

Use of Territory and Financial Valuation: The Cosan Group and the Brazilian Sugar- Energy Sector

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Keywords

Financialization of the economy
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Abstract

The structural changes that have occurred in contemporary capitalism, brought new conditions for the use of territory in Brazil. Consequently, it can be observed the insertion of new agents from the financial sphere, notably investment funds, corporate investors, and high net-worth individuals, who started to participate, directly and indirectly, in the productive processes in various sectors that take place in the Brazilian territory. This process was evaluated in this paper, through the empirical situation of Cosan Group, the main controller of the Brazilian sugar-energy sector (production of sugarcane and sugarcane derivatives). Our analysis was based on secondary data on the agricultural and agro-industrial production of this group, as well as the strategies and characteristics related to the financialization of the company (such as initial public offering, investor behaviour, among others) and financial issues, using information obtained from public and private databases. The analysis of the use of territory by the Cosan Group makes it possible to identify the transformations associated with the insertion of this agent into the current dynamics of financialization of the economy and the inherent territorial implication of this process. The strategies of the use of territory adopted by the Cosan Group, in the current context of financial accumulation, were mainly guided by the need for financial valuation, which occurred fundamentally through the mobilization of public funds and the territorial expansion of productive activities.

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INTRODUCTION

While capitalist production relations present distinct characteristics in each historical moment, it seems correct to indicate that this is also the case for each socio-spatial formation (SANTOS, 2012). Thus, an analysis of the general framework of the production mode indicates that structural and conjunctural changes were able to establish profound transformations in global capitalism after the second half of the 20th century, with broad implications at the level of central and peripheral economies, as it was the case in Brazil.

Such transformations were accentuated after the 1970s, notably with the exhaustion of the Fordist model and the emergence of the so-called flexible accumulation regime. However, the flexibility and hypermobility of the capital in its different forms, central characteristics of this regime (HARVEY, 1989; BENKO, 1999; ARRIGUI, 2008; SASSEN, 2017), were only possible in a geographic environment dense in technique, science, and information, within the scope of the social transformations aforementioned (SANTOS, 2012; CONTEL, 2020). It was from these processes and within the framework of flexible accumulation that the current dominance of financial valorization was established, a central characteristic of contemporary capitalism.

Of a polysemic nature, the phenomenon of financialization is characterized, above all, by the dominance of financial valorization in accumulation processes. This is not only due to the materiality of the period (development of information techniques that allow for the hypermobility of capital) but also to the deregulation and opening of national financial markets (concerning the universe of norms), which places finance as an increasingly central link in the political, social, and economic decisions and intentions of institutions and individuals (CHESNAIS, 2005, 2010; LAPAVITSAS, 2009, 2011).

The dominance of financial valorization, however, should not be measured, necessarily, by its quantitative importance to the productive sphere, but rather by its qualitative character. Thus, numerous changes can be observed in the new relations between the productive and financial spheres. These are transformations in the sphere of labor relations and management, as well as in the very organization of the production process (CHESNAIS, 2005, 2010; PAULANI, 2009). In this sense, we could ask a

question: how do these transformations appear and materialize in the territory?

Thus, we observe that, as the transformations of contemporary capitalism led to the centrality of financial valorization for accumulation, the territory itself is called upon to participate in the process of financialization, notably as a platform for valorization. In considering this situation, the article proposes understanding it in the light of an empirical example, which elucidates how financial valorization is ultimately allowed by accumulation processes within the scope of the used territory.

The example given refers to the behavior of financial capital within the Brazilian agribusiness, specifically in the sugarcane sector, whose articulation with international agents and capital intensified after the turn of the 21st century. Fueled by the structural conditions of contemporary capitalism and conjunctural issues of Brazil's economic policy, the financialization of agribusiness has reinforced the dependent and subordinate insertion of the Brazilian economy and territory in the international division of labor.

The analyzed agent was Grupo Cosan S.A., which entered the financial valorization process forcefully after 2000, with the opening of capital in the Brazilian and international stock exchanges. This process led to the increase in the participation of financial agents and capital in its shareholder composition (especially investment funds, corporate agents, and high-income individuals) and to the direction of business strategies toward the need to reimburse the invested financial capital. To meet this need, the economic growth of Grupo Cosan necessarily reaches a new territorial scale, represented by the expansion of production and control of the sector, widely supported by public funds and at the expense of indebtedness.

In addition to the introduction and final considerations, the article is divided into two parts. In the first one, we focus on delimiting some theoretical concepts and propositions that guide the analysis. Next, we focus on the empirical aspects of the studied example by demonstrating the territorial dimension of the valorization undertaken by Grupo Cosan, within the Brazilian sugarcane sector.

