of fictitious capital (Durand, 2018; Hilferding, 1971; Marx, 2006) as a predominant form of capital in contemporary capitalism helps us to understand the dynamics acquired in the reproduction of current capital and its influence on natural resource extraction activities, expanding the vision towards an interpretive perspective that places extraction at the reproduction level of capital metabolism, the predominance of which underlies the profitability —financial— in the short term over productive activities —and their profitability— in the long term.

Thus, although it would seem to manifest itself as an automatic and metaphysical fructification inherent in capital, the interconnection between the financial and productive spheres creates a specific valuation process made possible by the asymmetries of the global economy, whose manifestation in the acts of extraction of natural resources is expressed in the extraction of biophysical nature and the extraction of the human conditions that permit the reproduction of life, both as processes of exploitation of nature as an indissoluble metabolic unit.

Therefore, the historical evolution of natural resource extraction activities shows traces of discontinuity in the face of the conditioning of finance, which affects the development of activities and countries with a greater or lesser degree of deepening of their primary export structure.

### 3. FICTITIOUS CAPITAL AND ITS EXTRACTIVE NATURE: PROPERTY TITLES

Contemporary capitalism has a unique feature that distinguishes it from previous periods. It is currently characterized by the expansion and predominance of finance in its global development structure. This particular moment tends to be presumed by the concept of financialization based on different interpretations linked to a greater extent to heterodox and Marxist economics (Villavicencio and Meireles, 2019). From the Marxist point of view, it highlights the role of financial capital as a driving element in the primacy of productive behavior in the reproduction of capital (Hilferding, 1971). However, the concept of financial capital for authors such as Carcanholo and Nakatani (1999) tends to be conceptualized in an imprecise or undefined way, so it is necessary to refer to the concept of fictitious capital to understand the dynamics of contemporary accumulation from the theoretical approaches proposed by Marx (2006). Furthermore, it is necessary to consider financialization as a process of global insertion of differentiated capital with heterogeneous, unequal and asymmetric development. In this respect, such differentiations interact with the qualities that ascribe it as a dependent process (Ferraz *et al.*, 2022; Silva, 2012) in which fictitious capital is able to achieve value in the underlying framework of the reproduction process of the capital cycle due to its quality of materialization in the productive sphere.

In addition to the above, studies related to the Marxist tradition support a debate on the differentiation between interest-bearing capital and fictitious capital (Durand, 2018; Fine, 2013; Lapavistas, 2016; Moura de Cavalcanti and Nakatani, 2021). Although this debate can be traced back to Hilferding's (1971) contributions to the development of financial capital in the reproduction of capital, predominance now favors a greater weight of forms of fictitious capital in global economic activities and, thus, an increase in the mechanisms of accumulation through finance.

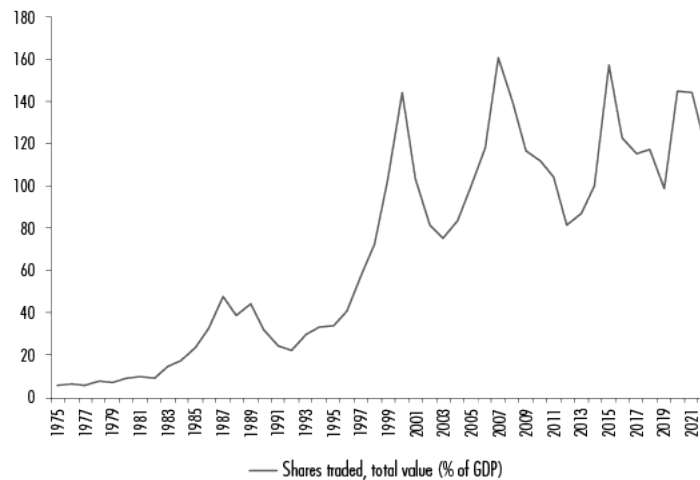
Empirical evidence can be found in the substantial weight of finance in the behavior of central economies shown in the work of Krippner (2005) where he confirms the increase since the 1970s of income from financial sources in relation to non-financial ones and its upward trend in the subsequent decade of US corporations, or Durand (2018) when exposing the increase in financial accumulation in the world's major economies based on three key elements: the financial sector, the profits generated in this sector and the dynamics of the financial profits of non-financial companies.

