

# Development Cooperation and Dependency: An Analysis of Brazilian-Spanish Cooperation in Latin America Between 2010 and 2018

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Based on analysis of Brazilian-Spanish cooperation in Latin America, this article aims to contribute to the discussion on whether South–South Cooperation (SSC) represents an alternative model with specific and differentiated objectives, or if it largely reproduces the constraints and interests traditionally associated with the North–South model, but with new institutions and actors. We start by analysing the main criticisms levelled at cooperation in the literature, emphasising the identification, review and comparison of the mechanisms of domination and dependency that derive from the bilateral and multilateral practices of traditional development cooperation. We then construct a synthetic dependency index to measure the ability of Spain and Brazil – as representative cases of North–South Cooperation (NSC) and SSC with Latin America – to influence the foreign trade, investment and foreign policy decisions of aid recipients, and to empirically contrast the lower level of verticality that much of the available literature assumes about SSC schemes. The empirical analysis suggests significant differences between NSC and SSC in terms of their ability to reproduce dependency patterns and validate the discourse that tends to identify the latter as an alternative cooperation model.

Keywords: Brazil, dependency, development cooperation, South–South cooperation, Spain.

One of the emerging issues in the international development cooperation system is the growing relevance of South–South Cooperation (SSC), referring to the direct relation between developing (normally recipient) countries and covering the exchange of knowledge, experiences, skills and resources. For some authors and other institutional agents, this is complementary to North–South Cooperation (NSC) and, on paper, has two main characteristics: horizontality and common interests. Other authors, emphasising precisely these two elements, conclude that it is an alternative paradigm to the traditional North–South one, aimed at overcoming dependencies in the areas of commerce, finance, culture, technology, politics and diplomacy.

As numerous authors have pointed out, SSC presents two major obstacles for its study and analysis. First, there is the problem of content framing (the activities to be included), given that it is a multidimensional phenomenon (political, economic, financial, and technical) that goes beyond ‘simple collaboration between countries of the South’, and has been defined in different ways by different international organisations such as UNCTAD, UNDP and the OECD’s own DAC (Xalma, 2013). Indeed,

SSC has blurred the boundaries between trade, investment and aid relations, and unlike Official Development Assistance (ODA) it does not come from public agencies only nor does it exclusively entail concessional financial transfers. (Li, 2018)

The second limitation, which is partly related to the first, is the lack of quantified, regular and comparable information on the different SSC programmes. In fact, accessing complete and coherent public sources for different countries is extremely difficult. As Brun (2018) points out, this can be explained in part by political and administrative reasons, either the lack of a unit that coordinates these actions or because, even where they exist, they do not monopolise cooperation activities and/or compile all information publicly and on an ongoing basis. Consequently, the phenomenon often lacks a global vision (Ayllon and Leite, 2010), meaning that many of the qualitative studies tend to focus on case studies, which are limited in scope to the specific examples studied and are most certainly not exhaustive. Although there are no regular annual reports or comprehensive overviews, and SSC is still an essential missing piece in the global architecture of international development cooperation (Gosovic, 2016), several estimations made by the OECD and the UN provide enough information to show that it has been growing in importance in the last years (Zoccal Gomes and Esteves, 2018). Ultimately, and more importantly, there is little available empirical research that facilitates comparison between the intentions and objectives of emerging donors and the results of their interventions, and that ultimately allows the supposed results pursued to be distinguishable from the actual results obtained (Chin and Quadir, 2012).

The present work proposes alternative indicators and estimates to contribute to the scarce quantitative literature on the topic. With this aim, we analyse whether development cooperation is an instrument of foreign policy at the service of the economic and political interests of donor countries and, based on the Brazilian-Spanish cooperation in Latin America, we attempt to detect potential differences between NSC and SSC in terms of dependency generation.

The article is divided into three sections. The first section analyses the extent to which international development cooperation has played a key role in the reproduction of global capitalism and different types of dependencies. In the next part, the very alternative nature of SSC is addressed. Last, the final section is a comparative analysis of the Brazilian and Spanish cases over the period 2010–2018. To this end, bilateral dependency indexes are calculated for each of the countries. A panel data model is then estimated, and dependency explained through variables that capture its economic dimension, the level of development cooperation, and the ideological overlap between the governments of the participating countries.

## The International Development Cooperation System

There is a general consensus that the period after the Second World War was the beginning of the conceptualisation of international cooperation in the framework of the United Nations. The Cold War, which conditioned responses to international affairs (Alonso, 2000), and the decolonisation processes taking place in Asia and Africa, which led the great powers to launch aid programmes aimed at maintaining their influence in these regions, were additional contextual and geostrategic elements that decisively determined the subsequent evolution of aid flows and systems.

As suggested by Develtere (2012), ODA changed in the 1970s to be focused on the meeting of basic needs. Throughout the 1980s ODA was characterised by the plummeting in quantitative terms of the amounts of bilateral flows and the redirection of aid towards programmes to finance balance of payments deficits and conditional on structural market reforms, in line with the Washington Consensus prescriptions (Ridell, 2008).

In the 1990s, the UNDP's human development approach exposed the need to expand the goals beyond economic growth to emphasise people's increased capabilities and the inclusion of variables such as education, health and freedoms. Last, new global challenges, such as environmental deterioration, led the United Nations to adopt the Millennium Development Goals (MDGs). The MDGs emphasised the need to eradicate poverty, among other goals (United Nations, 2000). They gave aid a central role as a lever to promote development, an aspect that entirely ignored the structural nature of the causes of underdevelopment. At the same time, they proposed the need to establish mechanisms

to enhance aid effectiveness. However, the MDGs simply reproduced the North–South vertical logic. They persistently proposed a scheme whereby donors *produced* development prescriptions which were to be *consumed* by recipients through aid. In 2015, the United Nations adopted the Sustainable Development Goals (SDG). Their integral approach to development puts development cooperation back at the centre of political responses to the challenges of globalisation, which created a framework and a shared language for both developed and developing countries. However, among the criticisms of the SDG, there is a question that needs to be answered: does the 2030 Agenda transcend the North–South scheme?

