BRICS JOURNAL OF ECONOMICS
DOI 10.3897/brics-econ.3.e96300
2022 Volume 3 Number 2

Foreign direct investments in the BRICS countries and internationalization of Chinese capital

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Academic editor: V. Faminsky | Received 13 October 2022 | Accepted 1 November 2022 | Published 8 November 2022

Citation: De Conti, B., & Diegues, A. C. (2022). Foreign direct investments in the BRICS countries and internationalization of Chinese capital. *BRICS Journal of Economics, 3*(2), 129–142. https://doi.org/10.3897/brics-econ.3.e96300

Abstract

This article aims to analyze the economic integration of the BRICS countries through foreign direct investments (FDI) since the first summit of the group in 2009. The investigation shows that this integration is very asymmetric due to the preponderance of Chinese investments in other BRICS countries. Hence, the paper sets an associated objective, focusing on the evaluation of diverse patterns of internationalization of Chinese capital and its impact on the investments within the bloc. In line with these goals, the paper's methodology involves several progressive steps. First of all, we are developing a data analysis of FDI in BRICS. Given the absolute dominance of China's investments within the bloc, we are shifting the focus to these Chinese outward foreign direct investments (OFDI). In order to cope with this requirement, we are promoting qualitative and quantitative analysis. The qualitative analysis consists in the perception of heterogenous motivations that induce the internationalization of Chinese capital through examining the strategies of three groups of economic agents in China: (1) state-owned enterprises (SOE) operating in traditional sectors, (2) big companies preponderantly oriented on the domestic market, and (3) technology-based companies. The quantitative analysis lies in the scrutiny of the available data on Chinese investments in other BRICS countries. As a result, the main contribution of this article lies in the characterization of heterogeneous strategies of the internationalization of Chinese capital and their analysis within the framework of the asymmetric productive integration within BRICS.

Keywords
BRICS, FDI, economic integration, internationalization of Chinese capital, development strategies.

JEL: F15, F30, F55.

Introduction

The acronym BRIC (Brazil, Russia, India and China) came to be used by financial market analysts as a reference to a group of countries that offered highly profitable investment opportunities. Thus, the initial perception of BRIC by the world financial community, the international press and even the governments of central countries highlighted the functionality of these four economies for the global economy as sources of raw materials and industrial products at low prices, but also as a source of high returns to investments addressed to these countries.

As has been extensively discussed in the literature (Batista Jr., 2021; Monyae & Ndzendze, 2021), the use of the acronym was consolidated and, finally, served to encourage the organization of meetings of the governments of these countries aimed at establishing discussions on the world economy. The first summit was held in Yekaterinburg, Russia, in 2009, and was focused on the need for reforms in the international financial system, but other topics were also discussed, such as international trade, food security and renewable energy. In 2011, South Africa was invited to join the group, setting up BRICS.

It is therefore clear that this group, primarily constituted as an object considered by global investors as a source of high-yield assets, gradually structured itself as an entity. Initially, the intention was to synchronize the countries' demands within the "old" multilateral institutions (notably, the World Trade Organization, the International Monetary Fund and the World Bank), but in a relatively short period of time the group was able to create new institutions (the New Development Bank – NDB and the Contingent Reserve Arrangement – CRA[1]). Becoming an important player in international dialogues, the BRICS countries convey a very clear message that they will not accept the role that the world economy has imposed on them, wanting to be protagonists in the international political and economic arena. This desire is justified by the fact that the BRICS countries together account for more than 40% of the world's population, a third of the global gross domestic product and a quarter of the world's land surface.[2] The group was initially organized around a program of denial of the *status quo*, and therefore its current challenge is to build a positive economic agenda, with proposals on the international order, as well as on relations between the five countries.

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1 For details, see, for instance, Bezerra (2020).

2 Data for 2020.

When we analyze the possibilities and challenges for the development of this bloc, we see, first of all, that economic relations between the five countries are growing very fast,[3] but it is mainly due to the importance of China. Thence, it can be understood that the construction of BRICS is fundamental to the search for a new international order, but it has to deal with the risk of creating (or reproducing) asymmetries within the bloc itself. With this in mind, it is crucial to develop research aimed at scanning the integration of the BRICS countries (and its evolution over time) through various lenses to investigate the degree and the characteristics of this integration.

Along with other interesting works contributing to this effort (such as Sholokhova (2020)), this article aims to analyze the economic integration of the BRICS countries through foreign direct investments (FDI) since the official creation of the group in 2009. The investigation corroborates the hypothesis raised above that this integration is very asymmetric due to the preponderance of Chinese investments in other BRICS countries. Hence, the paper sets an associated objective, focusing on the evaluation of the diverse patterns of the internationalization of Chinese capital and its impact on the investments within the bloc.

