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internationalization**

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# FDI in BRICS countries and the Chinese capital internationalization

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## Abstract

This paper aims to analyze the economic integration of the BRICS countries through Foreign Direct Investments (FDI) in the period 2009-2018. The investigation evidences that this integration is very asymmetric, due to the preponderance of Chinese investments in the other BRICS countries. Hence, the paper undertakes an associated objective, focusing on the evaluation of the diverse patterns of the Chinese capital internationalization and its unfolding on the investments within the bloc. In line with these goals, the paper methodology involves several progressive steps. First of all, we develop a data analysis of the FDI in the BRICS (both inward and outward). Given the absolute dominance of China's investments within the bloc, we move the focus to these Chinese Outward Foreign Direct Investments (OFDI) – after all, understanding BRICS FDI nowadays calls for a deep appreciation of the Chinese OFDI. In order to cope with this requirement, we promote a qualitative and a quantitative analysis. The qualitative one consists in the perception of the heterogeneous motivations that induce Chinese capital internationalization, through an investigation of the strategies of three economic agents' groups in China: (i) the State-Owned Enterprises (SOE) operating in traditional sectors, (ii) the big companies preponderantly oriented to the domestic market, and (iii) the technology-based companies. The quantitative analysis lies in the scrutiny of the available data on Chinese investments in the other BRICS countries. As result, the main contribution of this paper is characterizing the heterogeneous strategies of the Chinese capital internationalization, and analyzing them within the framework of the asymmetric productive integration within BRICS.

**Keywords:** Foreign Direct Investment, BRICS, China, Development strategies.

## Resumo

### *IDE nos países dos BRICS e a internacionalização do capital chinês*

Este artigo tem como objetivo analisar a integração econômica dos países do BRICS por meio de Investimentos Diretos Estrangeiros (IDE) no período 2009-2018. As pesquisas evidenciam que essa integração é bastante assimétrica, devido à preponderância de investimentos chineses nos demais países do BRICS. Assim, o artigo assume um objetivo associado, centrando-se na avaliação dos distintos padrões verificados na internacionalização do capital chinês e suas implicações para os investimentos dentro do bloco. Em consonância com esses objetivos, a metodologia do artigo envolve algumas etapas progressivas. Em primeiro lugar, são analisados os dados de IDE nos BRICS (tanto interna quanto externamente ao bloco). Dado o domínio absoluto dos investimentos da China dentro do bloco, altera-se o foco para esses IDEs chineses - afinal, entender o IDE dos BRICS exige uma apreciação profunda do IDE chinês. Para tanto, desenvolve-se uma análise qualitativa e uma quantitativa. A qualitativa consiste na percepção das heterogêneas motivações que induzem à internacionalização do capital chinês, por meio de uma investigação das estratégias de três grupos de agentes econômicos na China: (i) as Empresas Estatais (SOEs) atuantes em setores tradicionais, (ii) as grandes empresas orientadas preponderantemente para mercados domésticos; e (iii) as empresas de base tecnológica. A análise quantitativa reside no escrutínio dos dados disponíveis sobre os investimentos chineses nos demais países do BRICS. Como resultado, a principal contribuição deste artigo é oferecer uma caracterização das heterogêneas estratégias de internacionalização do capital chinês e analisá-las no quadro da assimétrica integração produtiva dos BRICS.

**Palavras-chave:** Investimento Direto Estrangeiro, BRICS, China, Estratégias de desenvolvimento.

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## **Introduction**

This paper aims to analyze the economic integration of the BRICS countries through Foreign Direct Investments (FDI) in the period 2009-2018. The investigation evidences that this integration is very asymmetric, due to the preponderance of Chinese investments in the other BRICS countries. Hence, the paper undertakes an associated objective, focusing on the evaluation of the diverse patterns of the Chinese capital internationalization and its unfolding on the investments within the bloc.