### *ODA: A Dependency-Generating Mechanism?*

Moyo (2009) provides a critical analysis of aid, claiming that it is at the root of the underdevelopment of African countries, while not overlooking other well-known geographical, historical, cultural, tribal and institutional factors. According to this author, there is a vicious circle of aid, which discourages investment and shapes a ‘culture of dependency’. Furthermore, foreign aid promotes corruption, harms economic growth and perpetuates poverty. A similar standpoint is shared by Glennie (2008), who points out that aid often causes some undesirable indirect effects that donors are unwilling to acknowledge, such as policy conditionalities (narrowing the policy space), the continued undermining of political accountability, dependency cultures and the impact of the influx of foreign capital on exchange rates. This approach is consistent with the postulates of the dependency theory (Theotonio dos Santos, Ruy Mauro Marini, André Gunder Frank, Samir Amin, Enzo Faletto or Fernando Henrique Cardoso), according to which the asymmetric development of the productive forces results in a system of relations of domination and dependency (commercial, financial, cultural and technological) between the centre and the periphery. For these authors, dependency stems from the articulation between national economies and the world economy. They argue that poverty and underdevelopment are caused by the developed or centre nations exploiting periphery nations through the colonial entrenchment of plantation economies and the continued post-colonial use of multinational corporations and international financial institutions to exploit and sustain dominance (Beckford, 1972; Rodney, 1972; Thomas, 1974). In this regard, underdevelopment is not considered a ‘stage’ in the evolution of an isolated and autonomous society, but part of the global historical process of development of capitalism. Since development cooperation is not conceived as a way of transforming the aforementioned relations and strengthening the agency of periphery countries, it actually reproduces the dependency patterns.

From a Marxist perspective, Hattori (2003) considers that international aid simply reveals the material hierarchies between states, in political, military and economic terms. Meanwhile, Krasner (2001) conceives the aid system as a mechanism within the new forms of neo-imperialism. To this effect, it infringes the sovereignty of the periphery, while the core countries influence the domestic political authority structures. Pauselli (2013), referring to the world-system theory, considers that development cooperation comes within the framework of an ‘interstate system’, the result of the hegemony of the United States and the country’s aim to impose institutional restrictions on its behalf. As Wallerstein claimed, ideological persuasion and bribery are two of its tools, a part of which is development aid.

Likewise in line with the dependency theory, Maestro and Martínez-Peinado (2012) argue that capitalist globalisation has brought about the transnationalisation of fundamental economic relations (production, distribution, consumption and exchange) and their accumulation logics (productivity, competitiveness and profitability).

Development strategies, conceived at national level, have evolved towards insertion in globalisation as the only valid option to progress. The process conditions the goal of development cooperation and is now oriented to facilitate this insertion. Consequently, good governance, the modernisation of institutions and legal certainty have become key items. Furthermore, development cooperation has increasingly focused on poverty and satisfying basic needs or is tied to other foreign policy goals (the fight against terrorism or the control of migratory flows, among others). As the Busan Alliance showed, securitisation, humanitarian action and the role of the private sector are to gain more relevance in defining the development cooperation agenda.

Also from a critical perspective, Llistar (2009) proposes the (in)coherence of development policies as the central element to understand the transforming nature (or not) of cooperation. To this effect, he defines North–South relations in terms of anti-cooperation, that is ‘the set of negative, destructuring interferences, activated from the North to the South’. He argues that ODA barely acts as a mitigation mechanism compared to other (much more powerful) mechanisms that reproduce the aforementioned interferences and occur in a wide range of fields: economic-financial, political, cultural, environmental, technological, property rights, immigration, external debt and conflicts, among others.

Institutions like the OECD do in fact acknowledge the economically dependent nature of development cooperation, estimating that 58 percent of ODA is tied ODA, defined as credits and loans where provision of the goods and services involved is limited to the donor country or to a group of developed countries, thereby increasing the project costs by as much as 20 percent to 30 percent and discouraging local producers from investing (OECD, 2006). While DAC members agreed to untie ODA in January 2002, in 2018 tied aid accounted for 19.4 percent of total bilateral aid. Notable is the huge amount of tied aid provided by non-western donors like China, which is not included in these figures (Brautigam, 2011). However, the instrumentalisation of ODA goes beyond the economic sphere and is also used by donors to achieve certain political goals and support their foreign affairs interests (Stokke, 1995; Thacker, 1999; Barya, 2003; Carter and Stone, 2010). In this regard, Thacker (1999) finds that the approval of IMF lending during the 1990s was directly linked to the relevance of recipients’ votes for US initiatives in the UN General Assembly.

## South–South Cooperation: An Alternative Cooperation Model?

The international development cooperation system has undergone important changes, and acceleratingly so in recent times. Notable is the significant increase in funding and activities promoted by non-DAC countries, a group which has also been named as ‘emerging donors’ or ‘new donors’. Nonetheless, many of them are not actually new in this field, having a relatively long history of participation in the so-called SSC, mainly in a technical sense.

The most remote origins of SSC are usually related to the Bandung Conference (1955), the emergence of the Non-Aligned Movement (1961), the creation of the United Nations Conference on Trade and Development (UNCTAD, 1964), and the constitution of the G-77 (1964). However, it was not until the 1970s that these countries began to specify their intentions in specific cooperation agreements. Although there had been a Working Group on Technical Cooperation among Developing Countries (TCDC) within the United Nations since 1972, it was not until 1974 that the Special Unit for South–South Cooperation was created as a special unit of the United Nations Development Programme (UNDP) to promote, coordinate and support South–South and Triangular cooperation, according to the directives and political orientations emanating from the United Nations’ High-Level Committee on South–South Cooperation. In 1978, and as an outcome of the United Nations Conference on TCDC, 138 states approved the Buenos Aires Plan of Action. Aimed at promoting TCDC, it emphasised the growing importance of SSC in the context of current international political and economic relations, focusing on aspects like respect for national sovereignty, non-interference in domestic affairs and equal rights (Alonso et al., 2011).