TERRITORY AND FINANCIALIZATION

Several works and researchers have discussed the epistemological foundations of

financialization, a polysemous and comprehensive term that designates a complex and recent process of transformation of the capitalist accumulation regime (CHESNAIS, 2005, 2010; LAPAVITSAS, 2009, 2011; PIKE, POLLARD, 2010; CHRISTOPHER, 2015). Characterized primarily by the predominance of financial valorization within capitalist production relations, the current financialization was only possible due to the deregulation and opening of national markets, initially in major countries and subsequently in peripheral countries, which facilitated the hypermobility of international capital flows (CHESNAIS, 2005; PAULANI, 2009). Its consequences have been broad, both for productive sectors and individuals, as finance has permeated decision-making in political, socioeconomic, and even everyday life spheres (LAPAVITSAS, 2009; DARDOT, LAVAL, 2016). Arroyo (2006) points out that the main problem resulting from this process is its rentier nature, based on operations purely focused on speculative profits.

For the productive sector, which is of particular interest due to the dimension of territorial use that it effectively engages with, the process of financialization has expanded the capacity of groups and entire sectors to raise funds without the help of banks, through the increased participation of institutions that specialize in accumulation through finance. This is the case for various investment funds, pension funds, sovereign funds, insurers, and even banks themselves in the role of administrators of these assets (PAULANI, 2009). From such postures of financial capital, two essential implications stand out.

One first implication is the redirection of banking activities from 1970 onwards, which focused prominently on the provision of financial services geared towards domestic consumption, constituting an important sphere of financial expropriation, as demonstrated by Lapavitsas (2009, 2011). Another important implication is the possibility of the externality of capital ownership concerning the production itself (CHESNAIS, 2005, 2010). Thus, the bonds and shares (which multiply in the context of financialization) present themselves to those who hold them as capital capable of "producing" a regular income flow, originating from an accumulation that does not care about who or how it was produced (CHESNAIS, 2010, p. 98). In agreement, Paulani (2009, p. 27) indicates how financialization imposed on productive capital the priority of maximizing shareholder capital.

This need became imperative for financialized companies that began to adapt their strategies to maximize shareholder value and remuneration of invested assets. All this is often at the expense of the overexploitation of labor and natural resources (PAULANI, 2009; DELGADO, 2012).

Thus, to the extent that production itself remunerates financial accumulation, a totalizing analysis from the perspective of Geography should not lose sight of the fact that, in the end, the remuneration of financial capital is directly linked to production processes that materialize with the use of territory, with their dynamics of circulation, control, and organization. Thus, as Souza (2016) argues, productive capital can be understood as the basis for the potentiation and realization of financial accumulation.

In this sense, Pike and Pollard (2010) point to the importance of Geography in understanding the contemporary process of financialization of the economy. According to the authors, analyzing the phenomenon of financialization in isolation from the productive sphere can lead to a mistaken understanding that global financial capitalism has no "place" or is "de-spatialized." Thus, the authors refer to the "spaces of financialization" as the materiality of production necessary for the remuneration of speculative capital and financial services (PIKE, POLLARD, 2010, p. 36).

Therefore, on one hand, there are central spaces characterized by the function of financial centers and control of global economic dynamics. In these places, controlling main agents originate, through financial instruments, a significant portion of global production (DOWBOR, 2017; PESSANHA, 2019). On the other hand, there are also subordinate spaces that participate passively in financial dynamics, becoming even more dependent since they do not participate in decision-making centers, notably concentrated in the major countries of capitalist economies (AMARAL, 2013). This is the case of Latin American countries, such as Brazil, now seen as "emerging markets" in the eyes of investors, turned into a mere platform for valorization and much more vulnerable because they are subjected to the interests of the financial market (ARROYO, 2006, p. 178).

It is in this context that we observe by Cosan's Group use of territory how the financial valorization undertaken from the 2000s on (when the Group went public) was established from a dialectical relationship between factors and variables that have a global dimension, specific to the context of financialization, but also a local dimension, particular to the national

territory. Such a mechanism is understood here as fundamental to the accumulation process that ultimately remunerates the agents and capital invested in the Group.

THE COSAN GROUP: RECENT TERRITORIAL USE DYNAMICS AND RELATIONSHIP WITH FINANCIAL VALUATION

The formation of the Cosan Group dates back to the 1930s, with the arrival of the Ometto family in Brazil and the beginning of land acquisition by them (GUEDES *et al.*, 2016). Since the beginning of the 20th century, Irmãos Ometto e

Cia. (the initial name of what would later become the Cosan Group) worked with the Brazilian State to ensure broad support for the production of sugarcane and its derivatives, expanding its activities and operations by purchasing land and mills in the state of São Paulo (BOECHAT, PITTA, 2020).