In line with these goals, the paper methodology involves several progressive steps. First of all, we develop a data analysis of the FDI in the BRICS (both inward and outward). Given the absolute dominance of China's investments within the bloc, we move the focus to these Chinese Outward Foreign Direct Investments (OFDI) – after all, understanding BRICS FDI nowadays calls for a deep appreciation of the Chinese OFDI. In order to cope with this requirement, we promote a qualitative and a quantitative analysis. The qualitative one consists in the perception of the heterogeneous motivations that induce Chinese capital internationalization, through an investigation of the strategies of three economic agents' groups in China: (i) the State-Owned Enterprises (SOE) operating in traditional sectors, (ii) the big companies preponderantly oriented to the domestic market, and (iii) the technology-based companies. The quantitative analysis lies in the scrutiny of the available data on Chinese investments in the other BRICS countries.

As result, the main contribution of this paper is characterizing the heterogeneous strategies of the Chinese capital internationalization, and analyzing them within the framework of the asymmetric productive integration within BRICS.

The paper is divided into two sections, in addition to this introduction. Section 1 presents a brief characterization of the intra BRICS FDI in the period 2009-2018, focusing on its asymmetric character. Section 2 presents an analysis of the evolution of the Chinese productive internationalization process, highlighting the understanding of the relationship between the competitive/accumulation dynamics, and the determinants of the extroversion strategy. The final remarks indicate some reflections on the limits of the intra BRICS integration process, given the perception that it is mainly subordinated to the logic of accumulation and extroversion of the Chinese capital, as well as to this country's national development strategy.

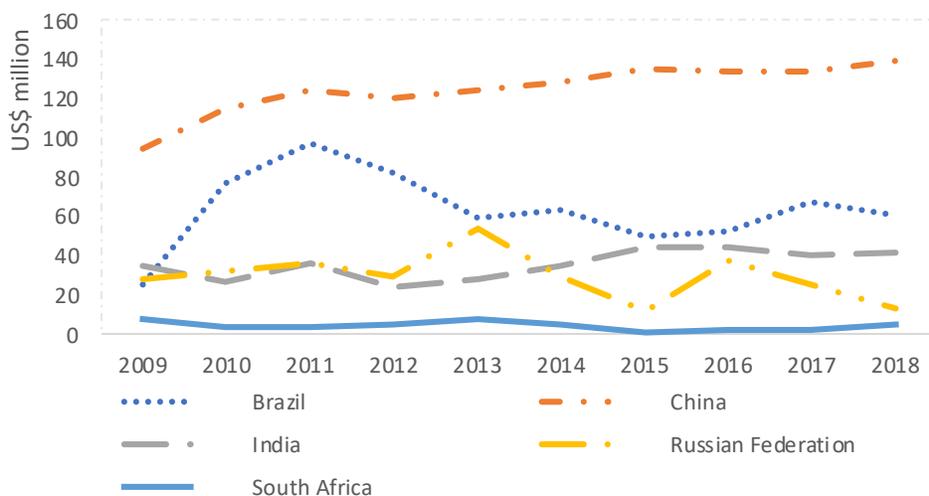
### **1 A characterization of the FDI in the BRICS**

This section aims to present a brief characterization of the FDI in the BRICS countries in the period 2009-2018, in two dimensions. The first one analyses FDI flows and stocks for each country, regardless of the intra BRICS dynamics. The second dimension focuses on the characterization of the productive integration via FDI within the bloc.

In this first dimension, the initial perception is that the importance of FDI as a source of resources for aggregate investment in each country is asymmetrical and, in general, lower than the world average. Measuring it as the participation of annual FDI flows in the gross fixed capital formation, we note that except for Brazil – and in some years Russia –, this ratio is slightly lower than the world average in the period under analysis. It is particularly important to highlight this minor relative importance for China, where the ratio evolves from 4.1% in 2009 to 2.6% in 2017 (while the world average varies between 8.2% and 7.1%, according to Unctad Statistics). In other words, there is a low and declining dependence on foreign investment in the Chinese structural transformation process, in contrast to Brazil (whose indicator increased in this period from 8.1% to 21%).