In line with these goals, the article's methodology involves several progressive steps. First of all, we are developing a data analysis of FDI in the BRICS countries (both inward and outward). Given the absolute dominance of China's investments within the bloc, we are shifting the focus to these Chinese outward foreign direct investments (OFDI) – after all, understanding the BRICS FDI currently calls for a deep appreciation of the Chinese OFDI. In order to cope with this requirement, we promote qualitative and quantitative analysis. The qualitative one consists in the perception of heterogenous motivations that induce the internationalization of Chinese capital through an investigation of the strategies of three groups of economic agents in China: (1) state-owned enterprises (SOE) operating in traditional sectors, (2) big companies preponderantly oriented on the domestic market, and (3) technology-based companies. The quantitative analysis lies in the scrutiny of the available data on Chinese investments in other BRICS countries.

As a result, the main contribution of this article lies in the characterization of heterogeneous strategies of the internationalization of Chinese capital and their analysis within the framework of the asymmetric productive integration within BRICS.

The text is divided into two sections, in addition to this introduction. Section 1 presents a brief description of intra-BRICS FDI in the period 2009-2018, with an emphasis 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 accumulation dynamics and the determinants of the extroversion strategy. The concluding 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.

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3 For details, see, for instance, Monyae and Ndzendze (2021), Thorsteinsen and Oliveira (2014).

2. Characteristics of foreign direct investments in BRICS

This section aims to present a brief characterization of FDI in the BRICS countries in the period 2009-2018 in two dimensions. The first one analyzes 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 asymmetric and, in general, lower than the world average. Measuring it as a share 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 from 8.1% to 21% during this period).

Figure 1 indicates that the evolution of FDI inflows to the BRICS countries during the analyzed period was very heterogeneous – China was concentrating around half of these resources, and Russia and Brazil were losing ground. Moreover, despite a 36% growth in the aggregated amount, the BRICS countries' share in the world FDI inflows did not have a significant growth trend. However, as for the FDI outflows, 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 this period (Figure 2). This movement is almost entirely explained by the internationalization of Chinese capital, which in 2018 accounted for 77% of the total OFDI of the BRICS countries (in addition to 22% of Russia; i.e. Brazil, India and South Africa are completely irrelevant in this regard).

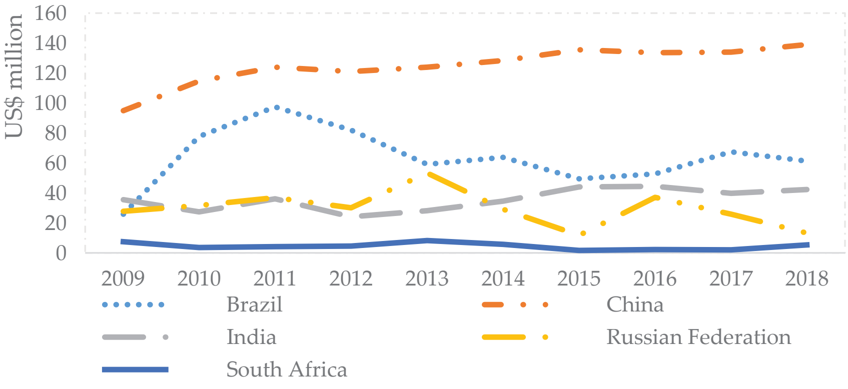

Figure 1. FDI (inflows), BRICS, US$ mln (2009-2018). *Source:* Compiled by the authors based on data from UNCTAD statistics.

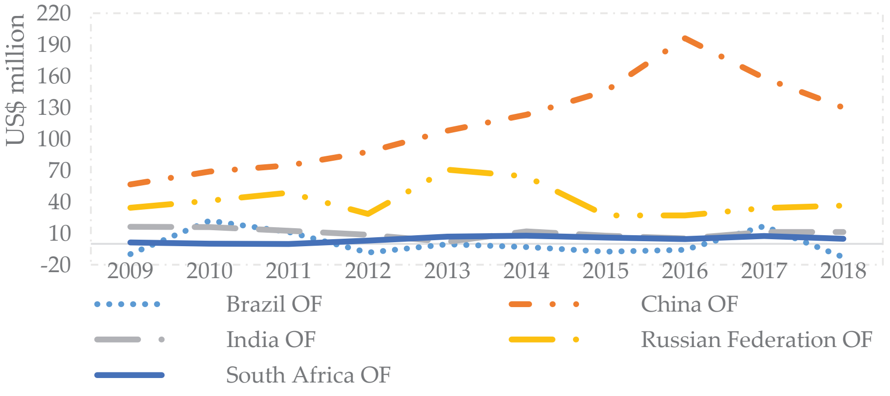

Figure 2. FDI (outflows), BRICS, US$ mln (2009-2018). *Source:* Compiled by the authors based on data from UNCTAD statistics.

