



Department of Political Science

Master in International Relations

Course of International Economics

The Developmental Effects of China's
Foreign Policy Approach on Latin America:
Evidence from a Selected Group of Countries

Prof. Alberto Petrucci

SUPERVISOR

Prof. Paolo D'Imperio

CO-SUPERVISOR

Niccolò Russo
ID 652472

CANDIDATE

Academic Year: 2023/2024

Extended Summary

The fundamental assumption underlying this thesis is that international aid, globalized trade and investment have become the most important foreign policy tools in improving relations with countries in the so-called Global South, especially when effectively harnessed to promote welfare and development. Development aid, in particular, has become increasingly crucial to such countries, as external support is often needed to implement socio-economic reforms, improve infrastructure networks and alleviate temporary periods of hardship. The relations with Global South developing countries are becoming essential especially for the two global superpowers, the United States and China, since for the former these are instrumental to preserve the existing global order, while for the latter to promote an alternative one. Beijing's perspective holds a strong fascination for countries in the Global South, which often share with China a view of the international sphere dominated by Western values and norms, of which the United States is viewed as the leader.

The first objective of this thesis is therefore to investigate the effects of Beijing's aid, trade and investment, considered as key elements of its foreign policy, on development in Latin America in the decade 2012 - 2022. Specifically, the empirical analysis on the effects of China's aid, trade and investment is conducted on a sample of six Latin American countries - Argentina, Brazil, Chile, Colombia, Ecuador, and Peru - and on six development indicators, namely employment, GDP per capita, external debt, per capita consumption, industrial value added, and citizens' satisfaction with the ability of public governance to promote economic development. The second objective of the study is then to explain what factors or mechanisms led Beijing's aid, trade and investment to produce better development results in certain countries than in others. The selection of the region and historical period of investigation has very specific reasons. Of all the regions belonging to the Global South, Latin America is the one closest geographically to Washington. Therefore, it was felt that the results produced by the analysis could provide useful indications about the level of Chinese projection in such a strategic region. The decade 2012-2022, besides being the historical period for which more data were available, represents Xi Jinping's first decade in power, which was marked by Beijing's much more assertive foreign policy on the international landscape than in the past.

To achieve the first objective, econometric analysis is employed. This returned some statistically significant and economically meaningful results at the individual country level, to which an explanation based on economic theory and some contextual information has been provided. However, mainly due to an insufficient number of statistically significant results, it has not been

possible to conclude anything general, either at the regional or individual country level, about the effects of Beijing's foreign policy approach, of which aid, trade and investment are understood as key components, on development. This occurred also because aid, trade and investment often tended to have contradictory effects with respect to each other, which made it very difficult to figure out which effect prevailed over the others. Moreover, the least number of statistically significant results were unfortunately obtained precisely about the effects of the variable of greatest interest, development aid. The main reason for this seems to have been the absence of complete data on aid from China, which was attempted to be remedied by resorting to the inclusion of the mean value of the available data in place of the missing data. The analysis also showed the presence of multicollinearity, meaning that the models often failed to explain the effects of the independent variables, namely aid, trade and FDI flows, in a statistically significant way, partly because of their high mutual correlation. This is particularly evident from the fact that the highest number of statistically significant results was obtained through the second model in which, in addition to all three independent variables being present, namely aid, trade and investment, a lagged endogenous variable was also included.

To reach the second objective, three case studies, namely Chile, Brazil and Ecuador, will be examined. Taking even results that were not statistically significant as an indication of a particular trend, the analysis of the case studies, through detailed examination of the socio-economic characteristics and economic and political relations of each analyzed country with Beijing, highlighted what might be the main determinants of the positive effects of Beijing's aid, trade and investment on development. Specifically, the benefits to be derived from the bilateral relationship do not appear to have been determined so much by how Beijing approached these countries but rather by the latter's agency, understood as their ability to leverage their relationship with China to further their own development goals. The agency of such countries seems to be fundamentally the result of a very specific factor: the level of democracy. Indeed, higher levels of democracy appear to be strongly related to, on the one hand, the ability of the political leadership to manage the relationship with Beijing without severe ruptures, and, on the other hand, the capacity of public institutions to scrupulously oversee Chinese penetration of markets as well as its access to key natural resources and critical infrastructure. Specifically, based on the qualitative analysis, China's effectiveness in promoting development seem to be much better the more the ease for Beijing to access natural resources and critical infrastructure is lower while Latin American countries' strategic clarity and continuity as well as the competence of their public institutions is higher. These conditions seem to be better met the higher the level of democracy in partner countries. Nonetheless, it is important to acknowledge the risk of overestimating agency in order to avoid attributing "underdevelopment" in

Latin America countries only to internal factors. Indeed, it is always necessary to consider also the realities and structural conditions of global politics and economics when exploring agency. Hence, it is essential to acknowledge China's escalating clout and power in terms of its capacity to extract and exploit resources.

Table of Contents

| | |
|---|-----------|
| <i>Introduction</i> | 1 |
| Chapter 1: Background | 6 |
| 1. Chinese Foreign Aid | 6 |
| 1.1 Defining Foreign Aid | 6 |
| 1.2 Comparison between Chinese and Western Models of Development | 7 |
| 1.3 Evolution of China’s Approach to Foreign Aid | 9 |
| 1.4 Foreign Aid Players: Agencies and Instruments | 11 |
| 2. China in Latin America and the Caribbean | 13 |
| 2.1 From China’s Perspective..... | 13 |
| 2.2 From Latin America and the Caribbean’s Perspective..... | 15 |
| 3. Theoretical Foundations and Thesis Structure | 17 |
| 3.1 Existing Literature | 17 |
| 3.2 Hypotheses | 25 |
| 3.3 Research Design..... | 27 |
| Chapter 2: Quantitative Analysis | 30 |
| 1. Introduction | 30 |
| 2. Variables | 31 |
| 2.1 Y-Factors | 31 |
| 2.2 X-Factors | 33 |
| 3. Data Collection and Selection | 34 |
| 4. Descriptive Statistics | 36 |
| 5. Regression Analysis | 38 |
| 5.1 Models | 38 |
| 5.2 Limitations..... | 39 |
| 5.3 Statistically Significant Results..... | 40 |
| 6. Analysis | 43 |
| 6.1 Illustrating the Effects of Aid | 43 |
| 6.2 Explaining the Impact of Trade..... | 45 |
| 6.3 Commenting the Spillovers of FDI Flows | 49 |
| 7. Concluding Remarks | 52 |
| Chapter 3: The Cases of Chile, Brazil, and Ecuador | 53 |
| 1. Introduction | 53 |
| 2. Case 1: Chile | 55 |
| 2.1 Country’s Profile: Richness, Full Democracy, and Institutional Competence..... | 55 |
| 2.2 The Positive Effects of China’s Foreign Policy Approach on Chilean Development | 57 |
| 2.3 Chile’s External Relations in the Last Decade: A Solid, Long-Standing Partnership with Both Beijing and Washington..... | 58 |
| 2.4 Sino-Chilean Economic Relationship: Burgeoning Trade, Limited Aid and FDI | 60 |
| 2.5 Critical Remarks..... | 61 |
| 3. Case 2: Brazil | 63 |
| 3.1 Country’s Profile: Big Economy, Widespread Inequality and Flawed Democracy..... | 63 |
| 3.2 The Mixed Effects of China’s Foreign Policy Approach on Brazilian Development..... | 65 |
| 3.3 Beyond Talk, Really Solid Partners? Brazil’s Oscillations in Political Relations with Beijing and Washington..... | 66 |
| 3.4 The Growing Strength of Sino-Brazilian Economic Relations: Beyond Political Leadership Reversals | 69 |
| 3.5 Critical Remarks..... | 71 |

| | |
|--|------------|
| 4. Case 3: Ecuador | 72 |
| 4.1 Country's Profile: Poverty, Poor Democracy, and Institutional Backwardness | 72 |
| 4.2 The Mixed Effects of China's Foreign Policy Approach on Ecuadorian Development | 74 |
| 4.3 Quito and the Superpower Competition between Beijing and Washington: The Decline of Relations with China and the Rapprochement with the U.S. | 75 |
| 4.4 The Growing Imbalance of Sino-Ecuadorian Economic Relationships in the Last Decade: China's Extractive Approach at Its Best | 79 |
| 4.5 Critical Remarks..... | 80 |
| 5. Concluding Remarks | 82 |
| <i>Conclusions</i> | 85 |
| <i>Bibliography</i> | 88 |
| <i>APPENDIX</i>..... | 108 |

Introduction

Over the past 30 years, the People's Republic of China has undergone a transformation that has resulted in its rise on the global stage. China has gradually assumed a leading role in advocating for alternatives to prevailing Western institutions and rules. As part of its integration into the international system, Beijing joined major multilateral institutions, such as the International Monetary Fund (IMF), the United Nations (UN), the World Trade Organization (WTO), and the World Bank (WB). Despite the membership to these institutions, China, under Xi Jinping's leadership, has established its own alternative multilateral institutions, including the Asian Infrastructure Investment Bank (AIIB), the China International Development Cooperation Agency (CIDCA), as well as development assistance programs under the auspices of the Belt and Road Initiative (BRI).

These institutions were designed by Beijing to be key instruments of Chinese foreign policy projection in the so-called Global South, in which it is primarily the role of development assistance, apart from the nonetheless central ones of trade and investment, that seems to have increasingly become fundamental. The strategic importance of this projection lies in the growing importance that this area of the world will hold in this century both in demographic and, above all, economic terms. Latest data from AidData, a research lab based at the College William & Mary, shows that China allocated US\$235 billion in aid worldwide between 2012 and 2022.¹ This figure is, in any case, still far lower than the US\$640 billion provided globally by the world's leading aid contributor, the United States, during the same period.² Nevertheless, Beijing's rise in the provision of global development aid is as concerning as surprising to many because of China's lack of transparency on funding and the level of antagonism to the Western international order.

Beijing has established itself as one of the world's most important donors, trading partners and investors. Nevertheless, its reputation is increasingly tarnished by rumors around exploitative terms, engineering-flawed infrastructure projects, burdensome debt traps, and sub-standard working conditions. Although Beijing officially claims that China seeks to assist developing countries in achieving “common development, solidarity and stability based on principles of mutual equality and respect”,³ many academics tend to refute this narrative by asserting that China is attempting to export or spread its authoritarian model through its foreign policy. China is sometimes even accused of being

¹ AidData (2024).

² USAID (2024).

³ The State Council of The People's Republic of China (2014).

a neo-colonial power that aims to maintain or exacerbate the developing countries' issues to increase their dependence, which, conversely, has often been attributed by developing countries to Western norms, institutions, and ideologies. Undoubtedly, China's rise on the global scene as an authoritarian state driven by communist ideology has notable implications for the contemporary liberal order hegemonized by the United States.

Academics and leaders around the world are increasingly acknowledging the challenges that China's foreign policy, in which economics plays a key role, could pose. However, they do not yet seem fully aware of what are the best levers to make the relationship with China produce more opportunities for development, rather than distortions. This question is particularly important for policymakers in the developing world, for whom the relationship with Beijing is proving increasingly crucial to promoting their own development. The fundamental belief underlying the study is that China's role in promoting the development of these countries and, most importantly, the outcomes that will accrue from this relationship, will have major repercussions in the power that Beijing will have in promoting a transformation of the global order of which it is increasingly suspected.