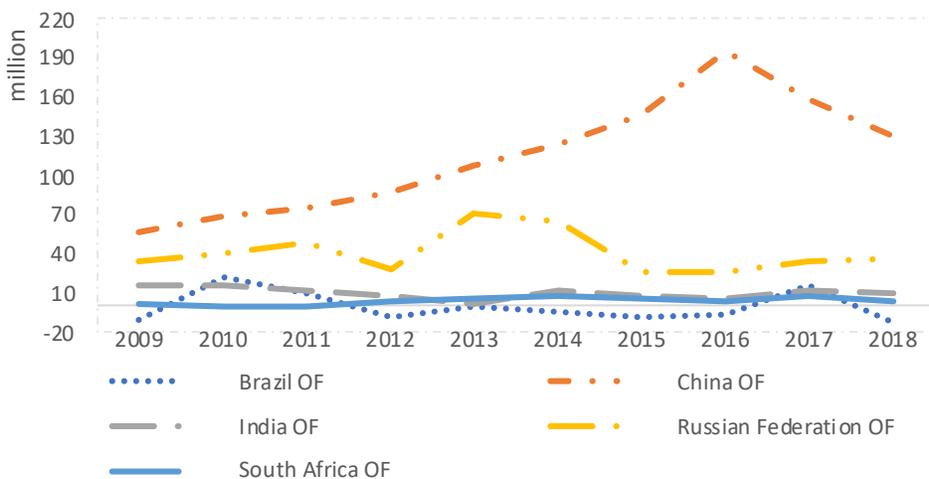
Figure 1 indicates that the evolution of FDI inflows to BRICS countries during the analyzed period was very heterogeneous – China concentrating around half of these resources, and Russia and Brazil losing ground. Moreover, in spite of a 36% growth in the aggregated amount, the BRICS countries’ share in the world FDI inflows had no significant growth trend. As for the FDI outflows (Figure 2) however, the growth was twice as large as the one related to the inflows (72%), and the BRICS’ share in the world total almost doubled during the period. This movement is almost entirely explained by the Chinese capital internationalization, which accounts in 2018 for 77% of the total BRICS countries’ OFDI (besides 22% of Russia; i.e. Brazil, India and South Africa are completely irrelevant in this regard).

Figure 1  
FDI inflows, BRICS, US\$ million, 2009-2018



Source: Authors’ elaboration, based in UNCTAD Statistics.

Figure 2  
Outward FDI, BRICS, US\$ million, 2009-2018



Source: Authors’ elaboration, based in UNCTAD Statistics.

The analysis of the evolution of such investments based on the stocks identifies very similar patterns. As expected, the share of BRICS countries' FDI stocks in the world total is lower than the one related to the flows. Concerning the inflows, this share unfolds from 8.6% to 10% between 2009 and 2018, with an increase in the weight of China in the bloc (evolving from less than a third to more than 50% of the total), and a reduction to at least half of Russia's and South Africa's shares (respectively 12.6% and 4.0% in 2018). As for the outflows, the asymmetry is even higher, given that China represents about 2/3 of the BRICS OFDI stocks. This vigorous Chinese growth is the main responsible for the expansion of these countries' participation in the global OFDI in the period, from 4.4% to 9.4%. It is worth noting again that China is the important vector for the reconfiguration of the relative importance of each country within the bloc, with a substantial reduction in the participation of Brazil (more than 50%) and Russia (67%).

The second dimension of the characterization the BRICS countries' FDI concerns the analysis of the intra-group integration. Such effort is developed through the analysis of data provided by the Coordinated Direct Investment Survey (CDIS/ IMF), which presents the consolidated stocks of FDI (in net equity and net debts) for the vast majority of the world until 2018<sup>3</sup>. This investigation indicates that, in general, the productive integration within BRICS is insignificant and strongly asymmetric.

Indeed, the bloc contributes with a very small share of the FDI attracted by its countries (0.34%), and represents only 1.45% of the destination for the FDI originated in these countries. Brazil is the country for which the BRICS have the higher weight as the destination for its FDI stocks (5.7%), and South Africa is the one in which the bloc has a higher relative importance as a source of investments (4.6%). For China, Russia and India, FDI stocks originated from other BRICS members are always below 1% of the total FDI received.