The analysis of the evolution of such investments based on the stocks reveals very similar patterns. As expected, the share of the BRICS countries' FDI stocks in the world total is lower than the one related to the flows. Concerning the inflows, this share increased from 8.6% to 10% between 2009 and 2018, with an increase in the weight of China in the bloc (from less than a third to more than 50% of the total) and an almost twofold reduction of Russia's and South Africa's shares (to 12.6% and 4.0%, respectively, 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 reason for the expansion of these countries' participation in the global OFDI in this period from 4.4% to 9.4%. It is worth noting once again that China is an important vector of 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 of the BRICS countries' FDI concerns the analysis of the intra-group integration. Such effort is based on the analysis of data provided by the Coordinated Direct Investment Survey (CDIS/ IMF), which presents consolidated stocks of FDI (in net equity and net debts) for the vast majority of countries in the world until 2018.[4] This investigation indicates that, in general, productive integration within BRICS is insignificant and strongly asymmetric.

Indeed, the bloc accounts for a very small share of the FDI attracted by its countries (0.34%) and only 1.45% of FDI destinations originated in these countries. Brazil is a country for which the BRICS countries have the higher weight as a destination for its FDI stocks (5.7%), and South Africa is a country in which the bloc has a higher relative importance as a source of investments (4.6%). For China, Russia and India,

[4] It is worth reminding that 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). However, for the specific analysis of Chinese investments (section 2) the article uses another database that bypasses these limitations.

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). Although this country is the most important for BRICS, the bloc has very little relative importance for 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 intra-bloc resources, but the bloc itself is not very representative for the internationalization of Chinese productive capital.

Table 1. FDI position (stock), BRICS countries (2018, % of total intra-BRICS foreign direct investment)

	Investment in:					
Investment from:	**Brazil**	**China, P.R.: Mainland**	**India**	**Russian Federation**	**South Africa**	**BRICS countries**
Brazil	-	3.8%	0.1%	0.0%	0.2%	**4.1%**
China, P.R.: Mainland	11.8%	-	5.5%	17.6%	41.6%	**76.5%**
India	1.2%	5.2%	-	4.2%	0.0%	**10.7%**
Russian Federation	0.3%	1.8%	1.5%	-	0.2%	**3.8%**
South Africa	0.7%	3.2%	1.1%	0.0%	-	**4.9%**
Total BRICS	**14.0%**	**14.1%**	**8.1%**	**21.9%**	**42.0%**	**100.0%**

Source: Compiled by the authors based on data from Coordinated Direct Investment Survey (CDIS).

Thus, it is clear that the main characteristics of the BRICS countries' FDI inflows and outflows in 2009-2018 are: (1) the BRICS countries are not so much dependent on FDI for gross fixed capital formation, with the exception of Brazil; (2) the BRICS FDI represent a stable share of global annual inflows and stocks; (3) the BRICS share of the global OFDI has more than doubled; (4) BRICS has a very low level of intra-bloc productive integration; and (5) the movement is characterized by an increasing asymmetry in favor of China in practically all the variables and dimensions analyzed, mainly when observing the OFDI, both intra-group and outside BRICS. Given the importance of the Chinese OFDI, the next section is devoted to a thorough study of the main modalities of these investments and their occurrence within the BRICS countries.

2. Evolution of the Chinese OFDI: A brief overview and coexistence of different patterns

Like numerous indicators associated with 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 FDI 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 the unfolding of the structural transformation process that characterizes the Chinese development strategy since the last quarter of the 20th 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 development of the Chinese productive forces (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 of the domestic productive structure both by seeking access to natural resources and by additional productive and technological capabilities in areas in which Chinese companies are catching up. The second pattern resembles the strategy of developed countries characterized by the extroversion of capital in search of new markets and global consolidation of national brands and technologies.

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

Table 2. Heterogeneity of the Chinese productive structure and the internationalization process: A typology based on 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: Compiled by the authors.

Thus, as suggested by the typology presented in Table 2, both the process of internationalization of Chinese capital and the development of its productive forces should be understood, in essence, from the analysis of the coexistence between different competitive and accumulative dynamics led by (1) SOEs in traditional sectors, (2) large companies mainly focused on the domestic market, and (3) technology-based companies.