At the end of the 20th century, there was a reconfiguration of state actions to promote sugarcane activities. They began to function as "inducing" policies by financing productive sugarcane capital, constructing transportation modes, expanding markets, and incentives for research, among other actions. This reconfiguration is part of a national and international context (Chart 1) favorable to the expansion of sugarcane production in Brazil.

Chart 1 - Overview of internal and external factors inducing the expansion of sugar-energy activities in Brazil after 2000

Internal factors	External factors
Sector's deregulation	Influx of foreign capital
Agribusiness political economy pact	Increased demand for agricultural goods and raw materials
Valuation of ethanol in the national energy policy	Emergence of environmental concern (as implications of the Kyoto Treaty and Paris Agreement)
Increase in the number of flex fuel cars	Increase in international sugar prices
Expansion of the domestic market	
Regulation of electric energy auctions and stimulation to cogeneration of electric energy	Increase in international oil prices between 2000 and 2008 (making ethanol more competitive)
Increase in subsidized financing operations to the sector through public banks	

Source: VERDI; AOUN (2009); PINTO (2011); MENDONÇA *et al.* (2012); CARNEIRO (2012); DELGADO (2012); SVAMPA (2012); OLIVEIRA (2016); SILVA (2022). Elaborated by the authors (2022).

A favorable conjuncture for the sugarcane industry allowed the Cosan Group to experience significant growth from the 2000s, acquiring mills and establishing international partnerships (GUEDES *et al.*, 2016; BOECHAT, PITTA, 2020; SILVA, 2022). However, the strong integration into the dynamics of financialization occurred in the first decade of the century through the opening of the Group's capital with two significant Initial Public Offerings (IPOs): the first in 2005, when Cosan S.A. went public on B3 (São Paulo Stock Exchange and Futures Market), raising US\$ 403 million; and the second in 2007, with the creation of the holding company Cosan Limited and the beginning of trading its shares on the

NYSE (New York Stock Exchange), raising approximately US\$ 1 billion (REUTERS, 2007).

The opening of capital in the stock market represented the consolidation of shareholder value demands for the Cosan Group, which is difficult to reverse. It is noteworthy that the dynamics of stock markets can accelerate the concentration and centralization of capital, as Chesnais (2010, p. 132) indicated, based on their emancipated control of asset management from production management, which also establishes specific strategies by financial and productive agents.

Thus, the opening of the Cosan Group's capital allowed the entry of foreign capital seeking to appreciate their activities, which

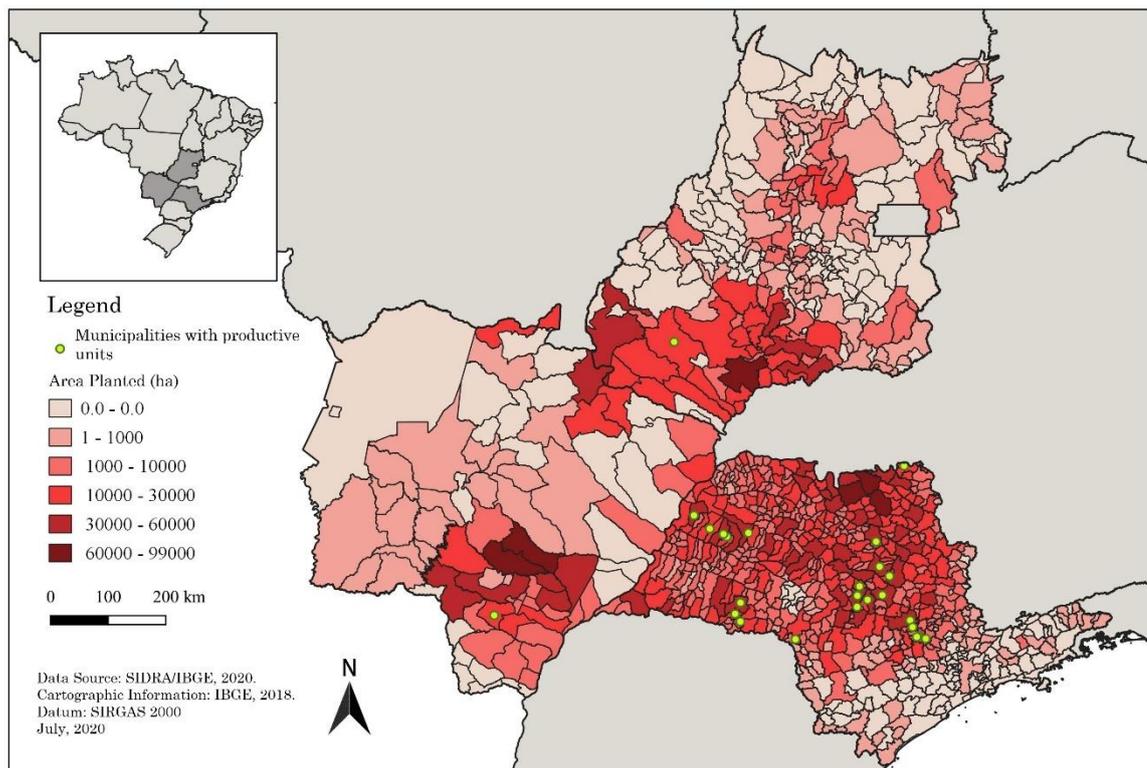
occurred through the diversification of activities and territorial expansion of the Group's operations. It is worth noting that this expansion occurred mainly through the acquisition of existing sugarcane units (brownfields). This is a primary characteristic of the Cosan Group's strategies, which expand their productive capacity without creating new fixed assets and, therefore, without contributing significantly to the increase in the sugarcane industry's overall production capacity.