Finally, the asymmetry is revealed mainly in the relative prominence of China, which is responsible for 76% of the intra-group FDI source (Table 1).

Table 1  
FDI Position (Stock), BRICS Countries, end-2018, % of total intra BRICS FDI

Investment from:	Investment in					
	Brazil	China, P.R.: Mainland	India	Russian Federation	South Africa	BRICS countries
Brazil	-	3,80%	0,10%	0,00%	0,20%	4,10%
China, P.R.: Mainland	11,80%	-	5,50%	17,60%	41,60%	76,50%
India	1,20%	5,20%	-	4,20%	0,00%	10,70%
Russian Federation	0,30%	1,80%	1,50%	-	0,20%	3,80%
South Africa	0,70%	3,20%	1,10%	0,00%	-	4,90%
<b>Total BRICS</b>	<b>14,00%</b>	<b>14,10%</b>	<b>8,10%</b>	<b>21,90%</b>	<b>42,00%</b>	<b>100,00%</b>

Source: Coordinated Direct Investment Survey (CDIS).

(3) It is worth reminding that the official FDI databases are only able to measure unidirectional investments, not taking into consideration the problems engendered by triangular operations (aimed normally at alleviating the tax burdens). For the specific analysis of Chinese investments (section 3), however, the article uses another database, bypassing these limitations.

Although this country is the most important for the BRICS, the bloc has very small relative importance to the total Chinese FDI inflow and outflow (0.08% and 1.5%, respectively). In other words, the BRICS countries depend fundamentally on China as the main source of intrabloc resources, but the bloc itself is not very representative for the internationalization of Chinese productive capital.

Thus, it is clear that the main characteristics of the BRICS countries' FDI inflows and outflows in 2009-2018 are: (a) BRICS countries are not so dependent on FDI for gross fixed capital formation, with the exception of Brazil, (b) BRICS FDI represents a stable share of the global annual inflows and stocks, (c) BRICS' share of the global OFDI more than doubled, (d) BRICS has a very low level of intrabloc productive integration, and (e) the movement is characterized by an increasing asymmetry in favor of China, in practically all variables and dimensions analyzed, mainly when observing the OFDI, both intra-group and beyond BRICS. Given this importance of the Chinese OFDI, the next section is devoted to scrutinize the main modalities of these investments and its occurrence intra-BRICS.

## **2 Chinese OFDI evolution: a brief overview and the coexistence of different patterns**

Similarly to numerous indicators associated to the Chinese economy, the evolution of its OFDI evidences its vigor in the recent period. In addition to the already consolidated position of China as an important destination for international FDI flows – representing 10.7% of the world total in 2018 –, the extroversion of Chinese capital has gained prominence in the recent period. This can be illustrated by the increase in its share in the global FID outflows, which more than doubled between 2009 and 2018 - reaching the aforementioned level of 10%.

When analyzing the internationalization of the Chinese productive capital, this article assumes the hypothesis that it should be understood as an unfolding of the structural transformation process that characterizes the Chinese development strategy since the last quarter of the 20<sup>th</sup> century (Naughton, 2019). In other words, such internationalization must be understood at the same time as a reflection of the virtues and limitations of the current stage of the Chinese productive forces' development (Nolan, 2013).

This results in the coexistence of at least two heterogeneous internationalization patterns. The first one concerns the exit of FDI with the intention of circumventing limitations to the domestic productive structure, both through the search for access to natural resources, and for complementary productive and technological capabilities in areas in which Chinese companies are catching-up. The second pattern resembles the strategy of the developed countries, being characterized by the extroversion of capital in search for new markets and the global consolidation of national brands and technologies.

Given the very distinct characteristics of these movements, one could expect that this heterogeneity would unfold in different competitive dynamics, accumulation strategies and agents instrumentalizing this process. Moreover, this coexistence of different patterns is also verified when analyzing the different development levels of the Chinese productive structure (see Table 2).