To explore the extent to which the criticisms and concerns are well-founded and, more importantly, to try to identify the levers through which developing countries can successfully exploit the relationship with China, this thesis seeks to answer first the question of whether or not development aid, international trade with and investment from Beijing, seen as key components of China's foreign policy approach, have promoted growth in some of the most important Latin American countries over the past decade. Secondly, it aims to identify what factors or mechanisms have determined the differences in the effectiveness of China's foreign policy in promoting their development.

The historical period, 2012-2022, and the region, Latin America, selected for analysis have very specific reasons. 2012 is the year of Xi Jinping's advent to power, an event that resulted in a foreign policy by China that was decidedly more assertive than in the past, while 2022, besides being the year that marks the end of Xi's first decade in power, also represented in many databases the last year for which data were available. Furthermore, prior to 2012, unfortunately, many data on China's aid, trade and investment in Latin America were not available. On the other hand, the selection of Latin America as the preferred region for analysis is mainly due to the fact that, of all the developing regions in the Global South, it represents the one closest geographically to China's main rival superpower, the United States. Therefore, it was felt that investigating Chinese projection in such a

strategically important region for Washington could have returned results of particular significance in the current competition between the two powers in the Global South. The dissertation provides information that could fuel the debate about the historical relevance of the theory that Latin America is the "backyard" of the United States, as it has always been since the adoption of the Monroe Doctrine in 1823 (which was aimed primarily at European powers, however). Specifically, the analysis was conducted on the following six countries: Argentina, Brazil, Chile, Colombia, Ecuador, and Peru. The rationale behind this selection will be detailed later in the study.

This thesis, divided in three main chapters, is organized as follows.

Chapter 1 provides indispensable background information on China's development aid regime, the effects of which on the development of Latin American countries is the major subject of research interest, and on the evolution of Beijing's relationship with the region since the birth of the PRC. It also reviews the existing literature about the effects of aid, trade and FDI on development, presents the research questions and their underlying hypotheses, as well as the research design. Specifically, the latter is divided into a quantitative section, based on econometric analysis, and a qualitative section, based on case studies, to answer the first and second research questions, respectively.

Chapter 2, the purpose of which is to answer the first research question, details the characteristics of the quantitative analysis, presents the statistically significant results emerged as well as some possible explanations for them, based both on economic theory and some contextual information about the countries analyzed. Specifically, this section is aimed at identifying and explaining for each country in the sample selected for analysis the effects of Chinese aid, trade and FDI flows, which are the independent variables, on six development indicators, namely the dependent variables, including employment, GDP per capita, external debt, consumption per capita, industrial value added and citizens' satisfaction with the ability of public governance to promote economic development.

Chapter 3, aimed at answering the second research question, identifies the case studies, detailing the methodology followed for this purpose, and illustrates the main features of their economic and political ties with China. Specifically, the three case studies identified were Chile, Brazil and Ecuador. First, the information provided complement the explanations outlined in the previous chapter regarding the effects of Beijing's aid, trade, and FDI on development indicators. Secondly and more importantly, the chapter aims to identify the main levers that enable Latin American countries to effectively exploit the relationship with China to promote their own development. A final section provides some concluding remarks.

The main findings from the study are as follows.

In relation to the first research question, the econometric analysis returned some statistically significant and economically meaningful results at the individual country level, to which an explanation based on economic theory and some contextual information has been provided. However, mainly due to an insufficient number of statistically significant results, it has not been possible to conclude anything general, either at the regional or individual country level, about the effects of Beijing's foreign policy approach, of which aid, trade and investment are understood as key components, on development. This occurred also because aid, trade and investment often tended to have contradictory effects with respect to each other, which made it very difficult to figure out which effect prevailed over the others. Moreover, the least number of statistically significant results were unfortunately obtained precisely about the effects of the variable of greatest interest, development aid. The main reason for this seems to have been the absence of complete data on aid from China, which was attempted to be remedied by resorting to the inclusion of the mean value of the available data in place of the missing data. The analysis also showed the presence of multicollinearity, meaning that the models often failed to explain the effects of the independent variables, namely aid, trade and FDI flows, in a statistically significant way, partly because of their high mutual correlation. This is particularly evident from the fact that the highest number of statistically significant results was obtained through the second model in which, in addition to all three independent variables being present, namely aid, trade and investment, a lagged endogenous variable was also included.

Concerning the second research question, a common denominator that emerged from the analysis is that Beijing appears to be primarily interested in mineral and agricultural products in all three case studies selected. The effectiveness of China's foreign policy approach, consequently, does not appear to have been determined so much by how Beijing approached these countries but rather by the latter's agency, understood as their ability to leverage their relationship with China to further their own development goals. The agency of such countries seems to be fundamentally the result of a very specific factor: the level of democracy. Indeed, higher levels of democracy appear to be strongly related, on the one hand, to the ability of the political leadership to manage, without severe ruptures, the relationship with Beijing and, on the other hand, to the capacity of public institutions to scrupulously oversee Chinese penetration of markets, especially its access to key natural resources and critical infrastructure. Specifically, based on the qualitative analysis, Beijing's effectiveness in promoting development seem to be much better the more the ease for Beijing to access natural resources and critical infrastructure is lower while Latin American countries' strategic clarity and

continuity as well as the competence of their public institutions is higher. These conditions seem to be better met the higher the level of democracy in partner countries.

Chapter 1: Background

This chapter, aimed at providing the background necessary to understand the logic and content of the dissertation, is divided into three sub-sections. The first is devoted to providing a definition of foreign aid, a comparison of Chinese foreign aid with Western one, an illustration of the evolution of China's approach to foreign aid and a presentation of Beijing's most relevant actors in aid giving. This is because, as reported in the introduction, the development aid regime is interpreted by Beijing as the most important foreign policy tool in the Global South, as also evidenced by the recent establishment of institutions such as the AIIB and CIDCA or aid programs initiatives under the BRI. Investigating the effects of development aid, as well as those of trade and investment, on the development of some Latin American countries is the main and most original objective of this thesis. Therefore, a preliminary illustration of the characteristics, functioning and history of Beijing's development aid regime is necessary. The second section examines the reasons behind China's interest in Latin America and the implications of this relationship from the perspectives of both Chinese and Latin American governments. This section illustrates the evolution of the broader relationship between China and Latin American countries from the birth of the PRC in 1949 onward. The goal is to highlight the main drivers that have determined the rapprochement over time between the Asian giant and the Latin American region. Finally, the last section explores the existing literature on the effects on growth of aid, trade and FDI, the three basic elements of China's foreign policy approach. It also presents the study's fundamental hypotheses with their underlying assumptions as well as the research design.

1. Chinese Foreign Aid

In light of the above, this section aims to provide a definition of foreign aid, a comparison of Chinese foreign aid with Western one, an illustration of the evolution of China's aid approach and a presentation of Beijing's most relevant actors in aid giving.

1.1 Defining Foreign Aid

Foreign aid occurs in various modalities. Official Development Assistance (ODA) is usually the primary form of aid provided by governments to support the economic development and welfare of developing countries. Chinese official aid differs from other major sources of aid in that it is not subject to regulation by the Organization for Economic Co-operation and Development (OECD)'s protocols for ODA. However, the distinction between China's development financing and ODA is often blurred. Moreover, Chinese aid can be further categorized into three distinct types: grants,

interest-free loans, and concessional loans. As per the 2021 white paper on China's international development cooperation released by the State Council of the People's Republic of China, “[Grants] are used to help other developing countries build small and medium-sized social welfare projects, human resource development cooperation, technical cooperation, material assistance... [Interest-free loans] are mainly used for public facilities and improving people’s livelihood... [Concessional loans] are provided for projects that can bring economic and social benefits, large- and medium-sized infrastructure projects.”⁴ Based on this classification, the thesis will focus mainly on concessional loans, as they closely resemble ODA and have the most direct connection to any development results that may arise. In this thesis, the term "ODA-like funding" will be used to encompass all funds that falls under the definition provided by the OECD, which includes concessional loans.

1.2 Comparison between Chinese and Western Models of Development

The distinctions between Chinese and traditional Western aid programs offer a foundation for evaluating Beijing's peculiar foreign policy approach assistance. First, China's foreign policy approach challenges the Western paradigm of development. Historically, the Western countries, led by the United States (U.S.), have advocated for economic growth through natural competition and limited government intervention, whereas China has embraced an opposing approach. Resulting from these contrasting beliefs, both states have developed models that marked a significant advancement in the history of mankind. After World War II (WWII), the U.S. emerged as a hegemonic global power and exerted significant influence in shaping the World Bank and the International Monetary Fund, actively promoting free markets and democracy by providing foreign aid. This concept of development is illustrated by modernization theory, which portrays developing countries as traditional cultures mostly reliant on agriculture, thus necessitating a transition towards a more advanced socio-economic system.⁵ Consequently, Western organizations and governments still strive to address global inequality by providing aid with the aim of orienting developing countries towards adopting the principles of market liberalization and democratization. Conversely, China’s former President Deng Xiaoping's policies can be deemed to represent the foundation for the emergence of China's opposing development paradigm. Indeed, in the 1980s, Deng boosted China's economic and developmental advancements, which had been hindered by years of starvation and upheaval resulting from the Cultural Revolution and Great Leap Forward. The core of his "reform and opening up" policy primarily relied on fostering economic growth through the implementation of infrastructure projects.⁶ Beijing’s Asian Infrastructure Investment Bank (AIIB) contends that sustained

⁴ The State Council Information Office of the People’s Republic of China (2021).

⁵ Rostow (1990).

⁶ Wen and Fortier (2016).

development can be attained solely and primarily by means of methodical and comprehensive investments in infrastructure. China's development experiences highlight its recognition of the crucial role of adequate infrastructure in facilitating industry, trade, and economic growth.⁷ Beyond adopting a distinctive foreign policy approach, Beijing also espouses an alternative aid philosophy that diverges from the conventional Western paradigm. Indeed, China interprets itself as engaging in South-South cooperation rather than simply being a “donor”.⁸ In 2014, China released a white paper outlining its approach to aid, which is explained in detail below:

“China adheres to the principles of not imposing any political conditions, not interfering in the internal affairs of the recipient countries, and fully respecting their right to independently choosing their own paths and models of development. The basic principles China upholds in providing foreign assistance are mutual respect, equality, keeping promise, mutual benefits, and win-win”.

The idea of non-interference or non-conditionality, which China frequently stresses, is further explained in its criticism of the existing foreign aid system. For instance, the Forum on China-Africa Cooperation (FOCAC) explicitly expresses China's criticism of the prevailing global model of foreign aid, which, according to the Chinese perspective, leads to the mistreatment or exploitation of developing countries.

“Each country has the right to choose, in its course of development, its own social system, development model and way of life in light of its national conditions... Moreover, the politicization of human rights conditionalities on economic assistance should be vigorously opposed as they constitute a violation of human rights.”⁹

Hence, China's foreign aid appears to constitute not just an alternative model, but a frontal criticism of the Western model, from this viewpoint. Besides, the most significant distinction between Western and Chinese aid lies in the concept of conditionality. The existing international aid or lending system, which is predominantly influenced by Western countries, is distinguished by conditionality, which entails that recipient states must fulfill certain requirements in order to obtain aid.¹⁰ China implemented a program of providing aid without any political requirements, in accordance with its aid doctrine, which resulted in significantly fostering ties and attracting developing nations. Although

⁷ Liu and Liu (2022).