Regarding the entry of new agents into the activities undertaken by the Cosan Group, the creation of Raízen is noteworthy, a joint venture between Cosan S.A. and Royal Dutch Shell. Since its establishment, Raízen has commanded the Cosan Group's sugarcane productive capital, directly acting on sugarcane and derivatives production in Brazil. In 2020, the company achieved a net revenue of BRL 119.7 billion, placing it in 4th place in the ranking of Brazil's

largest revenue-generating companies (COSAN, 2023). In the same year, Raízen had 26 sugarcane industrial units (Figure 1), distributed in the states of São Paulo (24 units), Goiás (one unit), and Mato Grosso do Sul (one unit). Together, they had an annual crushing capacity of 73 million tons of sugarcane, which consolidated it as the largest company in the sugarcane industry (RAÍZEN, 2020).

The opening of capital was a milestone for the management of the Cosan Group. The company went from being a closed family-owned organization to an "S.A." with complex corporate management and the adoption of strategies increasingly integrated into an updated global financial appreciation scheme. Likewise, these changes established the centrality of the role of shareholders, who began to guide the strategies of territorial use through the demand for the appreciation of their assets, as carried out by the production process.

Figure 1 - Raízen's productive units and area planted with sugarcane (hectares) in the municipalities of Goiás, Mato Grosso do Sul, and São Paulo (2018).



Source: IBGE/SIDRA (2020). Elaborated by Silva (2022).

After Grupo Cosan went public, there was a reorganization of ownership control, with the introduction of new agents in the form of common shareholders (with voting rights in company decisions) and staggered control starting from Cosan Limited. Until its dissolution and incorporation by Cosan S.A. in 2021, Cosan Limited was headquartered in

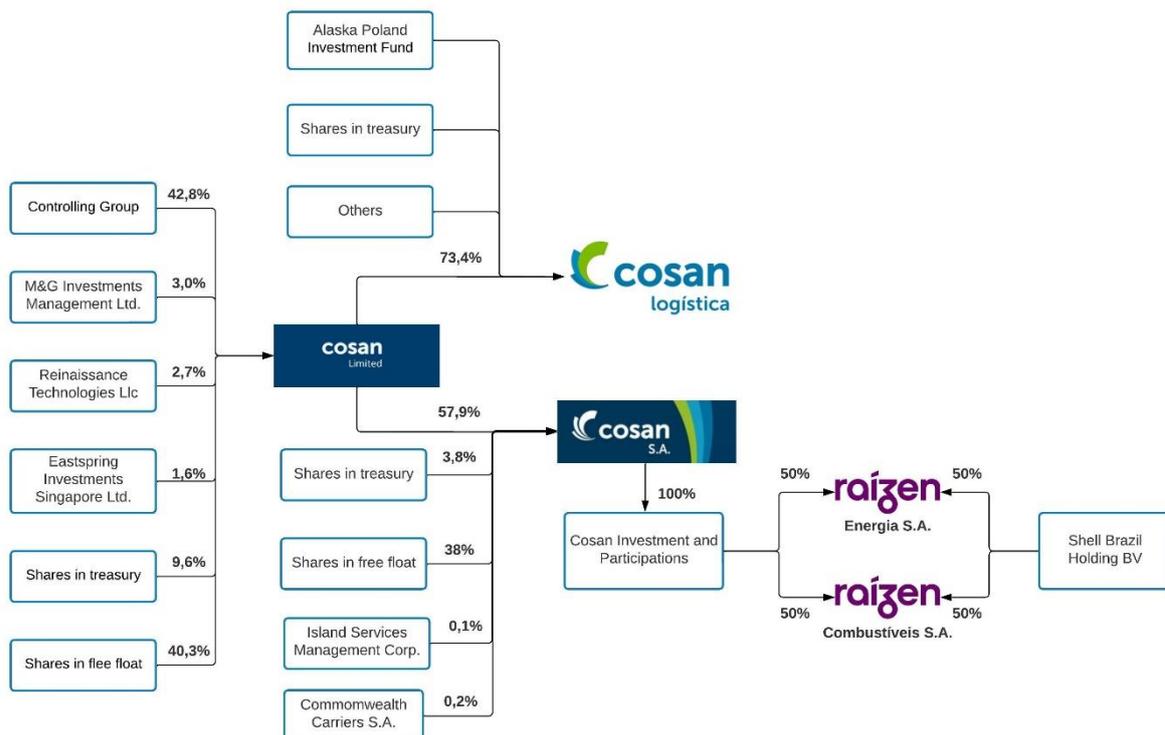
Bermuda (a tax haven), a British Overseas Territory.