Therefore, the reality that shows the tendency towards the processes of financial accumulation forces us to return to the theoretical approaches of Marx (2006) to understand the development of fictitious capital as a developed form of capital that accrues interest —capital advanced to produce—, which expresses a potentially producible value underlying a process of expropriation of capital gain that may or may not be generated in the future, and Hilferding's (1971) approaches regarding the study of fictitious capital<sup>1</sup> and the joint-stock company as a dominant form of capital in the contemporary capital composition of large companies.

Shares have become a means of internal financing for non-financial companies in order to use the funds raised to leverage the operations —productive, commercial or financial, etc.— of the companies in accordance with their obligations. The World Bank estimates that the percentage of shares traded worldwide from 1975 represented 6.1% of global GDP, while in 2022, the total value increased to 119.2%. Although the behavior of the total value of

shares traded fluctuates over time, there is an increase in value compared to 1975, an expansion of this means of financing companies and a distribution of title holders around the world involved in business activities (see Figure 1).

Figure 1. World: globally traded shares 1975-2022 (percentage of GDP)



Source: prepared by the authors with data from the World Bank (2024).

The new structure in the composition of business capital forced a reordering of corporate management models towards a tendency to generate higher dividends in the financial sphere over the productive one, thus expanding corporate operations and the search for dividends in financial markets rather than productive markets (Krippner, 2005; Baud and Durand, 2012; Lapavistas, 2016). The large corporation—which achieved glory during the 1980s and 1990s—within the framework of an economy that expanded the universe of finance in the search for adaptation to the new structures of a global financial architecture (Ugarteche, 2018), adapted new conditions through a restructuring of its corporate model of companies, subordinating productive strategies to financial ones.

In this scenario, the expansion of the accumulation of equity capital impacted the development of companies in different sectors of the economy. According to Baud and Durand (2012), three corporate elements leaned toward financialization: corporate objectives, investments and operations. In response, companies established business models based on shareholder dividends, were more likely to invest in financial channels than physical assets and established financial relationships with customers, suppliers, and employees. With the acquisition of a new corporate governance scheme—based on new strategies aimed at short-term profitability in financial channels rather than long-term profitability in productive channels—the generation of financial dividends became a key point since it was linked to the substantial materiality of the productive process, in other words to the valorization process generated by the capital-labor relationship,<sup>2</sup> since return depends on the future benefits of the productive process. The availability of surplus capital destined for the reproduction of capital dynamizes the processes of exploitation and generates interest on the borrowed capital (Hilferding, 1971; Marx, 2006).

In this framework, the fictitious/real dialectical quality of such capital emerges (Carcanholo, 2017; Durand, 2018; Hilferding, 1971; Marx, 2006). Shares represent fictitious capital transformed into real capital when companies invest in their operations, i.e., money exchanged for shares that are converted into industrial capital for companies. Therefore, it represents the transformation of monetary capital into industrial capital (Hilferding, 1971). However, it does not materialize as a duplicate capital, one for investors as a property title and the other as capital invested by the company, but only as a form of invested capital. Thus, a share is a property title that gives the right to a part of the future capital gain to be generated (Chesnais, 2017) or a right to income from future production or an allocation of returns (Hilferding, 1971). Since shares represent real capital that exists only in the form of invested capital, shares owe their return to the capital gain generated by the labor process dynamized by the invested capital. In this respect, the share represents a title to a portion of the exploitation of the work of others. Such fictitious capital in contemporary capitalism does not separate the financial and productive spheres. However, the former appears to be isolated from production and maintains an interdependence with the valorization processes (Durand, 2018). Therefore, the generation of dividends is not the result of a metaphysical artifice. Instead, it is the specific creation of valorization processes and the profit rate.

Now, considering that the large transnational corporations with global operations have over-acquired a model of financialized management and an equity financing scheme, the creation of their dividends goes through a process of realization of capital gain on a global scale. The link between financialization and economic liberalization promoted by the neoliberal model permits the expansive global scope of the mechanisms of capital accumulation in the productive and financial spheres by constructing a world architecture of interrelated channels that allow the generation and concentration of financial dividends. The global connection between fragmented companies in different parts of the world reconfigured the world production system and built an international integration of capital circuits (Saad, 2023).