⁸ The State Council of The People's Republic of China (2014).

⁹ Johnston (2022).

¹⁰ Carnegie Endowment for International Peace (2012).

rhetoric suggests a lack of conditionality, some analysts have found that China does impose certain criteria and obligations on recipient states. However, these conditions differ significantly from traditional notions of conditionality. In this regard, for instance, the Carnegie Endowment for International Peace has identified four frequently overlooked "conditions" associated with Chinese aid. First, there exists a "political conditionality" whereby recipient nations are required to conform to the one-China principle and, as a result, are denied ex-ante the possibility of establishing diplomatic relations with both mainland China and Taiwan. Furthermore, there is an "embedded conditionality" which mandates that any country receiving aid from China must consent to employing Chinese labor and resources, along with complying with certain other conditions imposed by Chinese firms.¹¹ Such kind of conditionality is particularly evident in the context of the extensive recourse to infrastructure projects as a form of assistance. The third requirement refers to the concept of "emergent conditionality," which indicates to the presence of data demonstrating how Chinese aid recipients develop a reliance on China in key sectors of the economy as a result of substantial investments. In particular, this circumstance pertains to the prevailing presence of Chinese firms in the recipient nations, especially in the construction sector. Such a result may be interpreted also as a reminiscence of dependence theory, which argues that resources move from underdeveloped states (referred to as the "periphery") to wealthy ones (referred to as the "core"), therefore benefiting the latter while causing detriment to the former.¹² The final criterion, known as "cross-conditionality," refers to an implicit requirement where funds from Beijing grants China or Chinese firms influence over the recipient country. However, it is worth mentioning that there is no official documentation of these conditions, not even in speeches, as many of them are implied or only enforced in specific instances or projects. Consequently, this study aims to examine the usual criticisms and concerns over the codependency resulting from the absence of explicit conditions in aid.

1.3 Evolution of China's Approach to Foreign Aid

More specifically, China's foreign aid programs underwent a transformation as the country experienced growth and development.

1.3.1 1949-1979

Since the establishment of the People's Republic of China (PRC), Chinese leaders regarded foreign aid as an essential instrument for gaining the support of other countries in pursuit of China's international and regional goals. This was particularly important in the face of sanctions, as it helped China secure its position on the United Nations Security Council (UNSC), obtain diplomatic

¹¹ *Ibidem.*

¹² McDonough (1980).

recognition of its claim to Taiwan, and forge partnerships with Third World nations.¹³ In particular, during this first stage, China's provision of foreign aid was principally motivated by its ideological commitment to fulfill internationalist responsibilities to support other socialist and developing nations.

1.3.2 1980-1999

During the period of China's economic reforms led by Deng Xiaoping, China's foreign aid focused primarily on economic objectives, rather than political ones, adopting a pragmatic approach driven by the pursuit of benefits. In the early 1980s, China sought to establish financial ties and foster positive relationships especially with Western countries. Domestically, the implementation of a market-driven economic reform entailed incorporating a strategy that would allow China to effectively engage in global trade while also providing aid to recipient nations. However, this assistance was conditional upon meeting additional requirements pertaining to trade and project agreements.¹⁴ Such a practice was labelled as “aid to facilitate trade”.¹⁵

1.3.3 2000-2011

During the 2000s, China's foreign aid witnessed a period of growth that was consistent with the global economic prosperity of the 1980s and 1990s. The 2011 white paper on foreign aid displays an average growth rate of 29% in foreign aid expenditure between 2004 and 2009.¹⁶ Consequently, the main objective of foreign aid shifted towards facilitating the overseas growth of Chinese firms, as part of the “going out” strategy put forward in 2000. Significantly, China also increased its engagement with traditional donor countries and actively participated in multilateral organizations throughout this period.

1.3.4 2012-present

The ascent of Xi Jinping to power marked a new phase in China's foreign aid initiatives, characterized by a renewed emphasis on achieving political and economic advantages through the Belt and Road Initiative and greater engagement in the global system. Specifically, the BRI serves as a symbol of China's contemporary extensive overseas aid programs. In a re-interpretation of the ancient Silk Road, the BRI has significantly increased its influence, besides Latin America, also across Central and South Asia, the Middle East, Africa, and Europe by actively encouraging the construction of infrastructure and connectivity along both land and maritime routes. This global

¹³ Jingdong, Fei, and Xuwan (2022).

¹⁴ Haibing (2017).

¹⁵ Jingdong, Fei, and Xuwan (2022).

¹⁶ Information Office of the State Council of The People's Republic of China (2011).

initiative provides Beijing with a wide range of resources, a means to address its excess of domestic production capacity, control over economic policies, and political legitimacy.¹⁷ China has recently prioritized both maintaining international order and expanding its “soft power”. Beijing’s 2021 white paper on foreign aid openly declares that it “has been upgrading its foreign assistance to a model of international development cooperation.”¹⁸ This represents an important step towards an “activist approach to multilateral rule-setting” which highlights China's increasing influence as a major global actor.¹⁹ The evolution can be noticed across multiple domains on the global level. First, Beijing's influence in international institutions has notably expanded. Chinese representatives have led four out of the fifteen specialized agencies of the United Nations (UN), namely United Nations Industrial Development Organization (UNIDO), International Telecommunications Union (ITU), Food and Agriculture Organizations (FAO), and International Civil Aviation Organization (ICAO).²⁰ The Chinese yuan or renminbi has gained substantial significance, arguably at the detriment of other currencies such as the euro, the British pound sterling, and the Japanese yen.²¹ The IMF's recognition of the renminbi as a reserve currency has significant implications for its unexplored potential, which has been hindered by the Chinese Communist Party (CCP)'s reluctance to liberalize the exchange rate. This would enable the external value of the Chinese currency to be set by market forces and facilitate the complete opening of the capital account. China has been exerting significant influence in various areas of global growth, underscoring the increasing significance of monitoring Beijing's foreign policies.

1.4 Foreign Aid Players: Agencies and Instruments

Chinese foreign aid is allocated through diverse bodies, contingent upon the kind of the assistance and project. In this section, three categories of actors that are pertinent to this thesis will be presented: government agencies, state-owned policy banks, and state-owned commercial banks.

1.4.1 Government Agencies

Two government agencies play an essential role in providing aid.

The first is the China Ministry of Commerce (MOFCOM) which shoulder primary responsibility for overseeing the interest-free loan and grant programs for developing countries.²² The

¹⁷ Morreale and Jain (2019).

¹⁸ The State Council Information Office of the People’s Republic of China (2021).

¹⁹ *Ibidem*.

²⁰ Paszak (2020).

²¹ Prasad (2011).

²² CIDCA (2021).

MOFCOM generally provides grants and interest-free loans only to support projects that have a development purpose. These funds are mostly allocated for the building, maintenance, upgrading, or expansion of infrastructure and other physical assets.

The second is the China International Development Cooperation Agency (CIDCA) which is a newly established organization that institutionally formalizes China's efforts in providing development assistance. Its main role is to set guidelines, strategies, and policies for foreign aid. It enters the international aid sector, which is currently dominated by institutions from developed countries like the Department for International Development of UK (DFID), the Japan International Cooperation Agency (JICA), and the U.S. Agency for International Development (USAID). CIDCA supervises the distribution of grants and interest-free loans. Additional relevant institutions comprise the China Ministry of Finance, China International Center for Economic and Technical Exchanges (CICETE), and the Chinese Embassies.

1.4.2 State-owned Policy Banks

The primary foreign aid agents of this kind are the Export-Import Bank of China (Exim Bank) and the China Development Bank (CDB). The Exim Bank primarily provides government concessional loans (GCL), which are loans provided to foreign governments that maintain diplomatic relations with China.²³ A GCL is typically issued with terms that are below the prevailing market rates, usually consisting of 20-year maturities, 5-year grace periods, and 2% interest rates. The Chinese government categorizes the GCL as a type of ODA.²⁴ The reason why CDB loans have less favorable conditions compared to Exim Bank's loans is that "unlike China Exim Bank, CDB must maintain its own balance sheets and lend without receiving official subsidies from the state."²⁵ The two state-owned policy banks in China that offer international finance possess a diverse range of lending instruments, such as term loans, bridge loans, revolving credit facilities, working capital loans, commodity-backed loans, club loans, syndicated loans, and buyer's credits.²⁶ CDB and Exim Bank provide loans to both governmental entities and firms.

1.4.3 State-Owned Commercial Banks

This group of lending agencies is not particularly pertinent to this dissertation. However, in the context of foreign aid, they play a residual role in offering certain kinds of concessional loans. State-owned commercial banks refer to Chinese banks that are predominantly owned by the Chinese

²³ Shalal (2021).

²⁴ *Ibidem*.

²⁵ Custer et al. (2023).

²⁶ *Ibidem*.

government or one of its agencies. State-owned commercial banks, such as the Industrial and Commercial Bank of China (ICBC) and People's Bank of China (PBC), serve as prime examples.

2. China in Latin America and the Caribbean

The primary focus of this thesis revolves around not only Chinese foreign aid, but also the complicated, intricate, and highly contentious relationship between China and Latin America. This region, consisting of 33 countries, hosts as many as 24 developing nations²⁷ and ranks as the third continent, after Asia and Africa, with the most substantial influx of aid funding from Beijing over the past two decades.²⁸ Through this latter period, indeed, a considerable share of China's aid has been allocated to Latin American states. Since 2001, particularly following China's accession to the World Trade Organization (WTO), China has more actively cultivated its ties with Latin American nations. Modern bilateral Sino-Latin American relations particularly began to strengthen when, in 2004, the Asian giant became an observer in the Latin American Parliament (Parlatino) and also in the Organization of American States (OAS), replacing Taiwan. China's commitment to Latin American countries is commonly attributed to their shared history of resisting Western dominance. Moreover, Beijing's remarkable developmental advancements in the last twenty years have shown the feasibility of economic growth within a non-Western framework. China actively promoted the latter through its distinctive aid programs, which typically prioritize infrastructure development and are characterized by the lack of conditionalities. In the past two decades, the greatest recipient of Chinese aid in Latin America have been, in descending order, Brazil, Ecuador, Peru, Venezuela, Cuba, Bahamas, Argentina.²⁹ This section examines the reasons behind China's current interest in Latin America and the implications of this relationship from the perspectives of both Chinese and Latin American governments.

2.1 From China's Perspective

China's engagement with Latin American countries has been steadily expanding, particularly in the past twenty years. This subsection explores Beijing's strategic, political, economic, resource-related, and global interests in the region by examining the history of diplomatic relations between China and Latin America. Indeed, since the 1949 when the PRC was established, Beijing's relations with Latin America have undergone different stages.

²⁷ The United Nations (2014).

²⁸ AidData (2024).

²⁹ AidData (2024).