Table 2  
The heterogeneity of the Chinese productive structure and the internationalization process:  
a typology effort based on the agents and strategies

	Traditional SOEs	Large companies mainly focused on the domestic market	Technology-based companies
Different technological strategies	Update and modernization	Catching-up, design and brands	Frontier
Different industrial and technological policy instruments	Licenses and local content	Dynamic efficiency (Schumpeterian and Keynesian)	Knowledge, financing, technological standards and local business model
Different forms of State participation	SASAC	Socialization of financing	Systemic
Different patterns of internationalization	Traditional / access to resources, markets, etc.	Acquisition of brands and markets	M&A, with a technological nature

Source: Authors' elaboration.

Thus, as suggested by the typology presented in Table 2, both the process of Chinese capital internationalization and the development of its productive forces must be understood, in essence, from the analysis of the coexistence between different competitive and accumulation dynamics led by (i) Stated Owned Enterprises (SOE) in traditional sectors, (ii) large companies mainly focused on the domestic market, and (iii) technology-based companies.

Concerning the SOE in traditional sectors, despite the huge revenues they earn in the local market, they still face a productive, technological and organizational lag in relation to their international counterparts. Thus, with the central coordination of the SASAC (State-owned Asset Supervision and Administration Commission), overcoming these limitations is the main effort of its learning strategies (Burlamarqui, 2017; Yu Zhou; Liu Xielin, 2013). So, its internationalization has a more traditional pattern, searching for access to natural resources and inputs, as well as for entering in other national markets that are relevant for their areas of activities.

Besides that, this strategy fosters also the indirect internationalization of Chinese suppliers of inputs and machinery to the enterprises that invested abroad (e.g. the long-term State Grid internationalization strategy, and the resulting internationalization of some of its electrical equipment suppliers).

For large companies mainly focused on the domestic market (e.g. producers of durable consumer goods, such as HAIER and the auto companies), the main challenges seem to be the completion of the catching-up process, mainly in activities with higher capacity for value generation (Nolan, 2013; 2014; Chen; Naughton, 2016). Thus, its internationalization strategies envisage the acquisition of brands (as in the case of Lenovo / IBM, Geely / Volvo) and the purchase of market share from its international competitors, in order to enable a future process for consolidating Chinese brands on a global scale.

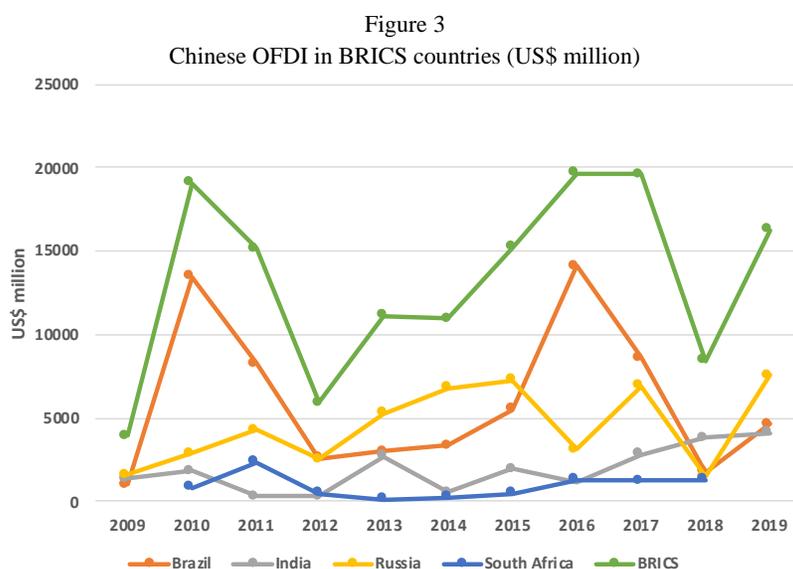
Finally, for some segments of technology-based companies that are already very close to the international frontier (Baidu, Alibaba, Tencent, Huawei, ZTE, Cambricon, Face ++, among countless others), the internationalization strategy brings together simultaneous efforts to search for new markets, to acquire technological and innovative capabilities, as well as to internationalize national technological standards (LEE, 2018). Thus, they tend to be directed towards countries where national innovation systems are consolidated and can contribute to increasing their competitiveness (Wubbeke, et al., 2016; US Chamber of Commerce, 2016; Zenglein; Holzmann, 2019).