Concerning the SOEs 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 focus of their learning strategies (Burlamarqui, 2017; Yu & Liu, 2013). So, their internationalization has a more traditional pattern of seeking access to natural resources and inputs, as well as access to other national markets that are relevant for their areas of activities.

Besides, this strategy also fosters the indirect internationalization of Chinese suppliers of inputs and machinery to the enterprises that invest 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 automobile companies), the main challenges seem to be the completion of the catching-up process, primarily in activities with higher capacity for value generation (Chen & Naughton, 2016; Nolan, 2013; 2014). Thus, their internationalization strategies envisage the acquisition of brands (as in the case of Lenovo / IBM, Geely / Volvo) and the purchase of market share from their international competitors in order to enable the future consolidation of 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++ and many others), the internationalization strategy combines simultaneous efforts to find new markets, acquire technological and innovative capabilities and internationalize national technological standards (Lee, 2018). Thus, they tend to be focused on countries where national innovation systems are consolidated and can contribute to increasing their competitiveness (US Chamber of Commerce, 2016; Wubbeke et al., 2016; Zenglein & Holzmann, 2019).

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

2.1. Chinese investments in the BRICS countries

In line with the abovementioned plans, Chinese investments have increased substantially in the past decades (for details, see, for instance, Sholokhova (2020)).

In 1999, the government launched the Going Global strategy aimed at stimulating Chinese companies to invest abroad. Nevertheless, a big boost for these investments came in the second decade of the 21st century, both in terms of the resources involved and a – gradual – diversification of the recipient countries and sectors. An important milestone is the promulgation of the One Belt and One Road Initiative (BRI), in 2013.

As for the BRICS countries, between 2009 and 2019, the China Global Investment Tracker registered 221 operations related to both investments and construction.[5] The data are volatile – notably, due to some extraordinarily big transactions in the Brazilian oil sector in 2010-2011 – but on average, it is possible to notice an increase in the volumes invested in the second half of the decade (Figure 3).

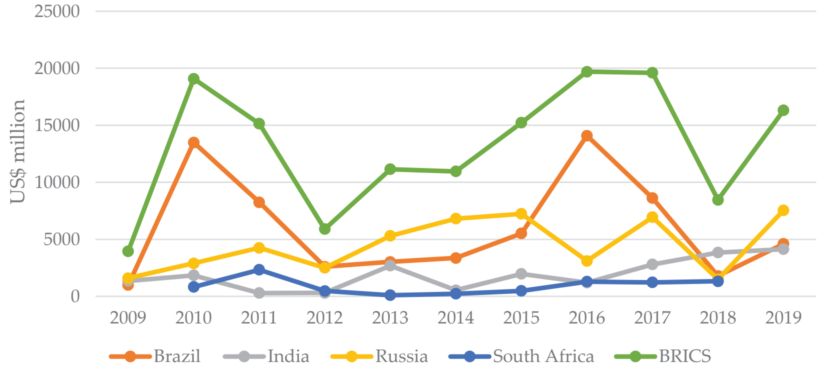

Figure 3. Chinese OFDI in the BRICS countries (US$ million). *Source:* Compiled by the authors based on the China Global Investment Tracker.

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

Table 3 allows us to analyze the sectors in which these Chinese resources in BRICS countries were invested, making it clear that there is an extremely high concentration in energy (58.2%), followed by metals (10.6%) and transport (6.8%). The country where investments are more concentrated is Brazil, where energy alone accounts for 73.2% of the total resources – notably, oil and hydro-electricity. Generally, these investments are made by state-owned companies (SOE) in the form of FDI, which is typical of the first category in the typology presented above. If, in addition to energy, we also consider metals, transport and agriculture, the share of the total Chinese OFDI in Brazil will exceed 90%. In Russia, investments in energy also account for more than half of the total, but the main subsector is gas. In South Africa, as expected, the main sector is metals,

5 The China Global Investment Tracker collects data using corporate reporting, registering them in the moment when companies announce the start of spending. Since it is impossible to have access to real-time expenditure, the full transaction amount is recorded at once.

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) which bought 20% of the Standard Bank in 2007 (US$ 5.6 billion) – in the typology proposed above, this is a typical investment of the second type aimed at acquiring a consolidated brand in a foreign country to immediately gain access to its market. Investments in the financial sector have been not important so far, but they may grow 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 the ICBC may have pursued the goal of using South Africa as a platform for the bank's internationalization across the continent. India is a country where investments are less concentrated. Interestingly, investments in the sector of technology are growing (see discussions below), and there are some sectors in which only India receives investments (e.g., tourism and health[6]).

Table 3. Chinese OFDI in the 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: Compiled by the authors based on the China Global Investment Tracker.