In the 1950s, due to their persistent diplomatic relations with Taiwan, China had minimal engagement with several Latin American countries. Subsequently, in the 1960s, the initial stage of the Cold War, the first Latin American partnership arose with the objective of enhancing the region's competitiveness in global markets. However, these efforts were mostly focused domestically and did not prioritize establishing foreign relations. Moreover, China preferred to distance itself from Latin American regional alliances during this initial stage, mostly to avoid provoking the U.S., whose backing Beijing deemed essential for the international recognition of the newly established communist regime.

The beginning of PRC's relationship with Latin American countries in recent history can be traced back to the 1970s. This occurred after Latin American countries, following the lead of the U.S., established diplomatic relations with China, as a result of Beijing securing its permanent seat in the UNSC in 1971.³⁰ Such a recognition by the UN represented a significant accomplishment, as it marked a turning point in China's legitimacy and expansion in the international system. Throughout that decade, the PRC provided significant support to numerous UN proposals that held particular importance for Latin America. These included backing Panama's request for sovereignty over the canal, advocating for the New International Economic Order, and endorsing the establishment of a Nuclear Weapons Free Zone in Latin America.

In the following period between 1978 to 1990s, China shifted its focus towards its internal economic development, while simultaneously strengthening its ties with the West through its "opening up" policy. The Chinese economic reform launched by Deng Xiaoping in 1978 had a beneficial effect on the potential interactions between China and Latin America. Indeed, this period is widely recognized as the moment when China signaled its willingness to begin trading, not only with the West, but also with the rest of the world, abandoning the quasi-autarkic economic system long imposed by the former President Mao Zedong. As a result, the overall trade between the two parties grew substantially, rising from US\$ 200 million to US\$ 2 billion between 1975 and 1988.³¹

Subsequently, in the 1990s, trade between LAC's countries and China continued to rise as China became more reliant on the region for fundamental resources, particularly oil, iron, copper, and soybeans. More precisely, bilateral trade experienced a growth rate above 100 percent between 1989

³⁰ Lehoczki (2015).

³¹ Mora (1999).

and 1996, thus resulting in a doubling of its value.³² Entering the 2000s, China still primarily focused on strategic economic interests based on the acquisition of regional natural resources.

Latin America continues to hold significance for Beijing's global ambitions amidst the present global climate. This might be evidenced by the fact trade between China and the LAC region grew 26-fold between 2000 and 2020 from US\$ 12 billion to US\$ 315 billion.³³ Beijing became the largest extra regional trade partner for almost all the largest Latin American economies. China's intention to enhance its global influence through leveraging its ties with and presence in Latin America is also evident in the way in which it provides aid. China's stated stance is that it does not want to exploit aid as a means to exert influence over the domestic politics of regional nations or impose policies, differently from the case of Western conditionalities. Specifically, China offers infrastructure finance and loans to support the industrialization and growth of Latin American countries, receiving in exchange specific benefits such as access to resources and local markets. Several infrastructure projects and aid initiatives also generate business opportunities for Chinese firms and employment for Chinese workers.

2.2 From Latin America and the Caribbean's Perspective

A frequently neglected facet of Sino-Latin American ties is to the aims and agenda of Latin American countries in their engagement with China. Mainstream literature tends to remove the agency from the Latin American perspective by villainizing China and victimizing Latin American countries. Whether or not is truth to this portrayal, this subsection will explore the perspective of the Sino-Latin American relationship among diverse countries, analyze the potential benefits for the region, and discuss the recent rise of Latin American agency in scholarly research.

In recent years, numerous Latin American countries witnessed swift economic and social transformations, highlighting critical fields that necessitate development in the forthcoming years. The latter encompass infrastructure development, effective governance, the promotion of both environmental sustainability and technological advancements, the reduction of inequality, as well as the exploitation of opportunities arising from a growing South-South cooperation at a global level. Latin America's growth has primarily highlighted the significant requirement for infrastructure funding, which China readily offers with little conditions, alongside other prominent donor states like the United States.

³² *Ibidem.*

³³ World Economic Forum (2021).

At the governmental level, several national leaders have kept cordial ties with Beijing, while other relationships have deteriorated for various reasons. The most commonly cited are unfinished or low-quality projects, failure to repay loans to Chinese banks, local worker dissatisfaction due to the widespread or exclusive employment of Chinese workers, occasional violations of Chinese company management to host country regulations during project implementation, and concerns about Chinese companies' price competition and product quality in local markets. There is limited research available that sheds light on the various Latin American countries' motivations for engaging with China. However, most scholars tend to give little relevance to state agency on the part of these states, which, nonetheless, remains an important consideration.

While certain states may not possess a regulatory and political framework that allows to effectively exploit Beijing's aid and engagement, others have the potential to benefit from this relationship. Furthermore, the way in which Chinese and American influence is perceived domestically can indicate the extent to which these ties have, at least perceived, positive or negative effects on Latin American people. For instance, in global policy matters, as measured by voting practices at the United Nations General Assembly (UNGA), Latin America is the region that least firmly aligned to either the U.S. or China. Moreover, in public opinion, surveys suggest that people view the U.S. and China as equally favorable.³⁴ For example, according to a survey conducted in 2021 by the American University, which included respondents from 23 Latin American countries, over 40% held a favorable or a very favorable opinion of Beijing while 30% held a neutral one.³⁵ While nation level polls provide additional details regarding these attitudes, these results partially contradict the prevailing narratives of China engaging in predatory or exploitative activities. Moreover, based on the same study, 78% consider China's influence in Latin America to be high while 86% consider China's influence on the region's economy to be high.³⁶

Throughout the rest of the thesis, different approaches to and perspectives on Sino-Latin American relations will be highlighted, especially by exploring how diverse political systems can play a role in affecting Chinese aid impact on certain macro-economic variables.

³⁴ Wintgens (2022).

³⁵ American University (2022).

³⁶ *Ibidem*.

3. Theoretical Foundations and Thesis Structure

The thesis addresses two central questions:

- 1) Did Chinese foreign aid, trade and FDI, understood as basic components of China's foreign policy approach, foster development in Latin American countries between 2012 and 2022?
- 2) If the effectiveness of China's foreign policy approach on partner countries' development differed in the last decade, what factors or mechanisms drove this difference?

With these questions in mind, this chapter first explores existing literature and then presents the research design. Prior to examining the existing literature, it is essential to establish a clear definition of "effectiveness". In defining effectiveness, the reference is to the ability of the above-mentioned Chinese factors to foster economic growth and enhance the well-being of populations in developing nations. The term "effectiveness" is highly ambiguous because there is disagreement on what defines successful vis-à-vis unsuccessful outcomes. Considering the objective of this thesis, which is to assess the effectiveness of the above factors in different Latin American countries, the term "effectiveness" will mostly be employed in a comparative or relative framework. For example, in the section dedicated to the quantitative analysis, GDP per capita, consumption per capita and external debt are viewed as measures of effectiveness. As such, an increase in GDP per capita might be considered as proof of efficacy, whilst a fall indicates the contrary.

3.1 Existing Literature

There are three key relationships essential to this thesis. Specifically, the impact that foreign aid, trade and FDI respectively have on development. To address these three associations, this subsection will first examine the broader body of literature on foreign aid effectiveness, considering the variety and the complexity of ways in which this variable can be measured and the distinction between tied and untied aid. The following paragraph will then explore the evidence emerging from World Bank's data about the interplay between trade and economic growth in Latin America during the past two decades. Finally, the third paragraph will delve into the empirical literature on the effects of FDI on economic growth, which shows contradictory results.

3.1.1 Aid Effectiveness: Tied vs Untied Aid

Development aid can be tied or untied. First, it seems appropriate to provide the definitions of these two types of aid so as to highlight their differences. Untied aid is assistance provided to

developing countries that can be leveraged to buy goods and services in almost any country.³⁷ Tied aid mandates that products and services purchased with it must come from the donor country or a restricted group of countries.³⁸ OECD Development Assistance Committee (DAC), the most important multilateral institution on foreign aid (of which China is not a member but has significant working relations with since October 1995), suggests untying aid, particularly Official Development Assistance (ODA), to Least Developed Countries.³⁹ Untied aid is believed to be more effective than tied aid due to reduced administrative burdens and potential technical incompatibilities between donor and recipient technologies associated with tied aid. Furthermore, the latter, sometimes considered a covert subsidy to the donor's domestic firms, may be influenced by political considerations rather than the needs of recipient countries.

The literature on tied and untied aid effectiveness is broad and presents conflicting results. Svensson (2000a⁴⁰, 2000b⁴¹) demonstrate that tied aid is an effective policy for enhancing welfare, leading to a reduction in poverty for the beneficiary. In 2007, Miquel-Florensa conducted a study on the distinct impacts of tied and untied aid on growth, and how these impacts change based on the policy framework's quality of the receiving country.⁴² The scholar discovered that there is no substantial difference in aid effectiveness between the two types of aid. However, when the analysis of aid effectiveness is conditioned on the quality of recipient countries' policies, untied aid has a more significant effect on growth compared to tied aid. Specifically, this evidence resulted statistically significant for the sample of low and middle-income countries, such as the ones assessed in the present thesis, while is not statistically significant but consistent in sign for the sub-sample of low-income countries. Sang-Kee and Young-Ham (2016) show that greater exclusivity of aid, in the form of tied aid, raises the equilibrium level of aid and the social welfare of the receiving nation when ODA policies are established without cooperation between donor countries.⁴³ Significantly, in many developing nations, as illustrated, China delivers aid differently from Western governments and other countries in the Global South, despite certain similarities.⁴⁴ When donor countries can coordinate assistance programs to maximize joint welfare, including the recipient country's welfare, providing untied aid will enhance the total quantity of aid and global social welfare. This evidence suggests that the policy suggestion of OECD DAC for untied aid can lead to welfare improvement only if the

³⁷ OECD (2007).

³⁸ *Ibidem*.

³⁹ OECD (2008).

⁴⁰ Svensson (2000a).

⁴¹ Svensson (2000b).

⁴² Miquel-Florensa (2007).

⁴³ Kim and Kim (2016).

⁴⁴ Lauria and Fumagalli (2019).

international coordination framework for cooperative aid functions well, which is not actually the case given the current multipolar geopolitical framework.

Regarding China more specifically, aid from Beijing cannot be definitively classified as tied or untied because it has not stated or formally designated its aid model as such in public statements or official papers. However, it is possible to analyze the elements of its aid model and the dynamics it creates to determine if it aligns more closely with one of the two forms of aid. Referring to the existing literature on the subject is beneficial in this context. Notably, China's development aid strategy in Latin America mostly relies on export-import banks offering low-interest financing, rather than Official Development Assistance (ODA).⁴⁵ Brautigam and Gallagher (2014) discovered that Chinese finance in Latin America does not significantly deviate from global interest rates, does not result in substantial commodity profits for China, and is not primarily focused on relocating Chinese workers to Latin America, despite popular beliefs.⁴⁶ However, they also noted that a significant amount of Chinese capital is closely linked to Chinese suppliers through the procurement of Chinese goods and services. This evidence aligns with findings from other researchers such as Croese (2013)⁴⁷ and Zimmerman and Smith (2011).⁴⁸ Controversy surrounding Chinese funding and Chinese suppliers may stem from the notion that the financial support provided by China to these countries is considered 'aid' and should not be connected to any conditions. However, all export-import banks, not only Chinese ones, aim to offer loans to purchasers of a country's products.