What is certain is that these countries are immersed in an ongoing process of change in the landscape of cooperation and partnerships with developing countries (Davies, 2010a; Mawdsley, 2012; Mawdsley, 2016). It is particularly important to highlight the relevance that this type of cooperation has acquired since the first decade of this century, and especially since 2008, partly as a consequence of the void left by traditional donors and partly the result of power rebalancing in international relations (especially due to the appearance of emerging economies). Furthermore, the relevance of South–South cooperation has been recognised in some of the main consensuses developed in the context of the new development agenda (for further information, see Alonso et al., 2011). Consequently, the SSC actors have been recognised as playing a growing and fundamental role in the international cooperation system. In this regard, notable is the conceptual precision made by Emma Mawdsley, when she distinguishes between what she calls ‘SSC 1.0’ and ‘SSC 2.0’. The first was developed between the 1950s and the late 1990s and was characterised by relative neglect within the ‘international’

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development community and by many orthodox and critical scholars, while the second refers to the period of remarkable expansion (both in visibility and capacities) from the early 2000s to the present (Mawdsley, 2019).

Nonetheless, the characterisation of this cooperation modality does vary depending on the author. While for some (Ruiz, 2018) it is a complementary cooperation to the traditional NSC, for others it is an alternative cooperation or even one that challenges the former. The first characterisation is the one defended by most international organisations (some official documents can be consulted in Li (2018) in summarised form). In short, the SSC has tried to define (and legitimise) itself based on its coincidences and, more importantly, its disparities with respect to the NSC.

There are several principles, norms and values attributed to the SSC when it is presented as a differentiated (but complementary) formula and/or an alternative to the NSC. Thus, the principles of solidarity, reciprocity, co-responsibility (and/or mutual benefit), non-interference (political) and horizontality of relations between the interacting countries have been contrasted with the verticality and unequal power relations (and generators of dependency) between the donor countries and the recipient or partner countries implicitly present in the NSC.

However, despite this alternative discourse, there is intense debate whether the SSC is a real alternative to traditional cooperation or just a case of neo-colonialism. Alonso, Aguirre and Santander (2011: 33–34) define SSC as more horizontal and with a greater capacity to generate an adequate sense of ownership in the recipient. In addition,

its activities generate a ‘double dividend’, with benefits for the donor and the recipient, by stimulating the technical and institutional capacities of both [...] and] the greater proximity to the conditions of the countries can improve the criteria of effectiveness and efficiency (greater adaptation and lower costs) compared to those promoted by a traditional donor.

Other works, like Blázquez-Lidoy et al. (2006), Maswana (2009), Tan-Mullins et al. (2010) and Brautigam (2011), describe SSC as a mutual benefit model based on interdependencies between developed and developing countries and the recognition of the cultural, political and historical particularities of recipients. However, as Alonso et al. (2011) argue, ‘none of these potential virtues are guaranteed’. According to authors like Morvaridi and Hughes (2018), the original focus of SSC on cultural cooperation, creating progressive global governance structures and combatting Northern hegemony, has been lost, the initial counter-hegemonic project having shifted to a more technical and depoliticised agenda in line with traditional aid practices and neoliberal thought. Similarly, Carrasco (2018) assures that ‘assuming an equivalence of interests simply because two states are considered developing or southern countries is naive’. In fact, attempts to emphasise the horizontal nature of SSC minimise the presence of important asymmetries (both economic and power) in cooperative relationships (De la Fontaine and Seifert, 2010; cited by Fejerskov et al., 2016).

Juncal (2018: 111) points out that for the specific case of the BRICS, ‘numerous examples refute not only the logic of mutual benefits of relations between the BRICS and the rest of the developing countries, but also the alleged initiative of these countries to formulate their demands and the absence of interference of the members of the bloc in the national sovereignty of third states’. Similarly, Reddy (2015) (cited by Juncal, 2018) recognises that in the period 2008–2012, international trade between the BRICS and Africa grew more than between the BRICS themselves. He argues that the growth of African exports is based almost entirely on sales of primary products to meet China’s, India’s and increasingly Brazil’s needs for natural resources. However, if the effect of depletion of these resources, the degradation of the environment and other similar factors are considered, this negatively contributes to the wealth of the continent, while also damaging these countries’ independence and self-sufficiency. Similarly, the author analyses the relations between the BRICS and Latin American countries, underlining the key role played by the Chinese and Brazilian national development banks in the penetration of capital in that region of the world. He concludes that recipient countries make limited profits, and they increasingly depend on Chinese exports and markets (Reddy, 2015). Likewise, a significant part of the financing of infrastructure projects and concessional loans has been tied to the purchase of goods and services from companies in the donor country (Manning, 2006). A similar conclusion is drawn by Bond (2014), who claim that the asymmetric nature of the relationship between the BRICS and other developing countries has perpetuated new types of dependency that replicate some of the main characteristics of Core–Periphery relations: composition of trade flows,



resource extraction, balance of FDI flows, primary sector investments, expansion of dominant markets, illegal loggings and displacement of local communities (like the one caused by the Brazilian Vale mining company).

In the case of Chinese development cooperation, Carmody and Owusu (2007) and Furbell and Parashar (2021) claim that ‘bilateral ‘aid’ from China has often been used to obtain broader rights in African oil and mineral extraction’, while in other settings Chinese investments have simply crowded out local textile industries (Edwards and Jenkins, 2015). In the same vein, Maguwu (2011) describes Chinese companies as even more predatory than Western corporations and backed by China’s support of local dictators, an example of which is the case of Zimbabwe and the Anjin Corporation. As far as Brazilian cooperation is concerned, the Morris et al. (2009) defines Brazilian–African relations as a win-win situation that can be seen as a mutual beneficial partnership in terms of African engagements with traditional donors. However, this view is not shared by Inoue and Costa Vaz (2012), who conclude that the old oil diplomacy and dependency would simply have been changed for a new one linked to biofuels, and that Brazilian cooperation cannot be viewed separately from its political, economic and commercial interests.

In short, as Fejerskov et al. (2016) point out, despite the apparent ideological novelty of the SSC’s discourse, focused as it is on equality and reciprocity, the question whether the practice of such cooperation is mutually beneficial and less exploitative than the NSC remains unanswered. As pointed out by Chin and Quadir (2012), although there is little empirical research available to contrast the intentions and objectives of emerging donors and the results of their interventions due to unsatisfactory data systems and incomplete statistics, the few case studies that aim to empirically compare the expected results and those obtained seem to conclude in the same direction. For the Saudi case, Bokhari and Jinhwan (2022) suggest that aid allocation also considers donors’ interests, having found that countries with strong commercial ties with the kingdom tend to receive more aid from Saudi Arabia. On analysing India’s aid commitments with 127 countries over the 2008–2010 period, a similar conclusion is drawn by Fuchs and Vadlamannati (2013), who conclude that commercial and political self-interest explain India’s aid allocation.