As a result, the global asymmetry between central and peripheral countries benefits the former by increasing the concentration of financial profitability. Fictitious capital finds ground for its reproduction in the liberalized structure of the peripheral economies, which encourages the circulation of capital within their economies in order to subsequently transfer its dividends to the financial markets of the central countries. Profits result from the corporations' exploitation of the labor force, the inputs used for production, the oligopolistic control of economic activities and the advantages of the monetary hierarchy dominated by the dollar (Dowbor, 2018; Durand, 2018; Saad, 2023). Thus, profit generation in the financial sphere is supported by

the unequal dimension of the global economic structure, imposing its control on the periphery by hindering the management of their economies and reorganizing the structural conditions of dependence.

In this respect, the dynamics of fictitious capital in the peripheral economies refers to the observation of their behavior and how profits are generated in substantial productive activities in their economic structure and the transfer of these profits, mainly those derived from the extraction of natural resources, which, with the progress of the financialization of the economies, have expanded in different territories of the Latin American periphery.

#### 4. THE DOUBLE ACT OF EXTRACTION IN THE EXPLOITATION OF NATURAL RESOURCES

First, it is necessary to point out that the activities of exploitation of natural resources correspond to the transhistorical social-natural process of a mutable and dialectically constitutive nature (Bellamy, 2004; Marx, 2001; Schmidt, 2014). Based on its historical approach, it refers to thinking about the predominant characteristics of social reproduction in order to understand the incidental particularities that distinguish substantial specificities in social organization from the form of appropriation of nature. Although the appropriation of nature constitutes a central act for the reproduction of life throughout the development of society, it is in capitalist social reproduction that the plundering of capital by nature in its indissoluble unity —human and non-human— acquires greater force and intensity, albeit with a heterogeneous nature in specific volume, intensity and space.

By shifting the mechanisms of capital accumulation, the processes of exploitation of natural resources are also affected, and with them, their specific instrumentality, which responds to an organizational form of capital in the same way that shifts in the qualitative composition of nature change the form of productive organization for its reproduction. Both processes unfold within a dialectical relationship between society and nature. Therefore, when referring to exploitative activities, there are underlying extractive processes that go beyond the plundering and destruction of natural wealth as a natural resource because, while exploiting nature, they generate labor processes as acts of appropriation that mediate the social-natural relationship (Marx, 2001). In other words, natural resource extraction activities underlie processes of labor exploitation.

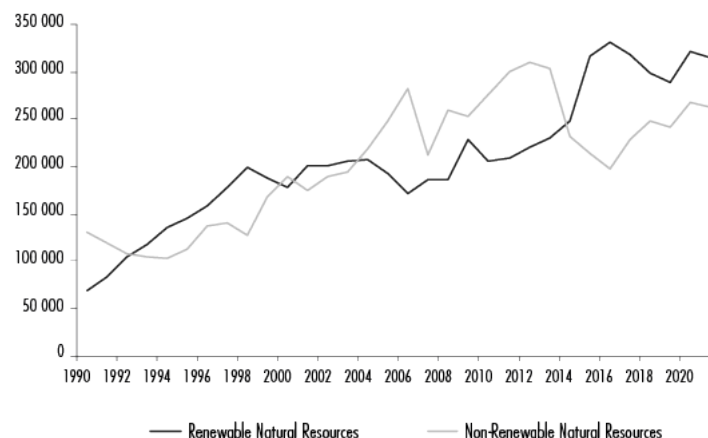
In capitalism dominated by finance, activities relating to the exploitation of natural resources acquire a specific instrumentality on productive and financial levels. In the operational framework, exploitation demonstrates an intensive process of extraction and export that has expanded the frontier of natural destruction in recent years, related to the organizational structure of capital that requires certain raw materials for global production (Osorio, 2012). Likewise, it demonstrates the presence of different assets and financial actors in activities related to nature (Clapp, 2014) as characteristic elements that affect the economic development of peripheral countries due to their financialization (López *et al.*, 2022). They acquire significant importance as a financial asset and an exploitable channel for the reproduction and accumulation of capital on an expanded scale (Harvey, 2004) by financialized natural resource extraction companies.

Currently, many of the natural resource extraction companies in Latin America pool their capital composition in the open markets of central economies such as the New York Stock Exchange (NYSE) in the United States, the Toronto Stock Exchange in Canada (TSX), the London Stock Exchange in England (LSE) and to a lesser extent the Shenzhen Stock Exchange in China (SSZSE), but also in local stock markets such as the Mexican Stock Exchange (BMV) or the Sao Paulo Stock Exchange (B3).