3.1.2 Trade and Development in Latin America: Evidence from the World Bank

The review of the literature on the link between economic growth and trade cannot transcend both a geographic and a temporal contextualization. To this end, the section is based solely on the data reported in a recent study by the World Bank (2019) about the relationship between trade and economic growth in Latin American countries over the past two decades.⁴⁹ Since 2000, a period strongly marked by the rise of China, the countries that displayed the best performances in terms of GDP per-capita growth were those with the highest export dynamism suggesting that this may be more fundamental than export diversification or complexity in avoiding the so-called “natural resource curse”. The latter driver was on the opposite the most determining factor for Latin America's economic growth between the 1960s and the 2000s according to the data. However, since the 2000s, the best performers in terms of GDP per capita growth have been surprisingly three commodity

⁴⁵ AidData (2024)

⁴⁶ Bräutigam and Gallagher (2014).

⁴⁷ Croese (2013).

⁴⁸ Zimmermann and Smith (2011).

⁴⁹ De La Torre and Ize (2019).

exporters (Chile, Peru, and Uruguay) and three commodity importers (Costa Rica, Dominican Republic, and Panama). Indeed, even where export baskets remain concentrated in commodities, countries might converge towards the standard of living of advanced countries if they can continue to raise their shares in global exports and translate such an export pull into a vigorous domestic response. Neither of these two conditions is easy to ensure, however. The former may be hinged not only on constant improvements in production efficiency but also on whether world demand for commodities will rise faster than world income. Concerning the latter, commodity dependence exposes countries to pronounced terms-of-trade cycles, which, in the absence of strong countercyclical policies, may induce major macroeconomic excesses during the upswing, followed by painful adjustments during the downswing. The adoption of counter-cyclical policies was found to be at the very basis of the best performing countries' success in terms of GDP per capita growth over the last two decades. The above leads to conclude about the relationship between trade and growth of Latin American economies over the past two decades that:

1) Growth is highly dependent not so much on the structure as on the dynamism of the import/export sector, particularly on exports.

2) Growth relies on the ability of the institutions to adopt appropriate macroeconomic policies, which in turn depends on their competence and thus their strength.

3.1.3 FDI and Economic Growth

The empirical literature on the effect of FDI on economic growth shows contradictory results.

A first strand: FDI has a beneficial impact on economic growth.

First, numerous studies have demonstrated a favorable impact of FDI on production levels by means of externalities and spillover effects, specifically through the accumulation of physical capital and the formation of human capital. According to this strand of the literature, FDI has the potential to facilitate the transfer of technology, leading to a boost in the efficiency of productive factors, which in turn leads to higher returns on capital. Moreover, if economic growth is propelled by innovation, as posited by Aghion and Howitt (1998),⁵⁰ the rationale for FDI to expedite development is warranted, considering the significant contributions of technology and knowledge in augmenting production levels, as highlighted by Barro (2001)⁵¹ and Lucas (1988).⁵²

⁵⁰ Howitt and Aghion (1998).

⁵¹ Barro (2001).

⁵² Lucas Jr. (1988).

In this regard, Barrell and Pain (1997) propose that FDI serves as a means of spreading ideas and technologies among countries.⁵³ This finding aligns with the one obtained by Borensztein et al., (1998), who examined the impact of FDI on economic growth in developing nations.⁵⁴ They concluded that FDI serves as a means of technology transfer, leading to enhanced productivity. However, this effect is only observed when the recipient country possesses a minimum level of human capital. Bengoa and Sanchez-Robles (2003) reached a comparable finding about Latin America.⁵⁵ Hence, it stems that FDI contributes to increasing production in receiving countries when they have the capacity to absorb technology (Borensztein et al., 1998).⁵⁶ This occurs because when the level of human capital in a FDI receiving country is low, the cost of technology transfer is high.

Moreover, the presence of linkages with local firms and improvements in the export capacity of the receiving country further enhance the positive impact of FDI (Anwar and Nguyen, (2011);⁵⁷ Ahmad and Hamdani, (2003);⁵⁸ Liu et al., (2002)⁵⁹). According to Romero (2012),⁶⁰ FDI promotes domestic investment and its impact on economic growth is enhanced by the interaction with human capital and macroeconomic policy. Anwar and Nguyen (2011) found that the influence of FDI on economic growth is more significant when there is a higher allocation of resources towards education and training, the development of the financial sector, and the reduction of technological disparities between local and foreign firms.⁶¹ Adeniyi et al. (2012) assert that the level of financial expertise plays a crucial role in enhancing the profitability of FDI in the economic advancement of developing nations.⁶² In addition, the combination of FDI and domestic investment fosters the growth of local businesses (Tan and Tang, 2016).⁶³

Furthermore, within the theoretical literature, neoclassical and endogenous growth models provide additional insights into the ways in which FDI might impact economic growth in both the short-term and long-term. Certainly, investment appears crucial for the accumulation of physical capital and the development of human capital. What remains uncertain is whether it only has an effect in the short-term or if it also has an impact in the long-term.

⁵³ Barrell and Pain (1997).

⁵⁴ Borensztein, De Gregorio, and Lee (1998).

⁵⁵ Bengoa and Sanchez-Robles (2003).

⁵⁶ Borensztein, De Gregorio, and Lee (1998).

⁵⁷ Anwar and Nguyen (2011).

⁵⁸ Ahmad and Hamdani (2003).

⁵⁹ Liu, Burridge, and Sinclair (2002).

⁶⁰ Romero (2012).

⁶¹ Anwar and Nguyen (2011).

⁶² Adeniyi, Omisakin, Egwaikhide, and Oyinlola (2012).

⁶³ Tan and Tang (2016).

For instance, according to Solow-type typical neoclassical development models, FDI contributes to the expansion of the host economy by financing the formation of capital, which in turn increases the capital stock (Brems, 1970).⁶⁴ Indeed, under neoclassical growth models that incorporate decreasing returns to capital, FDI only has short-term economic impact while countries transition to a new long-term equilibrium. Hence, the effect of FDI on economic growth is equivalent to that of domestic investment. On the other hand, in endogenous growth models, FDI is typically considered to be more efficient than domestic investment. This is because FDI promotes the integration of new technology into the production process of the receiving country (Borensztein et al., 1998).⁶⁵ FDI-related technological spillovers counterbalance the impact of diminishing returns to capital, hence sustaining the economy's long-term growth trajectory. Furthermore, according to endogenous growth models, FDI can enhance long-term economic growth by increasing the existing knowledge stock in the host country through labor training and skill development, as well as by introducing different management practices and organizational structures (De Mello, 1997).⁶⁶

According to this strand of the literature, it can be concluded that FDI can have a significant impact on economic growth due to spillover effects, such as the accumulation of capital and the transfer of knowledge. This effect, however, seems to depend in turn on the presence of certain specific conditions, such as the educational level of the human capital, the sophistication of the financial sector and the quality of domestic macroeconomic policies. Indeed, it results that the latter affect sensibly the level of absorption capacity of a given country. Moreover, it remains uncertain whether positive effects occur solely in the short-term or also in the long-term.

A second strand: FDI has an adverse impact on economic growth.

While one strand of the literature argues that FDI has a favorable effect on economic growth, another one reveals that this relationship is not as clear-cut as previously thought.

Several empirical studies have demonstrated the adverse impact of FDI on product, as evidenced by the research conducted by Musibah et al. (2015),⁶⁷ Alfaro et al. (2004),⁶⁸ and Ang (2009).⁶⁹ These findings show there is a negative correlation between the two variables, and that this

⁶⁴ Brems (1970).

⁶⁵ Borensztein, De Gregorio, and Lee (1998).

⁶⁶ De Mello Jr. (1997).

⁶⁷ Musibah, Shahzad, and Fadzil (2015).

⁶⁸ Alfaro, Chanda, Kalemli-Ozcan, and Sayek (2004).

⁶⁹ Ang (2009).

correlation has evolved over the research period in response to changes in the productive organization of the countries. Additional studies have indicated that FDI does not exert any influence on the expansion of the economy, as demonstrated by the research conducted by Hermes and Lensink (2003)⁷⁰ and Carkovic and Levine (2002).⁷¹ The latter contended that FDI lacks a strong and autonomous impact on economic growth, suggesting that FDI does not consistently expedite the process of economic growth.

Furthermore, there is widespread skepticism regarding the existence of FDI spillovers in developing nations. In a seminal study, Aitken and Harrison (1999) discovered compelling evidence of detrimental spillover effects on domestic productivity in Venezuela.⁷² Several studies, such as Djankov and Hoekman (2000) for the Czech Republic,⁷³ Kathuria (2000) for India,⁷⁴ Damijan et al. (2003) for eight transition economies,⁷⁵ Smarzynska (2002) for Lithuania,⁷⁶ Hu and Jefferson (2002) for China,⁷⁷ and Lopez-Cordova (2003) for Mexico,⁷⁸ attempted to replicate the findings of Aitken and Harrison in different countries. These studies successfully reached their targets, proving that the externalities were either insignificant or had a negative impact. Moreover, Herzer et al. (2008) showed that in most countries, there is no long-term or short-term impact of FDI on economic growth.⁷⁹ Indeed, they did not find any country where FDI has a positive unidirectional long-term influence on GDP. Furthermore, their findings suggest that there is no evident correlation between the growth effects of FDI and the per capita income, education level, degree of openness, and financial market development in emerging nations. Based on a thorough examination of the literature, Harrison and Rodríguez-Clare (2010) determined that the majority of research published after 1999 have reported either negative or inconsequential spillover effects.⁸⁰ Wooster and Diebel (2010, p. 652) contended, after conducting a meta-analysis of 32 papers, that there is a strong likelihood that there are no significant spillover effects within the same sector resulting from FDI in developing nations.⁸¹

⁷⁰ Hermes and Lensink (2003).

⁷¹ Carkovic and Levine (2002).

⁷² Aitken and Harrison (1999).

⁷³ Djankov and Hoekman (2000).

⁷⁴ Kathuria (2000).

⁷⁵ Damijan, Knell, Majcen, and Rojec (2003).

⁷⁶ Smarzynska (2002).

⁷⁷ Hu and Jefferson (2003).

⁷⁸ López-Córdova, Hernandez, and Monge-Naranjo (2003).

⁷⁹ Herzer (2012).

⁸⁰ Harrison and Rodríguez-Clare (2010).

⁸¹ Wooster and Diebel (2010).