## Dependency Relations and Development Cooperation: Comparative Analysis of the Cases of Brazilian and Spanish Development Cooperation with Latin America

The main aim of this section is to empirically contrast the potential instrumentalisation of development cooperation by aligning it with the political and economic interests of supplier countries. Additionally, the comparative analysis aims to evaluate the alternative and horizontal nature of SSC. To this end, the first step is the construction of Bilateral Dependency Indexes for each of the selected Latin American countries to measure their level of dependence on Brazil and Spain. We then seek to contrast the effect of development cooperation on this dependence based on a panel data analysis.

Our choice of the Latin-American region is based on its remarkable dynamism and evolution in global SSC initiatives more than 40 years after the Buenos Aires Plan of Action. According to SEGIB’s Report on South–South Cooperation 2020, in 2019 alone Latin American countries took part in 1083 initiatives, of which 148 correspond to triangular cooperation. As for the 935 SSC initiatives, 602 were bilateral and 75 regional, and the rest were projects with other developing countries (either bilateral or regional). But apart from the high numbers, the level of institutionalisation and the systematisation of the information, the analysis and evaluation of the initiatives represent a very relevant qualitative contribution, justifying our choice of the Latin American region.

As for the specific cases of Spain (illustrating the NSC) and Brazil (as a representative of the SSC), there are three main reasons for selecting these two countries: their significant (albeit not leading) role in development cooperation in the region, the institutionalisation level in this area, and these countries’ capacity to exert influence on the political and development agenda in Latin America.

Even though Spain was the fourth bilateral donor in Latin America in 2019 (the ninth if we include multilateral donors) after the USA, Germany and France, Latin America has always been a major

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**Table 1.** Distribution of Spanish Net ODA, 1990–2020 (Millions of Dollars)

Region	1990	1995	2000	2005	2010	2015	2020
Latin America and the Caribbean	252.82	556.65	562.77	626.18	1249.50	124.24	347.90
Asia	235.83	222.38	236.81	389.71	327.83	−22.36	17.79
Africa	311.36	190.87	188.65	690.84	1135.22	21.06	85.57

Source: Own elaboration based on OECD Data.

destination for Spanish ODA flows. In fact, the very creation of the Spanish development cooperation policy in the late 1980s was directly linked to the actions and projects implemented in the region where it concentrates most of the funds (especially in Central America) (Ramos, 2021). Table 1 shows the extent to which Latin America has remained central in Spanish development cooperation policy. Apart from the years 1990 and 2005, the region has consistently received more Spanish Net ODA than Africa (including both North and Sub-Saharan Africa) and Asia. In the two exceptional years, the main recipient was Africa.

This dynamism also reflects the close and historical ties between Spain and the region in the cultural, economic, social and political dimensions. For its part, Brazil is well recognised as a regional power, based on its population and its economic and political weights. It is agreed that Brazil has increased its participation in the international scene and has given a voice to developing countries by reinforcing alliances and cooperation between Southern countries (Soares de Lima and Hirst, 2006). Since the early 2000s, Brazil has taken its place in international forums, actively taking part in debates on development, trade, cooperation, human rights and humanitarian issues. Special attention has been given to SSC, especially during President Lula da Silva's administration, to raise the country's profile on the world stage.

A milestone of this process is the creation of the Brazilian Cooperation Agency (ABC) in 1987, marking the point when Brazil evolved from being a recipient to a provider of development and technical cooperation. Nowadays, Brazil supports projects in more than 100 developing countries, through bilateral and triangular technical cooperation projects. Bilateral cooperation includes humanitarian assistance, scientific and technological cooperation, scholarships and refugee costs. Triangular cooperation, partnering with several international organisations, supports developing countries in areas such as agriculture, food security, health and public administration. These programmes are mainly addressed to South American countries, Portuguese-speaking African countries, Haiti and Timor-Leste (OECD). In the period 2007–2017, Brazil led the way in terms of the number of SSC initiatives in Latin Ibero-America, with participation in 851 projects and programmes. In most of the cases (683), the country's role was as a provider and capacity builder, especially in the areas of health, the environment, water supply, sanitation and agriculture. In 44 cases, it played the role of recipient and in 144, the country played both roles (SEGIB, 2018). Last, but as importantly, Brazilian states and municipalities also carry out decentralised cooperation. This modality of technical cooperation aims to share knowledge and practices between public institutions of Brazilian federative units and subnational units of partner countries (ABC, 2022).

### Model and Data

Our model attempts to explain each country's level of bilateral dependence based on development cooperation flows. In the model below, we also control for a set of variables that aim to capture the asymmetrical bargaining power of countries and governments' ideology, thereby allowing competing interpretations of our findings to be ruled out. Given that the influence of donor countries can last more than a year, a lag of the independent variable is also introduced in the model.

$$\text{Dep}_{it} = \beta \text{Coop}_{it,t-1} + X_{it} + \alpha_i + \delta_t + \varepsilon_{it} \quad (1)$$

Here countries are indexed by  $i$  and years by  $t$ ,  $\alpha$  and  $\delta$  represent country and year fixed effects, respectively, and  $\varepsilon$  is a random shock. With the aim of removing time trend components and possible serial autocorrelation, dependent and independent variables are included in first differences.

## 1 Dependent variable

Even though dependency relationships can have multiple manifestations, based on the analysis of the specialised literature, we focus on evaluating the commercial, financial and political spheres. To this effect, a composite index – *Dependency Index* – is specified to approximate the alignment of the recipient country with the interests of the provider country, considering both the economic advantages offered by the recipient country in terms of foreign trade and investment and its possible subordination in the field of international politics.