For example, large agricultural and food companies such as Vittera, ADM and Cofco trade on the TSX, NYSE and SSZSE; oil companies such as Exxon Mobil, Chevron, Schlumberger, Ecopetrol and YPF trade on the NYSE; while mining companies such as Southern Copper, Newmont Corporation and Sociedad Química Minera de Chile trade on the TSX and NYSE, among others.

In aggregate terms, the participation of these companies as export-oriented operators of natural resource extraction activities can be seen in the volume of natural resource exports. Since the 1990s, the composition of exports in non-renewable and renewable natural resources has increased substantially, from USD\$129,773.67 million in 1990 to USD\$262,308.40 in 2021 and from USD\$67,760.91 million in 1990 to USD\$315,259 in 2021, respectively (see Figure 2).

Figure 2. Composition of Exports in Latin America 1990-2021 (USD\$ millions)

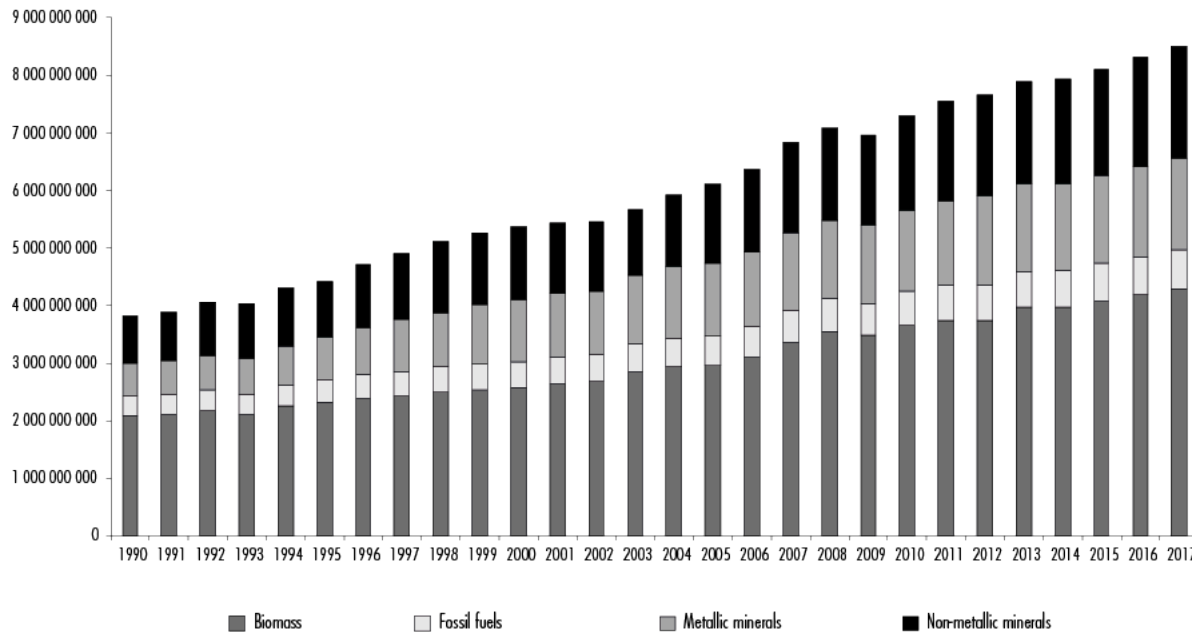


Source: prepared by the authors with data from the Economic Commission for Latin America and the Caribbean (ECLAC) (2023).

In contrast to the extraction of natural resources for export, the region's natural environment also shows an increase in depletion and destruction due to the intensity of extraction (see Figure 2). Expanding the extractive frontier for export generates greater pressure on nature and concentrates a large

amount of environmental liabilities, a condition seen in the ecological indicator of domestic material consumption in the region since 1990 (see Figure 3).

Figure 3. Domestic consumption of materials in Latin America and the Caribbean 1970-2017 (tons)



Source: prepared by the authors with data from the UN Environment Program and International Resource Panel (2023).

This ecological indicator —obtained from the sum of domestic extraction and imports minus exports of materials— shows the number of tons used in domestic consumption and production, i.e., the number of tons of materials used directly in the economic system. Of the total domestic consumption recorded between 1990 and 2017, 51.9% was accounted for by biomass generated by agricultural activities, 8.4% by materials generated by fossil fuel extraction activities, 17.5% by materials generated by the extraction of metallic minerals and 22.2% by materials generated by the extraction of non-metallic minerals.