The analysis of the Chinese companies investing in the BRICS countries – also enabled by the China Global Investment Tracker – is very interesting, too. First of all, it makes it evident that the concentration in the energy sector reflects the 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 (11.4 and 10.0%, respectively). The concentration is even higher in Brazil, where State Grid alone was responsible for 23.2% and SINOPEC – for 18% of all investments; if we include Three

6 India is an important regional center of health services in Asia.

Gorges, these three companies account for almost half the volume of all Chinese OFDI in Brazil during this period. As for India, apart from 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. This clearly shows the recent tendency of Chinese companies related to communication and information technology to buy similar companies abroad, which is a typical investment of the third type in the typology proposed above. Moreover, India is known worldwide as a source of high-qualified and low-price workforce in areas related to information technology. As for Russia, the Chinese company responsible for increasing investments in the past decade was the China National Petroleum Corporation (CNPC) – independently or jointly with the China National Oil Corporation (CNOOC) it accounted for 18.3% of all investments. However, companies associated with the processing industry also had important shares: China National Chemical Engineering (7.7%) and Sinomach (6.4%) – in the proposed typology, these are investments of the second type, almost entirely belonging to brownfield. Speaking of South Africa, Jinchuan (mineral), SINOPEC (energy), Beijing Auto (automobile) and China Minsheng Investments (diversified group) each have about 15% of participation in all Chinese investments during this period.

Finally, it is important to highlight that, according to the analyzed data, the Chinese investments in the BRICS countries are largely dominated by the purchase of existing assets: in 2009-2019, 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 being in between (around 20%).

In fact, the shares are completely different depending on the sector (Table 4). The area in which greenfield investments are very important is entertainment,

Table 4. Chinese OFDI in the 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	17,8	82,2

Source: Compiled by the authors based on the China Global Investment Tracker.

which, nonetheless, has 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 invested in brownfield – however, these sectors are becoming increasingly important, 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 directed to the acquisition of the existing assets.

Summing up, the Chinese OFDI in the BRICS countries during 2009-2019 were widely dominated by brownfield investments in energy, with only three investing companies (SINOPEC, State Grid and Three Gorges) accounting for 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, as well as some – minor, but not negligible – changes in priority sectors throughout the period, one way or another reflecting 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 also been made.

Conclusion

This paper analyzes FDI in the BRICS countries after the official creation 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 intra-BRICS FDI are still insignificant (in relative terms) and completely asymmetric. According to the data obtained from 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 this paper undertakes a more detailed analysis of the Chinese investments. As extensively discussed in the literature, the Chinese government encourages its companies to "go global" – a strategy initiated in 1999 but intensively accelerated in the last decade. Analyzing this evolution, the paper proposes a typology that organizes the Chinese OFDI into three main modalities: (1) conventional OFDI searching for resources and/or new markets; (2) acquisition of brands and companies abroad allowing to immediately conquer new markets; (3) mergers and acquisitions focused on achieving technological skills.

Exploring the China Global Investment Tracker, the paper presents an analysis of Chinese investments in the BRICS countries from 2009 to 2019. The study evidences that throughout the decade, Brazil and Russia were 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. The economies of Brazil and Russia are more concentrated, whilst India and South Africa have higher economic diversification. As for India, although energy is also the more prominent sector there

(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 (35.1%).

This sector analysis, complemented by a study of the Chinese companies investing in the BRICS countries, illustrates the pertinence of dividing China's OFDI in the three aforementioned modalities. As discussed above, most of the analyzed investments can be classified in the first category, but the second and third types are also present (the latter type being verified only in India due to the relatively immature development level of the BRICS countries' national innovation systems). As a result, the vast majority of the investments were directed to the acquisition of existing companies, and greenfield investments represented only 17.8% of the total.

Finally, it can be stated that the establishment of BRICS as a formal bloc in 2009 has not yet resulted in high economic integration among the member countries, either in terms of trade or in terms of FDI. The only perceptive move is the rapid acceleration of Chinese investments in the other four countries, but this does not apply exclusively to BRICS since the volume of China's OFDI worldwide is growing at a similar pace. Hence, it is impossible to affirm that the creation of the group in 2009 stimulates 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 combination of dynamic local comparative advantages 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.

Thus, this means that the political coordination of these five countries on the creation of BRICS has not yet unfolded into a configuration of particular characteristics of investments made within the bloc. In other words, Chinese investments in BRICS follow the same logic as Chinese investments in the rest of the world. As a consequence, they generally reinforce the role of Brazil, Russia, India and South Africa in the international division of labour and deepen the economic asymmetry between China and other member countries.

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

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