The composition of shareholders, whether in Cosan S.A. or Cosan Limited, is constantly changing due to the hypermobility that capital acquires in the context of financialization. However, when establishing a cutoff for analysis, there is significant participation of

direct and indirect foreign agents in command (Figure 2). The organizational chart considers the percentage of the total distribution of shares (common and preferred) but highlights only the agents that have control of common shares. The remaining shares are either in treasury (not traded and under company control) or in free float, meaning that they are traded on the stock exchange in the form of preferred shares and are controlled by individual investors, who mainly operate through financial funds.

When considering the composition of Cosan Limited in 2018 – a temporal cutoff established based on the availability of Economática's data –, there were both national agents – concentrated mainly in the so-called "controlling group" – and foreign agents. In this sense, there were English-origin managers, such as M&G Investment Management Limited and Eastspring Investment Singapore Limited, and American managers, such as Renaissance Technologies.

Figure 2 - Shareholding board of Cosan Limited and its principal subsidiaries (2018)



Source: ECONOMÁTICA (2020). Elaborated by Silva (2022).

Controlling Group: Águassanta Participations S.A., Queluz Holding Limited, Msor Participations and Bom Jesus Sugar and Alcohol S.A.

In addition to the funds presented in Figure 2, we highlight that other agents have already been part of the company's controlling shareholders, such as Fidelity Investments, Wellington Management Company, Llp, Blackrock Inc, Janus Capital Management, and Skagen AS (ECONOMÁTICA, 2020; SILVA, 2022). From Figure 2, it is also possible to observe that most of the controlling stake in Cosan S.A. (whose shares are traded on B3) belonged to Cosan Limited, which was part of the holding's control strategy. However, especially in the first years after the Group's IPO, other national and foreign agents participated in the controlling stake of Cosan S.A., such as Credit Suisse Hedging-Griffo C. V. S.A, Wellington Management Company, Llp,

Lewington Pte. Ltd, Anniston Finance, among others (ECONOMÁTICA, 2020; SILVA, 2022).

By recognizing the movements of entry and exit of different agents, it is possible to verify that great capital mobility is present, moving more fluidly through the financial sphere than it could in the material sphere. This hypermobility of capital, characteristic of contemporary financial capitalism, also occurs in the scope of the performance of investment funds holding preferred shares. Regarding these shares, both of Cosan Limited and Cosan S.A., a predominant presence of investment funds under the control of large national and foreign banks was observed, as well as insurers and investment managers, such as BNP Paribas, Credit Suisse, Itaú Unibanco, Santander, BTG

Pactual, Banco do Brasil, Caixa Econômica Federal, Porto Seguro, XP Investimentos, Órama, Az Quest, among others (ECONOMÁTICA, 2020).

The entry of investment funds represented an important capitalization of Cosan Group's activities and coincided with territorial transformations of sugarcane production. Thus, the territory, its material dimension, and its use ultimately enable the financial capital invested in the company to be reimbursed.

The participation of agents enabled by financialization requires closely observing how the growth that remunerated this invested capital performed in the analyzed period. As the dimension of the use of the territory matters for the analysis, we investigated the economic performance of Cosan S.A. and Raízen (Figures 3 and 4), which deals precisely with the sugarcane production process in the Brazilian territory.

The growth of capital that remunerates investors is simultaneously reflected in the appreciation of the invested capital, either through an increase in share prices or a dividend distribution. To dimension this appreciation, one can observe, for example, the distribution of dividends by Cosan S.A.: only between 2011 and 2021, approximately BRL 6 billion was paid to shareholders (COSAN, 2022). A comprehensive analysis of economic growth and the