Thus, Chinese capital internationalization must also be analyzed as part of a broader industrial policy strategy, with the aim of simultaneously circumventing the limitations faced in its productive forces development, and taking benefit of its built comparative advantages – and not only of the comparative advantages verified in the receiving countries – to enable the Chinese capital's reproduction on an expanded scale.

### *Chinese investments in BRICS countries*

In line with the abovementioned plans, Chinese investments have increased substantially in the last decades. In 1999 the government launched the Going Global strategy, aimed at stimulating Chinese companies to invest abroad. Nevertheless, the big push for these investments came in the second decade of the 21<sup>st</sup> century, both in terms of the resources involved and a – gradual – diversification of the recipient countries and sectors. A milestone is the promulgation of the Belt and Road Initiative (BRI), in 2013.

As for the BRICS, the “China Global Investment Tracker” registers 221 operations between 2009 and 2019 related to both Investments and Construction<sup>4</sup>. The data are volatile – notably due to some extraordinarily big transactions in the Brazilian oil sector, in 2010-11 – but in average it is possible to notice an increase in the volumes invested in the second half of the decade (Figure 3).



(4) The China Global Investment Tracker compiles data by corporate reporting, registering them in the moment when companies announce they have started spending. Since it is impossible to have access to real-time expenditure, the full transaction amount is recorded at once.

Figure 3 shows also that in the period 2009-2019 Brazil and Russia were the main recipients within BRICS of the Chinese investment flows. Nevertheless, investments in India have increased in a sustained way in the end of the period.

Table 3 allows us to analyze the sectors in which these Chinese resources in BRICS countries were invested, making clear that there is an extremely high concentration in energy (58.2%) – followed by Metals (10.6%) and Transport (6.8%). The country in which the investments are more concentrated is Brazil, where energy alone responded to 73.2% of the total resources – notably oil and hydro-electricity. Generally, these investments are made by State-Owned Companies (SOE), in a modality of FDI which is typical of the first category in the typology presented above. If besides energy we also consider metals, transport and agriculture, the share of the total Chinese OFDI in Brazil is higher than 90%. In Russia, investments in energy represent also more than half of the total, but the main subsector is gas. In South Africa, as expected, the main sector is metals, but energy, transport and real estate are also relevant. Nevertheless, if we extend the time-length of the analysis, the most important Chinese investment in South Africa (in terms of volume) was made by the Industry and Commerce Bank of China (ICBC), buying 20% of the Standard Bank in 2007 (US\$ 5.6 billion) – in the typology proposed above, it is a typical investment of the second type, aimed at the acquisition of a consolidated brand in a foreign country to immediately have access to its market. Investments in the Financial sector have been not important so far, but they may become higher in the near future due to the explicit will of the Chinese government to internationalize its banking system and its currency. This important investment made by ICBC may have had already this objective of using South Africa as a platform for the bank internationalization in the whole continent. India is the country where the investments are less concentrated. Interestingly, there are increasing investments in the sector of Technology (discussions below), and there are some sectors in which only India receives investments (e.g. Tourism and Health<sup>5</sup>).