Agosin and Mayer (2000) further contend that some types of FDI, such as mergers and acquisitions, may not automatically lead to an increase in the amount of capital available in capital-scarce countries.⁸² Indeed, cross-border mergers and acquisitions merely involve the transfer of assets from domestic ownership to international ownership (Agosin and Machado, 2005).⁸³ If the money earned from selling these assets is used for consumption, there is no chance that FDI would contribute to capital formation and growth. More importantly, for the positive impact of FDI on economic growth through the accumulation of capital, it is necessary that FDI does not displace an equal amount of investment from domestic sources: a phenomenon known as 'crowding out'. Hence, FDI can potentially have a detrimental impact on the host economy by allowing foreign companies to monopolize limited resources such as import licenses, skilled labor, credit facilities, and by restricting investment options for local firms. Another related issue concerns the repatriation of profits. According to Reis (2001), the transfer of earnings to foreigners through FDI can lead to a decline in welfare.⁸⁴ The extent of this effect is influenced by the degree to which foreign enterprises displace local firms. Dutt (1998, pp. 165–66) contended that the inflow of fresh FDI is typically lower than the outflow of capital resulting from profit repatriation, mostly due to practices such as transfer pricing.⁸⁵

There are also alternative explanations for the inability to discover any evidence of beneficial spillover effects of FDI on growth. According to Görg and Greenway (2004), multinational companies have the ability to successfully safeguard their unique expertise, preventing any transfer of knowledge between multinational and local businesses.⁸⁶ Moreover, as previously reviewed, it is possible that domestic companies employing outdated production methods and unskilled laborers are incapable of acquiring knowledge from global corporations. Another possible interpretation is that spillovers may not occur within the same industry, but rather, they may arise vertically through relationships that are not considered in traditional spillover research. If multinational corporations create favorable vertical connections, it can have a good impact on domestic companies that utilize similar resources as the multinational corporations. It is often expected that developing countries will experience positive horizontal spillovers. However, this strand of the literature does not support this notion. Instead, there is some evidence of positive vertical spillovers, as found by Harrison and Rodríguez-Clare in 2010.⁸⁷

⁸² Agosin and Mayer (2000).

⁸³ Agosin and Machado (2005).

⁸⁴ Reis (2001).

⁸⁵ Dutt (1998).

⁸⁶ Görg and Greenaway (2004).

⁸⁷ Harrison and Rodríguez-Clare (2010).

Furthermore, according to Suanes and Roca-Sagalés (2015), FDI leads to an increase in inequality, depending on specific amounts of FDI.⁸⁸ This is aligned with the findings of Basu and Guariglia (2007) who stated that FDI contributes to economic growth, but it also exacerbates inequality.⁸⁹ In another study, Lessmann (2013) demonstrated that FDI contributes to the widening of income inequality in low and middle-income nations.⁹⁰ This finding can be applied to Latin America, which is the region characterized by the highest degree of inequality globally. Similarly, this area is focused on the extraction of natural resources for the purpose of selling them to foreign markets, with FDI mostly geared towards this extraction process. The region's focus on exporting primary goods leads to a lack of skilled workers and unpredictable economic growth. In practice, if investments are focused on commodities, it is unlikely that there will be significant technological transfer from the investor to the recipient country. Furthermore, it is widely recognized that commodity prices exhibit significant fluctuations over time, hence resulting in growth being contingent upon the cost of raw materials. The productive structure of Latin America thus suggests that the impact of FDI on economic growth may be minimal or nonexistent.

3.2 Hypotheses

In light of the literature review and in order to address the research questions guiding this study, two hypotheses are proposed below that will be examined in the subsequent chapters.

H1: Chinese aid, trade and FDI are directly associated with development in Latin American countries.

H2: The impact of Chinese aid, trade and FDI on the development of partner countries depends on their degree of democracy. Chinese foreign policy approach in Latin American democracies leads to better development outcomes, or is more effective, than lower-scoring countries on the Democracy Index.

These hypotheses rely on four fundamental assumptions, namely:

1) The first basic assumption is that Beijing pursues strong economic relationship due to strategic interests. This assertion is supported by the fact that, as reported earlier, Beijing uses aid, trade and FDI as key tools of foreign policy, which is always influenced by political factors and

⁸⁸ Suanes and Roca-Sagalés (2015).

⁸⁹ Basu and Guariglia (2007).

⁹⁰ Lessmann (2013).

inherently linked to a country's core national interests. Indeed, China's capacity to establish solid economic partnerships creates a hierarchical structure that allows it to advance its strategic objectives, leveraging the basic components of its foreign policy approach as its means.

2) Another important assumption is that China's is willing to establish solid economic ties with any available country, regardless of the regime type, differently from Western countries. Indeed, several developed countries, primarily from the West, are less willing to deepen economic ties with less democratic countries. This reluctance stems from the close relationship between the latter and many undemocratic practices such as human rights abuses, corruption, and other non-democratic features. China displays greater indifference about the regime type of partner countries. The concept of non-interference is the basic one behind any partnership with Beijing. Nonetheless, China possesses a certain level of awareness regarding the politics of partner countries, yet it presents itself as a highly appealing alternative partner for numerous Latin American nations.

3) The effectiveness of China's foreign policy approach in promoting development varies by the degree of freedom of partner countries. China's concept of non-interference grants partner governments greater autonomy and control over the use of funds, in contrast to Western partnerships.⁹¹ According to this reasoning, a country that has more effective systems and stronger incentives to allocate funds efficiently will achieve better outcomes. Political leaders in more democratic countries with higher demands for political survival may have a greater incentive to deliver public goods. Conversely, in less democratic countries they encounter diminished public pressures and possess greater discretion in diverting public resources for unconstructive ends.

4) Latin American countries agency exists and can mediate the effectiveness of Chinese foreign policy approach. According to Brown (2012),⁹² agency represents "the faculty of acting or exerting power". In the context of international relations, Latin American agency is therefore understood as the ability of Latin American actors to negotiate and bargain with external actors, like China, in a way that benefits Latin Americans themselves. Bearing this definition in mind, it should always be acknowledged the power differentials inherent in any Sino-Latin American partnership as well as how Latin American agency in China-Latin America relations takes many forms and involves a variety of actors, operating at a range of levels. The case studies will later embody this approach in highlighting the degree of "agency" states exercise in engaging with China and how that mediates the effectiveness of Beijing's foreign policy approach on a country's development.

⁹¹ Marantidou and Glosserman (2015).

⁹² Brown (2012).

3.3 Research Design

In order to answer the research questions and test the hypotheses reported above, a two-part mixed methods approach of conducting a quantitative econometric analysis and comparative case studies will be employed.

3.3.1 Method 1: Quantitative

The quantitative methodology employs descriptive statistical analysis and regression analysis. Specifically, the analysis will be conducted on the following sample of six countries: Argentina, Brazil, Chile, Colombia, Ecuador, and Peru. The reasons behind this selection will be detailed in the next chapter. Data on Chinese foreign aid, bilateral trade and FDI as well as economic indicators, retrieved from the databases provided by AidData, the World Bank, the International Monetary Fund and Statista, will be employed. First, this data allows for the creation of descriptive statistics that show aid, trade and FDI flows' patterns in the region. Second, a regression analysis will be conducted in an attempt to answer the first research question:

1) Did Chinese foreign aid, trade and FDI, understood as basic components of China's foreign policy approach, foster development in Latin American countries between 2012 and 2022?

To this end, a regression model has been developed as to estimate the effect of the above factors on each of the economic outcomes of interest: "Employment-to-population ratio, 15+, total (%) (modeled ILO estimate)", "GDP per capita, PPP (current international \$)", "External debt (% of GDP)", "Final consumption expenditure per capita (current international \$)", "Industry (including construction), value added (% of GDP)" and "Regulatory quality: estimate". The specifics of the empirical set-up will be detailed in the following chapter.

3.3.2 Method 2: Qualitative

The purpose of the comparative studies is to supplement the data analysis and answer the second research question:

2) If the effectiveness of China's foreign policy approach on partner countries' development differed in the last decade, what factors or mechanisms drove this difference?

In the third chapter, dedicated to the case studies, three Latin American countries that have been identified through the quantitative analysis will be analyzed. The three chosen cases are those of Chile, Brazil, and Ecuador. The main reason for this selection is that these countries seem to

confirm the theory advanced in the hypothesis H2. Indeed, Chile, where the effectiveness of China's foreign policy on development has been the highest, is a country classified as a “full democracy” by the World Bank, while Brazil and Ecuador, where the effectiveness of China's foreign policy approach on development has been less, are identified as a “flawed democracy” and a “hybrid regime”, respectively.⁹³ Secondly, they are the countries for which the most statistically significant results were available based on the econometric analysis and for which there was the most data on development aid from China. These countries were also chosen because they received a high amount of aid from China over the past decade, appearing in the top-10 aid-receiving countries in tenth (Chile), first (Brazil) and second place (Ecuador), respectively.⁹⁴ In each case study, the analysis will be devoted to each Latin American country's political and economic relationship with China in an attempt to parse the mechanisms driving or hindering the effectiveness of Chinese foreign policy approach. The third chapter ends with a debate of how the effectiveness of Chinese foreign policy approach interacts with these regimes with varying degrees of agency and leverage. Specifically, the driving mechanisms that determine how China affects the development of partner countries will be highlighted.

3.3.3 Significance

The significance of the research lies in the implications of China's growing influence on development, the potential contribution to the discourse on Chinese foreign policy and the methodology. First, China's foreign policy approach and foreign aid conditions are different from those of Western countries, which have long led development efforts. The present study will break down what results are from Chinese foreign policy approach in various Latin American countries, shedding light on the efficacy of an alternative approach to development assistance. The findings in this thesis may prove useful to policymakers in considering the efficacy of existing foreign policy practices related to development promotion.

Second, the literature review reveals that there is little existing research on Chinese foreign policy effectiveness in promoting development across different countries. There is also little consensus on whether or how Beijing's foreign policy, in general, interacts with regimes with different degrees of freedom. The potential varying effects of such policy across regimes will reveal the effects of China's alternative practices as well as how political relationships or diplomacy may inform development outcomes in partner countries. Importantly, this research serves to provide

⁹³ World Bank (2022).

⁹⁴ AidData (2024).

evidence for ‘myth-busting’ when it comes to common narratives and accusations surrounding Chinese foreign policy’ effects on a country’s development.

Third, the comparative case studies provide a first look at how the effectiveness of Chinese foreign policy approach on Latin American countries’ development may compare. There exists few, or even no studies in this topic examining foreign policy efficacy using comparative case studies, with most scholars focusing only on either one country or conducting regional-level data analysis. Specifically, the focus on agency and leverage in the context of Latin American countries serves as an important factor to highlight amidst longstanding narratives and practices in both media as well as scholarship to dismiss Latin American governments as victims without agency. These case studies also highlight that the Latin American continent is not monolithic in any aspect of its governance or foreign relations. China’s interaction with each country, as the case studies will show, are fundamentally different in nature.

Chapter 2: Quantitative Analysis

1. Introduction

This chapter seeks to answer the central research question of the thesis using descriptive statistics and econometric analysis. Specifically, the aim will be to answer the first research question, reiterated below:

1) Did Chinese foreign aid, trade and FDI, understood as basic components of China's foreign policy approach, foster development in Latin American countries between 2012 and 2022?