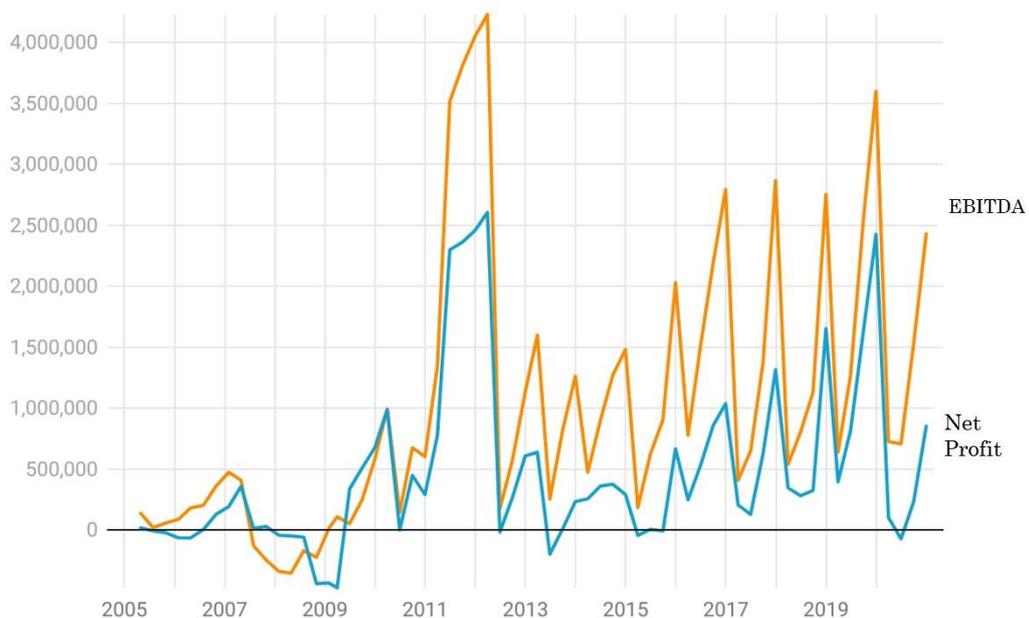
appreciation of invested capital indicates that such performance relates to external and internal factors that influenced the general dynamics of the sugarcane sector in this period.

From an external perspective, the role of international prices of sugar and oil can be highlighted as influencing factors in the demand for sugar and ethanol in domestic and international markets, which guide the structuring of the product portfolio of companies in the sector. Thus, the increase in sugar production in Brazil, for example, also accompanied the increase in international prices of the commodity, with peaks in the 2010/2011 and 2016/2017 harvests, which reflected in the financial dynamics of the Cosan Group.

However, the increase in international prices alone does not explain the expansion of activities which, as indicated, largely depended on the political support of the state and the public funds that enabled the growth of the productive capital of the Cosan Group, including the acquisition of brownfields and the implementation of greenfields.

In this sense, when analyzing the dynamics of Cosan Group's stock prices between 2015 and 2020, Oliveira and Andrade (2020) emphasized the importance of variables directly linked to the production process as the ones that most influenced stock prices.

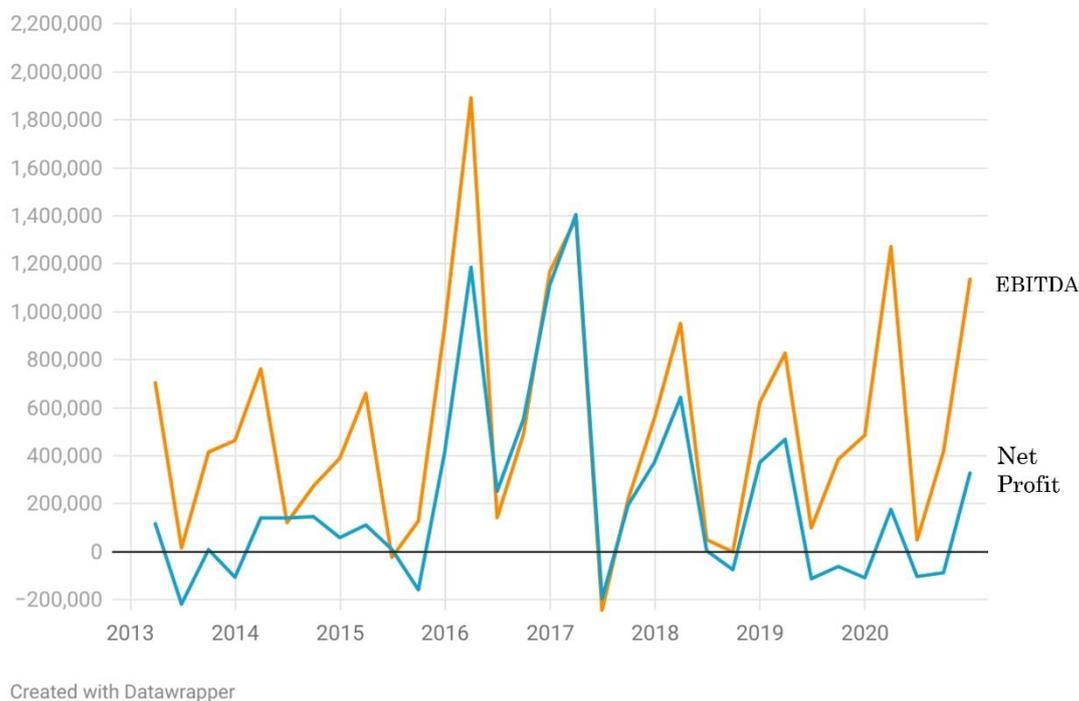
Figure 3 - EBITDA and net profit of Cosan S.A. between 2005 and 2020, in thousands of BRL



Created with Datawrapper

Source: Economática (2021). Elaborated by Silva (2022).