Table 3  
Chinese OFDI in BRICS countries – 2009-2019 – Sectors (%)

Sectors	Brazil	India	Russia	South Africa	BRICS
Energy	73.2	34.5	54.0	23.1	58.2
Metals	6.4	7.9	13.1	35.1	10.6
Transport	6.4	7.6	5.3	16.7	6.8
Real estate	1.5	2.6	7.5	17.5	4.6
Agriculture	4.9	2.4	5.8	0.0	4.6
Other	0.0	20.5	4.5	0.0	4.5
Chemicals	2.3	3.7	5.3	0.0	3.4
Finance	3.6	0.0	2.4	3.0	2.6
Technology	0.7	7.2	1.8	4.6	2.2
Tourism	0.0	6.0	0.0	0.0	0.9
Health	0.0	5.1	0.0	0.0	0.7
Logistics	0.7	0.0	0.3	0.0	0.4
Entertainment	0.0	2.4	0.0	0.0	0.4
Utilities	0.3	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Authors' elaboration, based on the China Global Investment Tracker.

(5) India is an important regional center in Asia for health services.

The analysis of the Chinese companies investing in BRICS countries – also enabled by the China Global Investment Tracker – is very interesting too. First of all, it makes evident that the concentration in the energy sector reflects also a concentration in the investing companies. State Grid and SINOPEC together represent more than 20% of all Chinese investments in these countries from 2009 to 2019 (respectively 11.4 and 10.0%). The concentration is even higher for Brazil, where State Grid alone was responsible for 23.2% and SINOPEC for 18% of all investments; if we include Three Gorges, the three companies respond to almost half the volume of all Chinese OFDI in Brazil in this period. In India, besides some companies related to energy and metal, the importance of Alibaba (10.8% of all Chinese investments made in the country in 2009-2019) and Tencent (5.2%) is remarkable. It clearly shows the recent tendency of Chinese companies related to communication and information technology to buy similar companies abroad, in a typical investment of the third type in the typology proposed above. Moreover, India is worldwide known as a source of high-qualified and low-price workforce in areas related to information technology. In Russia, the Chinese company responsible for the higher investments in the last decade was China National Petroleum Corporation (CNPC) – alone or with the China National Oil Corporation (CNOOC), it responded for 18.3% of all investments. However, companies associated to the processing industry had also important shares: China National Chemical Engineering (7.7%) and Sinomach (6.4%) – in the proposed typology, investments of the second type, being almost entirely brownfield. In South Africa, Jinchuan (Mineral), SINOPEC (Energy), Beijing Auto (Automobile) and China Minsheng Investments (diversified group) have each around 15% of participation in all Chinese investments in the period.

Finally, it is important to highlight that according to the analyzed data, the Chinese investments in BRICS countries are largely dominated by the purchase of existing assets: for 2009-19, only 17.8% were greenfield investments. The worst case is Brazil (only 10.3% greenfield) and the best one is India (30.4%), with Russia and South Africa in between (around 20%).

In fact, the shares are completely different according to the sector (Table 4). The one in which the greenfield investments are very important is Entertainment, which has

Table 4  
Chinese OFDI in BRICS Countries, 2009-2019 – Greenfield vs. Brownfield

Sector	Greenfield	Brownfield
Agriculture	19,9	80,1
Chemicals	0	100
Energy	13,7	86,3
Entertainment	80,4	19,6
Finance	2,6	97,4
Health	0	100
Logistics	24,6	75,4
Metals	21,6	78,4
Other	32,8	67,2
Real estate	24,6	75,4
Technology	44,3	55,7
Tourism	0	100
Transport	38,6	61,4
Utilities	0	100
Total Geral	17,8	82,2

Source: Authors' elaboration, based on the China Global Investment Tracker.

nonetheless a marginal share in the total amount (0.4%). Besides, only Technology and Transport have a proportion of more than US\$ 1 invested in greenfield to US\$2 in brownfield – however, these sectors have increasing importance, allowing us to expect higher shares of greenfield investments in the future. On the other hand, in the main sector, Energy, 86.3% of the investments were for the acquisition of existing assets.

Summing up, the Chinese OFDI for BRICS countries during 2009-19 was widely dominated by brownfield investments in Energy, with only three investing companies (SINOPEC, State Grid and Three Gorges) representing more than one fourth of the total investments. Nevertheless, a detailed analysis shows some diversity in the characteristics of the OFDI directed to each of the BRICS countries, and also some – slight, but non negligible – changes in the prioritized sectors all over the period, reflecting somehow the strategies of the central government. Following the typology proposed above, the first category of Chinese OFDI has been dominant in the last decade, but some investments of the second (notably in Russia) and third (exclusively in India) types have been also done.