In general, composite indicators are calculated using the following formula:

$$CI_{it} = \sum_{i=1}^i \sum_{t=1}^t w_{it} X_{it} \quad (2)$$

Here  $X_{it}$  stands for each of the standardised individual indicators for country  $i$  in period  $t$ , and  $w_{it}$  stands for the weight given to variable  $X_{it}$ . In the case at hand, we give the same weight ( $w=1$ ) to each variable to prevent the temporal evolution and cross-sectional comparison of the composite indicator from being affected by the weighting process. Each of the variables on which the bilateral dependency index is based and the indicators that have been selected for its approximation are defined below:

### (a) Trade Dependence (TD)

This refers to the lower capacity of one country when negotiating trade conditions with another one. In this article, we approximate this variable through the share of country  $i$ 's total exports imported by country  $j$  (World Bank, n.d.). With the objective of capturing the non-reciprocal nature of dependent trade relationships and ruling out potential interdependencies, the share of country  $j$ 's total exports imported by country  $i$  is subtracted from the previous result. In doing so, we neglect bilateral increases in trade intensity which could derive, for example, from trade agreements. Bilateral Trade Dependence Indexes are calculated as follows:

$$TD_{ij,t} = \frac{x_{ij,t}}{x_{i,t}} - \frac{x_{ji,t}}{x_{j,t}} \quad (3)$$

Here  $TD_{ij}$  stands for trade dependence of country  $i$  on country  $j$ ,  $x_{ij}$  for country  $i$ 's exports to country  $j$ ,  $x_{ji}$  for country  $j$ 's exports to country  $i$ ,  $x_i$  for country  $i$ 's total exports and  $x_j$  for country  $j$ 's total exports. According to Equation 3, country  $i$  will be strongly trade dependent on country  $j$  when country  $j$  accounts for a high percentage of country  $i$ 's total exports, and this relative importance is non-reciprocal.

### (b) Financial Dependence (FD)

This refers to the lower capacity of one country when negotiating investments agreements with another. The approximation of this variable is based on the weight of the Foreign Direct Investment (FDI) of country  $i$  in  $j$  (with respect to the total FDI received by  $j$ ). With the aim of capturing the non-reciprocal nature of dependent financial relationships and ruling out potential interdependencies, the weight of the Foreign Direct Investment (FDI) of country  $j$  in  $i$  (in relation to the total FDI received by  $i$ ) is subtracted from the previous result (Data Inxv, 2019). In doing so, we neglect bilateral increases in foreign investment intensity which could derive, for example, from investment agreements. Bilateral Financial Dependence Indexes are calculated as follows:

$$FD_{ijt} = \frac{FDI_{ji,t}}{FDI_{i,t}} - \frac{FDI_{ij,t}}{FDI_{j,t}} \quad (4)$$

Here  $FD_{ij}$  stands for the financial dependence of country  $i$  on country  $j$ ,  $FDI_{ji}$  for the FDI of country  $j$  in country  $i$ ,  $FDI_{ij}$  for the FDI of country  $i$  in country  $j$ ,  $FDI_i$  for the total FDI received by  $i$ , and  $FDI_j$  for the total FDI received by  $j$ . According to Equation 4, country  $i$  will be strongly financially dependent on country  $j$  when country  $j$ 's FDI in country  $i$  accounts for a high percentage of total FDI received by country  $i$ , and this relative importance is non-reciprocal.

### (c) Political dependence (PD)

This refers to the lower capacity of one country to defend its own national interests in the field of international politics. This variable is approximated through the percentage of coincident



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votes between countries  $i$  and  $j$  in the resolutions of the United Nations General Assembly (United Nations, n.d.). In this case, we are assuming that donors' political influence over recipient countries is higher than the influence exerted by recipient countries over donor countries.

### 2 Independent variable

The consideration of cooperation flows as the independent variable stems from the idea that countries use development cooperation as another diplomatic tool to defend their national interests. The variable Development Cooperation (Coop) is approximated in this study using different indicators: in the case of Spain, we use the gross flow of Official Development Assistance (OECD, 2019); and in the case of Brazil, we estimate the series based on IPEA (2017 and 2018), which includes the monetary assessment of Brazil's technical cooperation, and the Ibero-American General Secretariat (SEGIB, n.d.). For the years when monetary data were not available, they were estimated based on the number of technical projects carried out by Brazil in the country that year (SEGIB, n.d.), and the project average cost for the same country (IPEA, 2017, 2018 and 2020).

### 3 Control variables

History teaches us that countries can use their higher economic power (both in terms of purchasing power and capacity to invest) to defend their own interests. Given that the inclusion in the model of variables that want to capture the weight of the donor country on the recipient's imports and investments could generate multicollinearity problems, we opted to include a control variable which aims to measure the disproportion between the economic sizes of donor and recipient countries. In doing so, we are trying to control using the influence capacity associated with economic size rather than with development cooperation. This variable is calculated as the ratio between the nominal GDP of the donor country and the nominal GDP of the recipient country (World Bank, n.d.). Both series are expressed in current dollars.

Last, we include in the model a dummy variable which aims to capture the Ideological Coincidence (IC) between Brazil and Spain and the rest of the selected countries. The rationale behind this is that governments sharing the same political spectrum are more likely to cooperate in both a political and an economic way. This dummy variable adopts the value 1 when parties with similar ideologies govern the provider and recipient countries, and 0 when there is no ideological coincidence between governments.

### *Panel Data Estimation*

In this section we estimate a panel data model. This methodology allows for the increased reliability of the estimation, control of individual heterogeneity, and the capture of more dynamic relationships between the variables (Greene, 1997). The sample consists of a panel of 16 Latin American countries observed for the 9-year period 2010–2018. We introduce as regressor the dependent variable lagged one period to make the panel more dynamic. Likewise, dependent and independent variables are differentiated to avoid spurious relationships stemming from shared temporal trends.

Table 2 shows the results of the panel data estimation of Equation 1. The panel was estimated by introducing robust errors, since robust estimates are obtained for any type of correlation between observations, and any type of heteroscedasticity is corrected (without having to specify the functional form) using the Huber-White or sandwich technique.

In the Spanish case, the parameter associated with the lagged cooperation variable is positive and significant with a confidence level of 90 percent, suggesting that development cooperation could increase Spanish influence on the region. However, this influence did not seem to be immediate and needed one period to come into being. Likewise, the negative significant parameter associated with the lagged dependent variable suggests that the preferential treatment of recipient countries by Spain is short-lived and is unlikely to continue over time.