Figure 4 - EBITDA and net profit of Raízen S.A. between 2013 and 2020, in thousands of BRL



Source: Economatica (2021). Elaborated by Silva (2022).

Therefore, since public funds largely finance the expansion of productive infrastructure, the importance of transfers made by the state – such as those from the Banco Nacional do Desenvolvimento Econômico e Social (BNDES), which is the state-owned bank responsible for subsidized public loans and the Sistema Nacional de Crédito Rural (SNCR), which is a system responsible for organizing public financing for the Brazilian agribusiness – can be confirmed as factors influencing the dynamics of Cosan Group's appreciation, which are essential to meet international and domestic demands.

This support for the Group through access to public funds is noticeable from its performance before and after the 2008 financial crisis when a series of countercyclical policies were put into practice with direct impacts on the sector.

Thus, as the Group needed to expand its activities territorially, strategies were put into practice, such as the Group's opening of capital and the Brazilian state's activation in financing the endeavor, culminating in the acquisition of 19 productive units after the year 2000. Between 2007 and 2009, for example, when resources available to the Group via BNDES increased from BRL 71.2 million to just over BRL 1.5 billion, the company acquired five productive units (SILVA, 2022). These facts likely influenced the company's economic performance

after 2010, which generally showed growth throughout the decade.

Therefore, it is crucial to consider the allocation of public funds to the sector as a whole and the Cosan Group specifically, revealing how the state supports the sugarcane and energy sector and the company. In the case of the Cosan Group, it is possible to observe the centrality of financing for productive expansion, which received resources through Cosan S.A. and Raízen S.A., focusing on projects to expand production capacity, logistics, renovation and planting of sugarcane and construction of storage infrastructure (BNDES, 2021; SILVA, 2022).

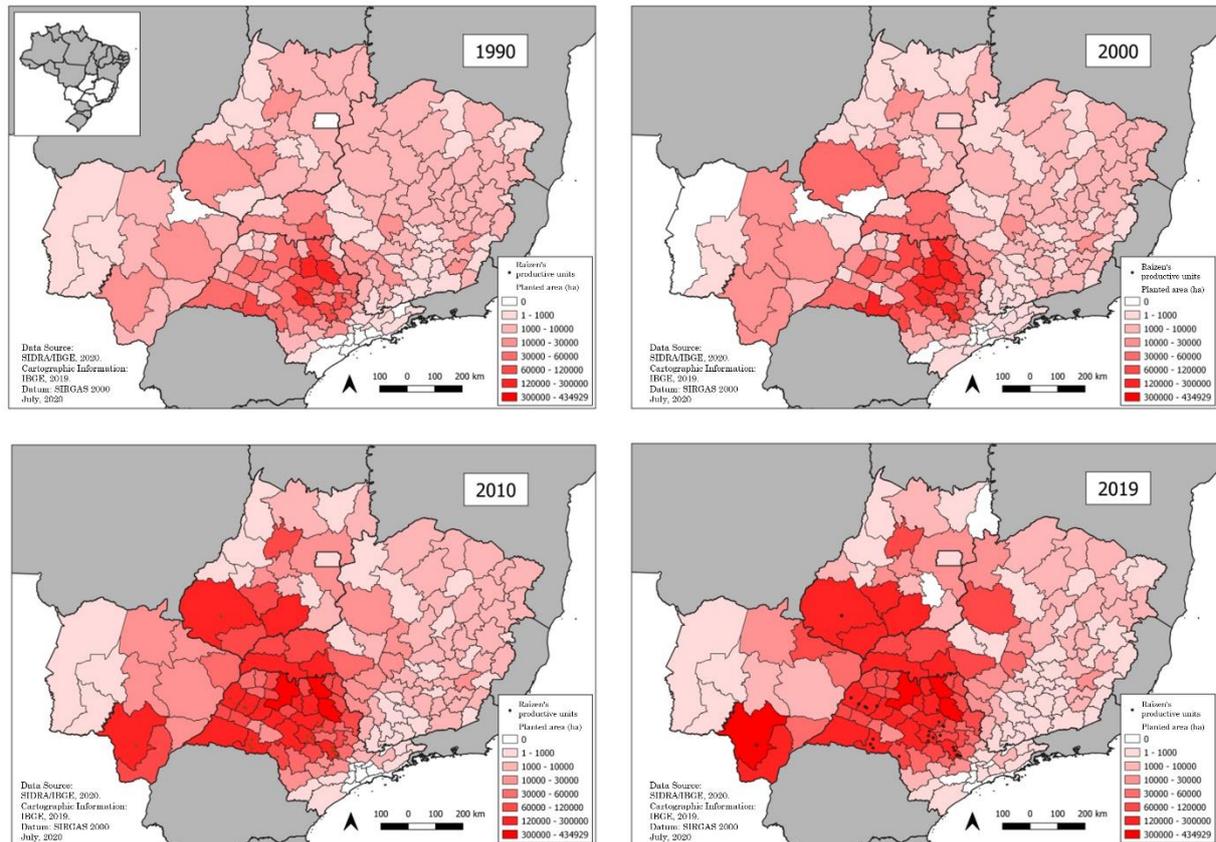
At the beginning of the century, the Cosan Group experienced significant economic growth, widely fueled by public funds, which enabled the financial appreciation of assets invested in their businesses. But how does this translate into the use of territory? Two intrinsically related points need to be highlighted to answer this question.