The hypothesis to be tested is H1, namely if Chinese aid, trade and FDI are directly associated with development in Latin American countries. The basic objective of this chapter is to answer the above question and test H1 by estimating the effects of the independent variables, namely aid, trade and FDI, on six output variables. The latter, all together, should represent an indicative measure of a given country's development. They are: "Employment-to-population ratio, 15+, total (%) (modeled ILO estimate)", "GDP per capita, PPP (current international \$)", "External debt (% of GDP)", "Final consumption expenditure per capita (current international \$)", "Industry (including construction), value added (% of GDP)" and "Regulatory quality: estimate". The expectation is that the estimated coefficients will return a reliable measure of how Chinese aid, trade, and FDI affect in a specific country: employment, real individual income, external debt, per capita consumption, industrial value added, and citizens' satisfaction with the ability of public governance to promote economic development. First, considering the availability of data on China's development aid in the Latin American region, the sample selected for analysis was reduced to six countries: Argentina, Brazil, Chile, Colombia, Ecuador, and Peru. Indeed, given the importance of aid in Beijing's foreign policy approach, estimating the effects of aid on the development of Latin American countries is the major focus of this section. Nevertheless, the selection of countries was also made on the basis of additional reasons that will be detailed later in the chapter. In light of the above, the chapter begins with a detailed presentation of the variables used in the analysis. Then, it continues with an illustration of the methods of data collection and selection as well as the report of the results of the descriptive statistics analysis on the collected data. Subsequently, it outlines the characteristics of the regression analysis, its main limitations as well as the statistically significant results obtained. Finally, possible explanations for the latter will be provided on the basis of economic theory and some contextual information regarding the countries analyzed, followed by some concluding remarks.

2. Variables

This section is concerned with presenting the six dependent variables, henceforth also referred to as Y-Factors or outcome variables, and the three independent variables, henceforth also referred to as X-Factors or explanatory variables, that were used in the subsequent quantitative analysis. The former are interpreted for each country as indicators of development, while the latter are understood as basic components of China's broader foreign policy approach. For each variable, it will be given the extended denomination, the acronym to which they correspond in the analysis (e.g. Y_{1t}), the databases from which the data were retrieved, a brief explanation of their significance and, in the cases where they have been carried out, also the calculations made to derive them.

2.1 Y-Factors

In order to look at development outcomes holistically, six measures will be employed, specifically: “Employment-to-population ratio, 15+, total (%) (modeled ILO estimate)”, “GDP per capita, PPP (current international US \$)”, “External debt (% of GDP)”, “Final consumption expenditure per capita (current international US \$)”, “Industry (including construction), value added (% of GDP)” and “Regulatory quality: estimate” as proxies. The values of the Y-factors have all been retrieved from or calculated based on the World Bank database.

The “Employment to population ratio, 15+, total (%) (modeled ILO estimate)”, which corresponds to the variable Y_{1t} , is, according to the official World Bank’s definition, “the proportion of a country’s population that is employed”. This variable has been chosen because it is a useful, broad-rush measure of the health of the job market that does not typically change noticeably from month to month, but, of course, it does from year to year. Moreover, it does not have the shortcomings that the unemployment rate has. The unemployment rate is affected by the size of the labor force. Indeed, as the labor market falters, the unemployment rate may actually fall if workers give up looking for work, and as the labor market is recovering, unemployment can rise because more people are entering the labor force as they start to look for work again. The employment-to-population ratio because it is unaffected by voluntary changes in labor force participation, is a useful indicator of current labor market conditions. Lows in the employment-to-population ratio correspond with economic downturns. Hence, the employment-to-population ratio holds clear and discernible implications for the labor market.

The choice of “GDP per capita, PPP (current international \$)”, which corresponds to the variable Y_{2t} , as an outcome variable is a simple one. Indeed, it is a common measure of development

as it is able to capture real economic growth at a high-level. However, discourse in the development field emphasizes the shortcomings of using GDP per capita as the sole measure of development as it fails to capture other important socio-economic indicators.

“External debt (% of GDP)”, which corresponds to the variable Y_{3t} , has been calculated by dividing the indicator called “External Debt Stocks, total (DOD, current US\$)” by the indicator called “GDP (current US\$)”. This variable has been derived because ideal to investigate a particular country’s ability to pay back its debts. Indeed, expressed as a percentage, this ratio can be interpreted as the number of years need to pay back foreign debt if GDP is dedicated entirely to debt repayment. A country with a high external debt-to-GDP ratio typically has troubles paying off external debts, which are any balances owed to outside lenders. In such a scenario, creditors are apt to seek higher interest rates when lending and this usually triggers financial mistrust in domestic and international markets, hampering economic growth and increasing the risk of default.

“Final consumption expenditure per capita (current international \$)”, which corresponds to the variable Y_{4t} , has been calculated multiplying the variable “Household and NPISHs final consumption expenditure (% of GDP)” by the variable “GDP per capita, PPP (current international dollars)”. The calculation of this variable reflects the intent to understand the extent to which people's wealth then actually translates into consumption, thus reflecting their real wealth. Indeed, a high per capita consumption is a direct measure of high personal economic well-being.

Furthermore, “Industry (including construction), value added (% of GDP)”, which corresponds to the variable Y_{5t} , is the “value added of a country in mining, manufacturing (also reported as a separate subgroup), construction, electricity, water, and gas as a ratio of its GDP”. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. Ideally, industrial output should be measured through regular censuses and surveys of firms. But in most developing countries such surveys are infrequent, so earlier survey results must be extrapolated using an appropriate indicator. The choice of sampling unit, which may be the enterprise (where responses may be based on financial records) or the establishment (where production units may be recorded separately), also affects the quality of the data. Moreover, much industrial production is organized in unincorporated or owner-operated ventures that are not captured by surveys aimed at the formal sector. Even in large industries, where regular surveys are more likely, evasion of excise and other taxes and nondisclosure of income lower the estimates of value added. Such problems become more acute as countries move from state control of industry to private enterprise, because new firms

and growing numbers of established firms fail to report. Given this premise, this indicator was chosen precisely because of its greater applicability in measuring industrial output of developing countries such as those analyzed in this study.

Finally, the variable “Regulatory quality: estimate”, which corresponds to the variable Y_{6t} , captures the “perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. Estimate gives the country's score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5”. This World Bank’s indicator is based on a research dataset named “Worldwide Governance Indicators” (WGI) summarizing the views on the quality of governance provided by a large number of enterprise, citizens, and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, non-governmental organizations, international organizations, and private sector firms. Such a variable was selected as a proxy for the change in the perception of a given country's society of the state's ability to promote economic development. The purpose is to test whether China's involvement in the countries analyzed leads to increased trust or distrust in national policymakers' ability to effectively lead and promote economic development.

2.2 X-Factors

X-Factors, which constitute the fundamental components of China's broader foreign policy approach as understood in this study, are the variables “Chinese Foreign Aid (% of Recipient Country’s GDP)”, “China’s Trade Balance with the Country (% of GDP)” and “FDI Flows from China (% of Recipient Country’s GDP)”. The data about aid in the numerator of the first variable were retrieved from the AidData database. Those of China’s trade balance with each country and FDI flows in and from each country appearing in the numerator of the second and third variables were retrieved from the International Monetary Fund database and that offered by Statista, respectively.

The variable “Chinese Foreign Aid (% of Recipient Country’s GDP)”, which corresponds to the variable X_{1t} , records the total aid received by a specific country relative to the latter’s GDP. Total aid here means the sum of all "Flow Classes" provided by the AidData database, thus “ODA”, “Other Official Flows” and “Vague”, without also filtering aid flows by target sector. Therefore, all aid classified by AidData as such was considered aid also in this study. This was for several reasons. First, because, unlike several Western countries, China has never provided its own definition of what officially constitutes aid. Second, because, in doing so, the results more comprehensively reflect what is Beijing's overall approach to aid in Latin American countries, which, as it will be empirically

acknowledged in the following section, it is mostly based on concessional loans. Third, the distinction between various categories of aid, with specific reference to ODA, is usually found in the literature to make sure that China's performance is compared with that of Western nations, an objective that is beyond the scope of this thesis. Beijing's aid was then put in relation to the recipient country's GDP to account the relative importance of aid for the recipient economy under consideration, thus also allowing comparison of results on a real basis between different countries.

The variable "China's Trade Balance with the Country (% of GDP)", which corresponds to the variable X_{2t} , reflects China's trade balance with each country in relation to Beijing's GDP. Specifically, the expression "China's Trade Balance with the Country" means the difference between exports from China and imports to China in and from a specific country. So, again an aggregate measure was referred to, without making distinctions between different commodity categories. It was then put in relation to Beijing's GDP so as to account the relative importance of China's trade with a specific country and allow for a real comparison of results between different countries.

Finally, the variable "FDI Flows from China (% of Recipient Country's GDP)", which corresponds to the variable X_{3t} , portrays FDI flows from (or to) China to (or from) each country relative to the latter's GDP. In this regard, it is important to clarify the difference between FDI stocks and FDI flows. FDI stocks are the total accumulated level of direct investment at the end of a given period (usually quarter or year). FDI flows are transactions recorded during the reference period (usually quarter or year). They are a measure of transactions that change FDI stock over a specific period of time. FDI flows can be negative in certain cases. This measure, like to the ones above, was then put in relation to the recipient country's GDP to account the relative importance of China's FDI flows for the recipient economy under consideration, thus also allowing comparison of results on a real basis between different countries.

3. Data Collection and Selection

As previously emerged, data have been retrieved from AidData, International Monetary Fund, Statista, and World Bank databases.

AidData – created by the William and Mary Research Lab – is the only comprehensive compilation of data on China's foreign aid. Data was retrieved from this database according to the two following criteria:

- 1) A geographic filter was applied as to retrieve data only for development projects in the region “Americas”, accounting also for those realized through the collaboration and support of Latin American Regional Institutions.
- 2) A temporal filter was applied as to retrieve data only for projects whose “Commitment Year”, “Implementation Start Year” and “Completion Year” were comprised between 2012 and 2022.

The subsequent dataset obtained ranged over 29 Latin American countries in the period from 2012 to 2022. The Top 10 aid recipients resulted in descending order: Brazil, Peru, Cuba, Ecuador, Argentina, Venezuela, Jamaica, Suriname, and Chile. Interestingly, 85 % (US\$29 out of US\$34.42 billion) of total Chinese aid commitments in the region falls into the category “Other Official Flows”, while only the 14,7 % (US\$5 billion) in the category of ODA. Even more significantly, in terms of project type, 87 % of the commitments (US\$30 billion) took the form of loans. These data should definitively clarify why, as reported in the previous section, it was decided to include the category of "Other Official Flows" (and the almost negligible "Vague" category), in addition to "ODA", in the calculation of the numerator of the explanatory variable X_{1t} . Moreover, around 53 % (US\$18 billion) of aid was provided to the sector labelled “Industry/Mining/Construction”, while about 29 % (US\$10 billion) to the energy sector and 9 % (US\$3 billion) to “actions relating to debt”. This evidence should contribute to reinforcing the rationale behind the choice of outcome variables such as Y_{3t} and Y_{4t} to comprehensively measure the effects of China's broader foreign policy approach on regional development.