#### **4 Final remarks**

This paper analyzed the FDI in the BRICS countries after the official constitution of the bloc, in 2009, allowing some perceptions regarding the economic integration of these countries with the whole world and within the group.

The first conclusion is that the FDI intra-BRICS is still not significant (in relative terms) and completely asymmetric. According to the data obtained at CDIS/IMF, China is the source of three quarters of the intra-BRICS FDI (2018) – and this share tends to increase in the future.

Precisely due to this very high importance of China in the BRICS' FDI, the paper moved to a more detailed analysis of the Chinese investments. As extensively discussed in the literature, the Chinese government has been stimulating its companies to “go global”, a strategy initiated in 1999, but intensively accelerated in the last decade. Inspecting this evolution, the paper proposes a typology which organizes the Chinese OFDI into three main modalities: i) conventional OFDI, searching for resources and/or new markets; ii) acquisition of brands and companies abroad, allowing the immediate conquer of new markets; iii) mergers and acquisitions focused on achieving technological skills.

Exploring the “China Global Investment Tracker”, the paper presented therefore an analysis of the Chinese investment in BRICS countries from 2009 to 2019. The investigation evidenced that all over the decade, Brazil and Russia have been the main receiving countries within BRICS. Concerning the sectors, there is a strong concentration of investments in the Energy sector (58.2%) – notably in oil, gas, coal and electricity. Nonetheless, there are important differences between the countries. Brazil and Russia have the higher concentrations, whilst India and South Africa have a higher diversification. In India, although energy is also the more prominent sector (34.5%), it is important to highlight the increasing relevance of the Technology sector (7.2%). In South Africa, the metals sector is the most important one (35.1%).

This sector analysis complemented by the investigation of the Chinese companies investing in BRICS countries illustrates the pertinence of dividing China's OFDI in the three abovementioned modalities. As discussed above, most of the analyzed investment may be framed in the first category,

but the second and third types are also present (the last type being verified only in India, due to the relative immature development level of the BRICS countries' national innovation systems). As a result, the vast majority of the investments have been for the acquisition of existing companies, and the greenfield investments represented only 17.8% of the total.

Finally, it is possible to state that the constitution of the BRICS as a formal bloc, in 2009, has not yet resulted in a high economic integration among the member countries, neither in terms of trade, nor in what regards FDI. The only perceptible move is a rapid acceleration of the Chinese investments in the other four countries, but this is not exclusive to the BRICS, since China's OFDI for the whole world is increasing in a similar pace. Hence, it is not possible to affirm that the creation of the group in 2009 is stimulating the acceleration of these intra-bloc investments, inasmuch as they seem to merely respond to China's national interests and necessities. In general, China invests in BRICS attracted by a dialectic combination between local built dynamic comparative advantages<sup>6</sup> and the mainstream economic goals of benefiting from the comparative advantages offered by each receiving country, in line with its capital accumulation logic (which inherently requires extroversion), and its national development strategy.

It means therefore that the political coordination of these five countries for the constitution of the BRICS has not yet unfolded into the configuration of particular characteristics in the investments made within the bloc. In other words, the Chinese investment in the BRICS follow the same logic of the Chinese investments in the rest of the world. As a consequence, they are generally reinforcing the role of Brazil, Russia, India and South Africa in the international division of labour, and deepening the economic asymmetries between China and the other member countries.

That said, we claim that it would be important for the BRICS to enhance its cooperation regarding FDI, both in terms of the amounts involved and the modalities of investments. More specifically, the five countries could define priority sectors, exploring the complementarities of their economies, but also the needy areas in each country. In this process, the New Development Bank can be strengthened as a strategic provider of resources, notably for investments related to a green economy.

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(6) In this case, we can verify the prevalence of internationalization fostered by local firms that had already developed capabilities in areas such as electronic, heavy industries and scale intensive sectors.

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