The first point is that, concerning Cosan Group's activities in the sugarcane and energy sector, economic growth was based on the territorial expansion of its activities, represented by the expansion of its production capacity and increased control of sugarcane processing in the Brazilian territory, mainly through the acquisition of new units, especially after going public.

In this sense, it should be noted that, during the period analyzed, most of the acquisitions made by the Cosan Group occurred even before the creation of Raízen in 2011 and intensified after going public on national and foreign stock exchanges. By 2020, of the 26 production units

controlled by the Cosan Group, 17 were acquired after the public offering processes. Notably, the territorial dimension of this expansion (Figure 5) followed the recent growth dynamics of the sector as a whole (CASTILLO, 2015).

Figura 5 – Planted area with sugarcane (ha) and Raízen's productive units in the microregions of de Goiás, Mato Grosso do Sul e São Paulo (selected years)



Source:IBGE/SIDRA (2020). Elaborated by Silva (2022).

It is important to emphasize that the territorial expansion of activities is directly related to the need for financial remuneration, that is, as the company goes public, the appreciation of capital and the compensation of shareholders become goals, and systematically accessing public resources as well as expanding territorial activities in search of new scale and market gains (expanding the number of agro-industrial units and the area of sugarcane planted in the country) co-occur.

Therefore, it is an immediate process of triggering the territory, that is, the territory is mobilized and becomes a platform for the appreciation of the capital employed in the sector, a mechanism fundamental to providing the accumulation bases that ultimately remunerate the money invested in the Group.

FINAL CONSIDERATIONS

Considering financialization as an essential characteristic of contemporary capitalism and assuming that the apprehension of territory occurs through the understanding of its uses (SANTOS, 2014; SANTOS, SILVEIRA, 2016), the carried out analysis sought to understand how the territory, intrinsically activated during the sugarcane energy production process, appears as a condition for the production of value that ultimately, along with other forms of fictitious valorization, remunerate the financial capital invested in the Cosan Group.

The analysis indicated that the financialization process of the sugarcane energy activities carried out by the Cosan Group is guided by a global logic of contemporary capitalism (the globalization of finance),

coordinated by external demands and speculation of future markets, as well as by material and normative conditions established within the Brazilian territory.

Thus, the valorization process necessary for the remuneration of agents and capital that started to participate in the activities carried out by the Cosan Group via financial accumulation activated the Brazilian territory, either through the expansion of productive units or the growth of areas destined for sugarcane planting, which was primarily done through facilitated access to public resources.

As more general considerations, we can observe how material and normative conditions established at the level of national territories – mainly and deliberately shaped by the actions of the state – make peripheral and dependent countries, such as Brazil, natural attractions for the dynamics of financial accumulation, by enabling or allowing for facilitated extraction of more value. The broad support network provided by the Brazilian state to large business groups, as observed for the Cosan Group, is a fundamental factor in the Group's practices, making the strategies for remunerating financial capital viable in the current stage of capitalism's development.

In conclusion, and based on the analyzed example, evidence showed how financialization spaces are established based on their own characteristics, which also shape their functions, indicating how dependent territories and economies play a central role in the dynamics of financial accumulation at a global level.

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AUTHORS CONTRIBUTION

Laís Ribeiro Silva participated in the conception, data collection, analysis, investigation, methodology and writing of the article. Mirlei Fachini Vicente Pereira participated in the tasks of supervision, analysis, writing and revision of the article.



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