The results in the Brazilian case are quite different from those obtained in the Spanish case. The most relevant result corresponds to the negative and non-significant (both contemporaneous and lagged) impact of development cooperation on the bilateral dependency of its partners, thereby confirming

Table 2. Estimation of Equation 1 Between 2010 and 2018<sup>a</sup>

Endog. var: Dep	Spain	Brazil
Dep (-1)	-0.465 (0.000) <sup>b</sup>	-0.306 (0.000)
Coop	-0.003 (0.831)	-0.015 (0.910)
Coop (-1)	0.020 (0.059)	-0.012 (0.119)
GDP	0.004 (0.434)	0.005 (0.001)
IC	-0.118 (0.828)	-0.193 (0.386)
Cons	0.084 (0.653)	-0.111 (0.598)
R2	0.235	0.128
Prob. chi2	0.000	0.000
Hausman Test	1.30	1.26
Prob. chi2	0.935	0.738

Source: Own elaboration.

<sup>a</sup>Standard errors are clustered by country.<sup>b</sup>*p*-value is shown in brackets.Table 3. Estimation of Equation 1 Between 2010 and 2018<sup>a</sup>

Country	Spain			Brazil		
	TD	FD	PD	TD	FD	PD
End. var.						
TD (-1)	-0.366 (0.000) <sup>b</sup>	-	-	-0.445 (0.000)	-	-
FD (-1)	-	-0.529 (0.000)	-	-	-0.357 (0.000)	-
PD (-1)	-	-	-0.712 (0.000)	-	-	-0.391 (0.000)
Coop	-0.013 (0.923)	-0.003 (0.329)	0.160 (0.753)	0.096 (0.493)	-0.025 (0.778)	0.003 (0.970)
Coop (-1)	0.126 (0.150)	0.003 (0.241)	0.062 (0.062)	-0.003 (0.921)	-0.042 (0.626)	0.019 (0.852)
GDP	0.001 (0.591)	0.001 (0.365)	-0.011 (0.529)	0.003 (0.060)	0.001 (0.297)	0.001 (0.938)
IC	-0.069 (0.830)	-0.001 (0.981)	-0.994 (0.571)	-0.141 (0.311)	-0.119 (0.475)	1.154 (0.580)
Cons	0.105 (0.414)	-0.021 (0.379)	1.465 (0.093)	-0.054 (0.635)	-0.013 (0.912)	0.001 (0.999)
R2	0.144	0.312	0.449	0.225	0.143	0.140
Prob. chi2	0.000	0.000	0.000	0.000	0.000	0.006
Hausman test	0.61	0.91	1.64	0.75	1.35	0.61
Prob. chi2	0.988	0.70	0.896	0.861	0.717	0.895

Source: Own elaboration.

<sup>a</sup>Standard errors are clustered by country.<sup>b</sup>*p*-value is shown in brackets.

the horizontal nature of Brazilian cooperation and supporting the narrative of actors and institutions promoting South–South cooperation. Therefore, according to the results, Brazil did not appear to use development cooperation to the benefit of its economic and political interests during the period of study. However, the results suggest that dependence on Brazil of the selected countries would derive from the large size of its economy and the existing disproportion in the relations with other smaller economies. As for the Spanish case, the negative and significant parameter associated with the lagged endogenous variable confirms that the preferential treatment of recipient countries would be one-time and non-cumulative. In both cases, the parameter associated with ideological coincidence is not significant. Therefore, governments sharing the same ideology do not seem to promote (or attenuate) the preferential treatment of the sample countries by Spain or Brazil.

Given that the results seemingly confirm the link between Spanish cooperation and dependency for the sample countries, we now proceed to determine which component is driving the overall positive relationship to understand the nature of this dependency. Table 3 shows the results of the panel data estimation of Equation 1, considering alternatively Trade Dependency (TD), Financial Dependency (FD) and Political Dependency (PD) as dependent variables.

According to the results of the disaggregated analysis, development cooperation seemed to be an effective tool to promote Spain's political interests in the region. Although it did not appear to facilitate Spanish investments over the period of study, the results are less conclusive regarding the link between Spanish exports and development cooperation with the region, since the lagged development cooperation is close to being significant to explain trade dependency on Spain.

The results for the Brazilian case once again support the horizontal nature of development cooperation with the sample countries over the period of study, since they are not significant to explain any of the disaggregated dependency indexes. The disaggregated analysis also suggests that the higher economic power of Brazil was used to increase its exports to its regional partners, thereby increasing their trade dependency on the largest Latin American economy.

## Conclusions

The most widespread view on SSC defends that it presents a series of differential principles and values with respect to NSC. Unlike the verticality and unequal power relations of the North–South formula, SSC assumes the principles of solidarity, reciprocity, co-responsibility (and/or mutual benefit), non-interference (politics) and horizontality. However, this apparent novelty of the SSC approach has been challenged by other scholars, who refute not only the logic of mutual benefits but also the alleged initiative on the part of developing countries and the absence of interference in the national sovereignties of third states. In the case of the BRICS, the greater penetration of capital in the recipient countries and the promotion of exports have been emphasised.

Based on the analysis of the Brazilian and Spanish cases and their cooperation with the selected Latin American countries, the present article aimed to contribute to this debate by assessing the extent to which development cooperation has generated dependency on recipient countries, and the existence of substantial differences between Spanish and Brazilian cooperation with the region in this regard. The results of the empirical analysis confirm that development cooperation flows have allowed Spain to obtain preferential treatment from the selected Latin American countries, favouring the political alignment with Spanish foreign policy and supporting the thesis that places NSC as another foreign policy instrument at the service of the political interests of donor countries. However, the analysis does not seem to confirm this hypothesis in the case of Brazilian cooperation as the selected case study of SSC in the region. The results allow us to identify Brazil's higher economic dimension – and not development cooperation – as the key factor exerting its influence on the sample countries. Despite the significant differences identified by the analysis and the relevance of Brazilian and Spanish development cooperation in Latin America, the lack of homogenous information forces us to be cautious in terms of cross-country comparisons. In this regard, further research will be required to validate whether development cooperation can generate dependent relations among recipient countries and the alternative nature of SSC. The

current study must be understood as an initial and modest contribution to this necessary and urgent debate.

## Acknowledgements

This article was produced within the context of the INCASI Network, a European project that receives funding from the Horizon 2020 research and innovation programme under M. Skłodowska-Curie GA No. 691004.

## Funding Information

This article was produced within the context of the INCASI Network, a European project that receives funding from the Horizon 2020 research and innovation programme under Marie Skłodowska-Curie GA No. 691004, coordinated by Pedro López-Roldán. This article reflects only the authors' point of view and the Agency is not responsible for the use that could be made of the information it contains.

## Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## REFERENCES

- Alonso, J. A. (2000) 'Globalisation, Civil Society and the Multilateral System'. *Development in Practice* 10: 3–4.
- Alonso, J. A., Aguirre, P. and Santander, G. (2011) La cooperación triangular española en América Latina: un análisis de dos experiencias de interés. Documentos de Trabajo 51, Instituto Complutense de Estudios Internacionales (ICEI) and Fundación Carolina–CeALCI: Madrid, Spain.
- Ayllon, B. and Leite, I. (2010) 'La cooperación Sur-Sur de Brasil: Instrumento de política exterior y/o manifestación de solidaridad internacional?' *Mural Internacional* 1: 20–32.
- Barya, J. J. B. (2003) 'The New Political Conditionalities of Aid: An Independent View from Africa'. *IDS Bulletin* 24: 1–23. <https://core.ac.uk/download/pdf/286044843.pdf> [accessed 11 July 2023].
- Beckford, G. L. (1972) *Persistent Poverty: Underdevelopment in Plantation Economies of the Third World*. Oxford University Press: London.
- Blázquez-Lidoy, J., Rodríguez, J. and Santiso, J. (2006) 'Angel or Devil? China's Trade Impact on Latin American Emerging Markets'. *Cepal Review* (90): 15–41.
- Bokhari, A. and Jinhwan, O. (2022) 'What Determines Saudi Arabia's Development Finance? An Empirical Approach'. *Global Business and Finance Review* 27(5): 42–54. <https://pure.ewha.ac.kr/en/publications/what-determines-saudi-arabias-development-finance-an-empirical-ap> [accessed 11 July 2023].
- Bond, P. (2014) *Elite Transition*. Pluto Press: London.
- Brautigam, D. (2011) 'Aid 'with Chinese Characteristics': Chinese Foreign Aid and Development Finance Meet the OECD-DAC Aid Regime'. *Journal of International Development* 764: 752–764.
- Brun, É. (2018) 'La cooperación Sur-Sur de Brasil, Chile y Venezuela: interés y pérdida de esencia'. *Revista CIDOB d'Afers Internacionals* 120: 171–194.
- Carmody, P. R. and Owusu, F. Y. (2007) 'Competing Hegemons? Chinese Versus American Geo-Economic Strategies in Africa'. *Political Geography* 26(5): 504–524. <http://linkinghub.elsevier.com/retrieve/pii/S0962629807000406> [accessed 11 July 2023].
- Carrasco, G. (2018) 'Cooperación trilateral Sur-Sur al desarrollo: por una descolonización de la solidaridad'. *Revista CIDOB d'Afers Internacionals* 120: 147–170.
- Carter, D. and Stone, R. W. (2010) Sincere or Strategic? U.S. Aid Disbursements and Voting in the United Nations General Assembly, Working Paper. Pennsylvania State University.

- Chin, G. and Quadir, F. (2012) 'Introduction: Rising States, Rising Donors and the Global Aid Regime'. *Cambridge Review of International Affairs* 25: 493–506.
- DataInVex (2019) *Estadísticas de inversión española en el exterior: Ministerio de Industria, Comercio y Turismo. Gobierno de España*. [http://datainvex.comercio.es/principal\\_invex.aspx](http://datainvex.comercio.es/principal_invex.aspx) [accessed 11 July 2023].
- Davies, P. (2010a) A Review of the Roles and Activities of New Development Partners. *CFP Working Paper Series* 4.
- De La Fontaine, D. and Seifert, J. (2010) The Role of South–South Cooperation in Present Brazilian Foreign Policy: Actors, Interests and Functions. *Papers in Latin American Studies*.
- Develtere, P. (2012) *How Do we Help: The Free Market of Development Aid*. Leuven University Press: Leuven.
- Edwards, L. and Jenkins, R. (2015) 'The Impact of Chinese Import Penetration on the South African Manufacturing Sector'. *The Journal of Development Studies* 51(4): 447–463.
- Fejerskov, A. M., Lundsgaarde, E. and Cold-Ravnkilde, S. (2016) 'Recasting the 'New Actors in Development' Research Agenda'. *The European Journal of Development Research* 29: 1070–1085.
- Fuchs, A. and Vadlamannati, K. C. (2013) 'The Needy Donor: An Empirical Analysis of India's Aid Motives'. *World Development* 44: 110–128.
- Glennie, J. (2008) *The Trouble with Aid: Why Less Could Mean More for Africa*. Zed Books: London.
- Gosovic, B. (2016) 'The Resurgence of South–South Cooperation'. *Third World Quarterly* 37(4): 733–743.
- Greene, W. H. (1997) *Econometric Analysis*. Prentice Hall International: New Jersey.
- Hattori, T. (2003) 'The Moral Politics of Foreign Aid'. *Review of International Studies* 20(20): 229–247.
- Inoue, C. Y. A. and Costa Vaz, A. (2012) 'Brazil as "Southern Donor": Beyond Hierarchy and National Interests in Development Cooperation?'. *Cambridge Review of International Affairs* 25(4): 507–534. <https://doi.org/10.1080/09557571.2012.734779>.
- IPEA (2017) *Brazilian Cooperation for International Development*. 2011–2013. [WWW document]. URL [http://www.ipea.gov.br/portal/index.php?option=com\\_content&view=article&id=30412](http://www.ipea.gov.br/portal/index.php?option=com_content&view=article&id=30412) [accessed 11 July 2023].
- IPEA (2018) *Cooperação Brasileira para o Desenvolvimento Internacional*. Brasília. [WWW document]. URL [http://www.ipea.gov.br/portal/index.php?option=com\\_content&view=article&id=34507:cooperacao-brasileira-para-o-desenvolvimento-internacional-2014-2016&catid=410:2018&directory=1](http://www.ipea.gov.br/portal/index.php?option=com_content&view=article&id=34507:cooperacao-brasileira-para-o-desenvolvimento-internacional-2014-2016&catid=410:2018&directory=1) [accessed 11 July 2023].
- Juncal, S. E. (2018) 'El bloque BRICS: ¿Instrumento para el desarrollo de los países emergentes?'. *Revista de Economía Crítica* 25(1): 105–120.
- Krasner, S. (2001) *Soberanía: hipocresía organizada*. Paidós: Barcelona.
- Li, Y. (2018) 'Assessment of South–South Cooperation and the Global Narrative on the eve of BAPA+40'. *South Centre Research Paper* 88: 1–43.
- Lima, M. R. S. and Hirst, M. (2006) 'Brazil as an Intermediate State and Regional Power: Action, Choice and Responsibilities'. *International Affairs* 82(1): 21–40.
- Lisimba, A. F. and Parashar, S. (2021) 'The 'State' of Postcolonial Development: China-Rwanda 'Dependency' in Perspective'. *Third World Quarterly* 42(5): 1105–1123. <https://doi.org/10.1080/01436597.2020.1815527>
- Llistar, D. (2009) *Anticooperación. Interferencias Norte-Sur: Los problemas del Sur Global no se resuelven con más ayuda internacional*. Icaria: Barcelona.
- Maestro, I. and Martínez-Peinado, J. (2012) 'La cooperación al desarrollo como parte de la estructura económica del capitalismo global'. *Estudios de Economía Aplicada* 30(3): 811–836.
- Maguwu, F. (2011) The Marange Diamond Fields Remain Volatile. *Interview with Heinrich Böll Foundation*. [https://www.boell.de/sites/default/files/Perspectives\\_3.11web.pdf](https://www.boell.de/sites/default/files/Perspectives_3.11web.pdf) [accessed 30 July 2023].
- Manning, R. (2006) 'Will "Emerging Donors" Change the Face of International Co-operation?'. *Development Policy Review* 24(4): 371–385.
- Maswana, J.-C. (2009) 'China-Africa's Emerging Economic Links: A Review under the Core-Periphery Perspective'. *African and Asian Studies* 8: 67–88. IngentaConnect. [WWW document]. URL <http://www.ingentaconnect.com/content/brill/afas/2009/00000008/F0020001/art00003> [accessed 11 July 2023].
- Mawdsley, E. (2012) *From Recipients to Donors: Emerging Powers and the Changing Development Landscape*. Zed Books: London.
- Mawdsley, E. (2016) 'Development Geography 1: Cooperation, Competition and Convergence between "North" and "South"'. *Progress in Human Geography* 41(1): 108–117.
- Mawdsley, E. (2019) 'South–South Cooperation 3.0? Managing the Consequences of Success in the Decade Ahead'. *Oxford Development Studies* 47(3): 259–274. <https://doi.org/10.1080/13600818.2019.1585792>.