The trend towards increased export of natural resources —renewable and non-renewable— and its environmental impact on the region demonstrates the intensification of primary sector activities in the regional economic structure since the 1990s, where the productive and financial levels combine to influence the extraction process. Thus, the tendency to increase the export of natural resources, led by companies with financialized activities, ends up being a key element in the framework of contemporary capitalism and how the pattern of accumulation (Osorio, 2012) unfolds in the region, increasing the conditions of underdevelopment and dependence of peripheral countries (Günther *et al.*, 2020; López *et al.*, 2022).

Based on this logic, extractive companies with subsidiaries operating in the Latin American region seek to make their capital profitable —consolidated by external contributions— by controlling territory to strengthen their financial activities of speculation and extraction activities. Thus, nature assumes a double instrumentality by being appropriated, enclosed and controlled by capital for the benefit of the productive and financial spheres, first, as an instrument of exploitation by inserting it into the productive process and promoting the extraction of natural resources, and second, as an instrument of speculation of derived assets operating in the financial universe; therefore, nature used in extractive activities permits returns for capital in both spheres. The double instrumentality as a whole ascribes a process of subsumption of the use value of nature by exchange value or, in other words, subsumption of nature by capital as a function of financial and productive return.

Both returns depend on the exploitation of the biophysical and human qualities of the region. It is the metabolic unity of the reproduction of capital, manifested in the exploitation of nature, which allows us to observe that every act of extraction of natural resources by capital becomes an act of exploitation of the labor force. This dynamic has been observed in recent years in the changes in the organizational composition of extraction processes, such as agribusiness or large-scale mining, with high technology and a low number of workers (Arboleda, 2020; Delgado, 2012). The high technologization generated by the 4.0 revolution has transformed and intensified the extraction processes through digitalization and productive automation, with less manual dependence on workers and, consequently, a higher degree of exploitation of large areas of nature with a lower volume of labor and low wages. Thus, new technologies invade production, the consequences of which tend to reorganize work processes by eliminating those elements considered redundant or surplus. As Antunes (2020) states, companies try to guarantee their profits by demanding and transferring to the workers the pressure to maximize time through high productivity rates, the reduction of labor costs and flexibility, which allows them to adapt to the company's production rate. Therefore, the productivity-intensified scheme demonstrates a tendency towards generating relative capital gains, generated in the periphery through the exploitation of natural wealth and workers and transferred to the financial centers of the central countries.

Thus, in extractive activities within the framework of financial domination, the exploitation of nature —human and non-human— under the domination of capital maintains its quality of creation and extraction of surpluses —economic (Arghiri, 1972; Marini, 1973) and ecological (Hornborg and Martínez-Alier, 2016)— but with specific conditions that increase the devastation of natural sources of wealth and dependent economic structures, while limiting

and conditioning the extractive sector in terms of corporate profitability. Therefore, as Saad (2023) states, the search for financial profits obtained from intensified extractions by workers in poor countries and from nature hinders productive activities and promotes the concentration of wealth within and between countries, damaging the real economy and long-term growth.

Therefore, fictitious capital in shares tends to prioritize its activities in terms of business returns that increase the generation of profits for the participants involved in the concentration of business capital. However, they depend on the generation of capital gains and its realization in profits through the devaluation of the exploited resources: nature and labor. Production rates and times, while varying according to the type of nature being extracted, maintain the concentration of potentially exploitable nature (speculation) and exploited nature. The expansion of the extractive frontier then represents the expansion of capital towards the production of new spaces and the production of nature by inserting the social relations of capital (Smith, 2020) where its reproduction occurs. Although the appropriation of territory and the enclosure of nature are actions inherent to the reproduction processes and contribute to the financial speculation of natural assets, the underlying materiality that allows the generation of productive and financial returns is the exploitation of natural wealth and labor. In this regard, it should be added that the act of dispossession (Harvey, 2004) inserts the seed of capitalist social reproduction to establish activities of creation and extraction of surplus, which later—in their realization—will generate accumulation processes. Therefore, reproduction and accumulation depend on the interconnection between the exploitation of labor and nature, both as cheap commodities (Moore, 2020) in the metabolic dynamics of a nature extraction activity, in other words, of a specific and historical form of appropriation through certain forms of labor organization.