- Morris, M., Binswanger-Mkhize, H. P., and Byerlee, D. (2009). 'Awakening Africa's Sleeping Giant Prospects for Commercial Agriculture in the Guinea Savannah Zone and Beyond'. *World Bank*. Available from: <https://doi.org/10.1596/978-0-8213-7941-7>.
- Morvaridi, B. and Hughes, C. (2018) 'South-South Cooperation and Neoliberal Hegemony in a Post-Aid World'. *Development and Change* 49(3): 867–892.
- Moyo, D. (2009) *Dead Aid. Why Aid Makes Things worse and how there Is another Way for Africa*. London: Penguin Books.
- OECD (2006) *Declaración de París sobre eficacia de la ayuda al desarrollo y programa de acción de Accra*. OCDE. [WWW document]. URL <https://www.oecd.org/dac/effectiveness/34580968.pdf> [accessed 11 July 2023].
- OECD (2019) OECD Data. Net ODA. [WWW document]. URL <https://data.oecd.org/oda/net-oda.htm> [accessed 11 July 2023].
- Pauselli, G. (2013) 'Teorías de Relaciones Internacionales y la Explicación de la Ayuda Externa'. *Revista Iberoamericana de Estudios de Desarrollo* 2(1): 79–92.
- Ramos, M. (2021) La cooperación española en América Latina ¿Un cambio de ciclo? Fundación Carolina. Documento de Trabajo 5. <https://www.fundacioncarolina.es/la-cooperacion-espanola-en-america-latina-un-cambio-de-ciclo/> [accessed 30 July 2023].
- Reddy, N. (2015) 'BRICS after the Durban and Fortaleza Summits' in P. Bond and A. García (eds.) *BRICS-An Anti-Capitalist Critique*. Pluto Press: London, 274–278.
- Ridell, R. (2008) *Does Foreign Aid Really Work?* Oxford University Press: Oxford.
- Rodney, W. (1972) *How Europe Underdeveloped Africa*. Tanzania Publishing House: Dar es Salaam.
- Ruiz, P. X. (2018) 'La cooperación sur-sur de Brasil y Colombia: entre la política exterior y el desarrollo'. *Papel Político* 23(1): 209–248. <https://doi.org/10.11144/Javeriana.papo23-1.ccep>.
- SEGIB (2018) *Una década de Cooperación Sur-Sur en Iberoamérica*. Secretaría General Iberoamericana: Madrid.
- SEGIB (n.d.) Informe de la Cooperación Sur-Sur en Iberoamérica, Secretaría General Iberoamericana: Madrid.
- Stokke, O. (1995) *Aid and Political Conditionality*. Routledge: London.
- Tan-Mullins, M., Mohan, G. and Power, M. (2010) 'Redefining "Aid" in the China–Africa Context'. *Development and Change* 41(5): 857–881.
- Thomas, C. Y. (1974) *Dependence and Transformation: The Economics of the Transition to Socialism*. Monthly Review Press: New York.
- United Nations (2000) Declaración del Milenio. <https://www.un.org/spanish/milenio/ares552.pdf> [accessed 11 July 2023].
- United Nations (n.d.) *Index to Proceedings of the General Assembly*. <https://library.un.org/index-proceedings/general-assembly> [accessed 12 April 2019].
- World Bank (n.d.) *World Integrated Trade Solutions*. <https://wits.worldbank.org/> [accessed 11 July 2023].
- Xalma, C. (2013) 'El renovado auge de la cooperación Sur-Sur: la experiencia iberoamericana'. *Revista Integración y Comercio* 36: 33–46.
- Zoccal, G. and Esteves P. (2018) 'The Brics Effect: Impacts of South-South Cooperation in the Social Field of International Development Cooperation'. *IDS Bulletin* 49(3): 130–144. <https://doi.org/10.19088/1968-2018.152>.