In this relentless search for returns, fictitious capital, in the form of shares, has materialized in productive processes that use both labor and nature from the periphery as instruments of profitability. It is in the overexploitation of human nature—the workforce (Marini, 1973)—and non-human nature—the physical world (Moore, 2020)—that capital is favored to maximize its productive and financial returns and generate higher dividends. Both processes—linked and combined in an inseparable unity—unfold in an asymmetrical global framework in which profits are generated and concentrated at one pole through the use and enjoyment of other people's resources, the depletion of natural and human resources and the dissolution of profits at the other.

Therefore, extraction in activities related to the exploitation of nature subscribes to a process that transcends the biophysics of nature, also integrating processes of devaluation—directly or indirectly—of labor for the benefit of the operations of companies engaged in extractive activities. Both dimensions integrate the unity of the social-natural metabolic interaction with interactive particularities due to the appearance of participants who seek to generate extraction beyond the physical dimension. In generating benefits in an asymmetrical framework between the center and the periphery, fictitious capital present in the extractive activities of nature demonstrates its extractive nature.

## 5. CONCLUSIONS

The reflections offered in this paper seek to interpret the concept of extractivism from an analytical point of view, which observes the dynamics of extraction from the metabolic structure of the socio-natural development of capitalism within its asymmetrical and financialized global dynamics. In this respect, it is considered necessary to emphasize, first, that contemporary natural resource extraction activities are immersed in a financialized process of capitalism, which makes us think about the generation of financial and productive returns in extractive activities and the role that financial actors and assets play in their development.

Therefore, considering financial predominance allows us to delve deeper into extraction mechanisms beyond the biophysical nature and the transfer of returns. Secondly, the conceptual deployment of fictitious capital and its forms opens up a horizon of interpretation on how the forms of its development are incorporated into extractive activities.

In this case, this paper has addressed property titles (shares) in the development of financialized extractive companies, with the aim of observing the financial-productive link in the processes of exploitation of human and non-human nature. However, addressing each form of fictitious capital can provide horizons of analysis in relation to its impact on extractive activities developed in the Latin American margins.

In order to generate a gradual approach to the study of the interconnection between finance and nature by addressing the unwinding of fictitious capital in its interconnection with the productive dynamics of the exploitation of nature within the framework of global asymmetries between central and peripheral countries, we are placed under a spotlight that considers the devaluation of the labor force and biophysical nature as inherent and underlying elements of the logic of capital that allow the generation of dividends for shareholders with activities in natural resource extraction companies.

Therefore, it is considered that there is an underlying instrumentalization of nature, where there is a double exploitation mechanism for which fictitious capital is used to develop the accumulation process of contemporary capital. The consequences of the dynamics of the use of nature for financialized capitalism lie in the intense advance in the degradation of nature by subjecting and subordinating it to the capital era. In this sense, the instrumentalization of nature subordinated to capital intensifies the processes of human and non-human appropriation for its exploitation as a function of profitability. In this scenario, it underlies the accelerated and constant wear that exhausts and depletes its biological conditions to the point of considering an excessive dimension of the exploitation of nature that goes beyond the purely biophysical acts of extraction, but also a deepening of the overexploitation of labor through the erosion of working conditions pursuant to new forms of productive organization.

The considerations described above are intended to pave the way for an analysis of the role of fictitious capital in the form of shares in non-financial companies engaged in the extraction of natural resources in order to analyze the new ways of instrumentalizing nature—human and non-human—that disrupt the metabolic behavior of the social-natural relationship, underpinning the trend towards a dynamic of returns dominated by the financial sphere over the productive sphere, and its effects on peripheral countries.

The short and accelerated times of fictitious capital in order to make property titles profitable set the pace for nature extraction activities in peripheral economies while at the same time creating a scenario to perpetuate the historical features of dependence within the framework of contemporary financialized capitalism, where unequal exchange, transnational control, the deepening of the export pattern, the concentration of wealth in central countries and the increase in dependence in the periphery are intensified.



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<sup>1</sup> Marx (2006) distinguishes between three forms of fictitious capital: credit currency, public debt securities and shares.

<sup>2</sup> Capital gains are added to these forms of financial income, the benefits of which are obtained through financial channels, as opposed to dividends from the company's

operations.