Primarily on the basis of this initial data, the sampling of economies to be analyzed was made. This was a choice that then also guided the search for data on the other X- and Y-Factors and, thus, determined the fundamental basis of the content of the study produced. Specifically, the following sample of 6 countries was selected for analysis: Argentina, Brazil, Chile, Colombia, Ecuador, and Peru. There are several reasons behind this selection. First, this choice is motivated by a reasoning of relevance to what is the ultimate goal of the thesis, namely, to explore primarily the relationship between China's aid and the actual economic development of Latin American countries. Indeed, all the countries above, with the exception of Colombia, appear among the top 10 recipients of aid from China. Remarkably, all the countries listed, including Colombia, also constituted the top 6 economies in Latin America (excluding Mexico, ranked second after Brazil) in terms of GDP in 2022, the latest year for which data are available. Moreover, all these 6 economies are part of MERCOSUR, the main Latin American trading bloc, and the population of these countries also corresponds to about 60 %

(58.4 %) of the total population of what the World Bank considers the Latin American region. Besides, considering only the population composed of the top 10 recipient of Chinese foreign aid, the second fundamental motivation behind this sampling was the limited availability and integrity of data available for the other countries (e.g. Cuba, Jamaica, Suriname, Venezuela). Consequently, the above 6 countries represented those for which the least fragmentary and most robust aid-related data were available, and for which it was therefore possible and reasonable to make inferences that could have real-world impact and relevance.

Moreover, data on China's trade balance has been retrieved from the database "Direction of Trade Statistics" provided by the International Monetary Fund. Two filters have been applied: "China, P.R., Mainland" and the period 2012-2022 as geographic and temporal filters, respectively. The dataset thus obtained shows China's exports and imports with almost every partner country in the world. After data cleaning, only data on exports from and imports to China about the six Latin American countries selected were left.

Furthermore, data on FDI flows have been retrieved from Statista, a global data and business intelligence platform with an extensive collection of statistics, reports, and insights on over 80,000 topics from 22,500 sources in 170 industries. To search and retrieve data about FDI flows from China for each country selected, it has been sufficient to write "Annual flow of foreign direct investments from China to (x-country: e.g. Argentina) between 2012 and 2022" in the search toolbar of Statista's website and download the data.

After these steps were accomplished, the data were merged with data about Y-Factors obtained from the World Bank's Databank, specifically the database entitled "World Development Indicators," for the period 2012-2022. After some further data formatting and cleaning to prepare the data for analysis, the final dataset on which the present study was conducted was created. In the next section, a summary of the descriptive statistics analysis conducted will first be proposed to illustrate some general and potentially interesting features about the collected data.

4. Descriptive Statistics

The table below (Table 0) lists the descriptive statistics of each variable. The results were obtained by simply applying to the data the "Descriptive Statistics" function found in the "Data Analysis" section on the "Data" page already installed by default on Microsoft Excel 2016.

Table 0 - Descriptive Statistics

| Summary Table – Descriptive Statistics | | | | | |
|---|-------------|-------------|------------------|-------------|-------------|
| Variables/Parameters | Obs. | Mean | Std. Dev. | Min. | Max. |
| Y-Factors | | | | | |
| Y_{1t} | 66 | 0.60 | 0.067 | 0.50 | 0.76 |
| Y_{2t} | 66 | \$16,785.07 | \$5,228.06 | \$10,304.89 | \$30,208.81 |
| Y_{3t} | 66 | 0.41 | 0.159 | 0.18 | 0.82 |
| Y_{4t} | 66 | \$10,777.20 | \$3,442.49 | \$6,212.65 | \$20,074.36 |
| Y_{5t} | 66 | 0.28 | 0.052 | 0.18 | 0.38 |
| Y_{6t} | 66 | 0.06 | 0.730 | -1.14 | 1.54 |
| X-Factors | | | | | |
| X_{1t} | 41 | 0.002 | 0.005 | 0 | 0.031 |
| X_{2t} | 66 | -0.0005 | 0.0010 | -0.0033 | 0.0005 |
| X_{3t} | 66 | 0.0005 | 0.0009 | -0.0013 | 0.0049 |

In terms of relative Chinese foreign aid, the average percentage received by one of the Latin American recipient countries selected is equivalent to 0.2 % which is not so high but is not even negligible considering that, in the last decade, a GDP growth equivalent to this measure has usually been deemed a good performance in developed countries. Interestingly, Beijing's trade balance with these countries has been negative on average, equal to -0.05 %. Completing the picture of X-factors, relative FDI flows have averaged positive over the past decade, standing at 0.05 %.

Regarding the Y-Factors, real employment in the 6 countries averaged 60 %, slightly above both the regional average of 57.8 % and the world's average of 57 % during the same period. Real GDP per capita averaged \$16,785.07 slightly above both the world average of \$16,706.28 and the regional average of \$16,237.72 over the same period. On average, industrial value added as a percentage of GDP stood at 28 %, again just above the world average of 27.1 % but below the regional average of 28.9 %. The variable "Regulatory quality: estimate" has remained positive on average, indicating that, on the regional level, citizens were satisfied with their government's performance in promoting economic development. Unfortunately, this figure cannot be compared with the world and regional averages due to lack of data. The same applies to external debt and final consumption expenditure per capita.

5. Regression Analysis

This section is devoted to presenting the regression analysis models used to investigate the effect of China's aid, trade and FDI on outcome variables, the main limitations of the research conducted, and the results obtained from the empirical analysis. Therefore, it is divided into three sub-sections, each dedicated to achieving one of these objectives.

5.1 Models

In order to parse the effects of the X-Factors on development outcomes, four empirical specifications have been used to estimate this relationship. The following six indicators - “Employment-to-population ratio, 15+, total (%) (modeled ILO estimate)” (Y_{1t}), “GDP per capita, PPP (current international \$)” (Y_{2t}), “External debt (% of GDP)” (Y_{3t}), “Final consumption expenditure per capita (current international \$)” (Y_{4t}), “Industry (including construction), value added (% of GDP)” (Y_{5t}) and “Regulatory quality: estimate” (Y_{6t}) - are the Y variables, while the independent variables are “Chinese Foreign Aid (% of Recipient Country’s GDP)” (X_{1t}), “China’s Trade Balance with the Country (% of GDP)” (X_{2t}) and “FDI Flows from China (% of Recipient Country’s GDP)” (X_{3t}). The above variables were subsequently integrated into the four multiple linear regression analysis models listed below:

- 1) $Y_t = a_0 + a_1X_{1t} + a_2X_{2t} + a_3X_{3t} + \varepsilon_t$,
- 2) $Y_t = a_0 + a_1X_{1t} + a_2X_{2t} + a_3X_{3t} + b_3Y_{t-1} + \varepsilon_t$,
- 3) $Y_t = a_0 + a_1X_{1t} + a_2X_{2t} + \varepsilon_t$,
- 4) $Y_t = a_0 + a_2X_{2t} + a_3X_{3t} + \varepsilon_t$.

where:

Y_t : represents the output variable for which to estimate the coefficients.

a_0 : represents the intercept of the function.

a_1, a_2, a_3 : represent the coefficients to be estimated for X1, X2 and X3, respectively.

ε_t : represents the stochastic error.

Each model was run for each outcome variable previously described and for each country sampled for the 2012-2022 time period. To run the regressions, it was adopted XLSTAT, a powerful yet flexible Excel data analysis add-on employed by over 150,000 users in over 120 countries. The above specifications aim to test whether China’s aid, trade and FDI flows are associated or not with

development in the selected countries in the last decade. Hence, they represent the concrete attempt to answer the first research question.

5.2 Limitations

The lack of reliable and verifiable data on Chinese foreign aid was a significant limitation of the subsequent regression analysis. First, AidData's methodology of collecting data on Chinese foreign aid through TUFF (Tracking of Underreported Financial Flows) has been called into question by many. However, it is the sole comprehensive attempt at tracing Chinese financial flows, including foreign aid. This means that there may be measurement errors in the dataset, of which the analysis is heavily dependent upon. Second, there are several missing data in the dataset obtained from AidData about China's aid to the countries analyzed, which were attempted to be remedied through the method of deriving the average of existing data to replace missing data. Another limitation might be that the data were collected using as many as four different databases, which makes the values included in the final dataset employed for the analysis (and the results obtained through it) not as reliable as they would have been had they been collected from a single source. Indeed, the four entities that own the databases from which the data were obtained have different reputations in terms of reliability and use different methods of data collection and classification.

Another important limitation of the research conducted could be the outcome variables chosen. Indeed, their selection was based primarily on economic intuition and being limited in number, they represent a rather limited sample of all possible indicators that could be employed to measure the impact of the explanatory variables on the development of the countries under consideration. Moreover, although the objective of the research is to draw conclusions at the regional level about the impact of China's foreign policy approach on development and the selected countries make up the majority of the regional population and wealth, the study does not take into account all the countries that are part of the analyzed region. Hence, it will return results however inclusive, in any case still partial. Moreover, it should also be acknowledged that the models do not include all possible indicators that can explain the impact of China's foreign policy approach on the development of the countries considered but only the conventional and basic ones usually used in the literature, namely indicators of aid, trade and FDI.

Despite the above limitations, the models proposed did provide some statistically significant and economically meaningful results.

5.3 Statistically Significant Results

In light of the above, this subsection aims to recapitulate only the statistically significant evidence emerged from the previous analysis in order to give an economic explanation. The results were considered statistically significant when the p-value of an estimated coefficient was less than or equal to 0.1 (symbols ".", "*", "**" and "***" in the Appendix' summary tables), while statistically insignificant when it was superior to 0.1 (symbol "°" in the Appendix' summary tables). Moreover, the effect of each explanatory variable on a specific outcome variable was deemed as “slight” if the coefficient value was between 0 and 0.30, “fair” if the coefficient value was between 0.31 and 0.70, and “considerable” if the coefficient value was greater than 0.71. To describe these effects, the corresponding adverbs were more frequently used, namely "slightly," "fairly," and "considerably." The effect was described as negative or positive, depending on whether the sign was "-" or "+," respectively, except in the case of the description of the results of external debt where the opposite reasoning was applied to facilitate the subsequent explanations. In cases where both the estimated coefficients of the endogenous lagged variable and those of one or more variables in the second model were found to be statistically significant, the long-run estimated coefficients for the latter were calculated to account for their long-run effect as well. The magnitude of this effect was then described following the same criteria outlined in point 3). On the other hand, when it was found that the coefficient of the lagged endogenous variable was statistically significant while those of the independent variables were not or when the endogenous lagged variable in the second model was not statistically significant (including cases where the independent variables to the contrary were), nothing was reported about the long-term effects.

Therefore, the subsection is divided into three paragraphs, each devoted to presenting the main evidence regarding the effect of China's aid, trade and FDI flows only on the output variables for which significant results emerged. Specifically, an indication of the size and sign of the effect has been provided, as well as the specification of the model(s) from which it resulted, and the country affected.

5.3.1 *Statistically Significant Results about Aid*⁹⁵

Statistically significant results regarding China's aid (X_{1t}) emerged in the cases of:

⁹⁵ Look at Tables 1 to 4 in the Appendix.

1) Chile, where the effect on GDP per capita (Y_{2t}) was slightly positive according to the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted considerably positive.

2) Chile, where the effect on external debt (Y_{3t}) was slightly positive according to the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted considerably positive.

3) Argentina, where the effect on per capita consumption (Y_{4t}) was slightly positive based on the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted considerably positive.

4) Brazil, where the effect on industrial value added (Y_{5t}) appears to have been fairly negative based on the results of the first and third models.

5.3.2 Statistically Significant Results about Trade⁹⁶

Furthermore, statistically significant results regarding trade with China (X_{2t}) emerged in the cases of:

1) Brazil, where the effect on employment (Y_{1t}) was considerably positive according to all models' results.

2) Ecuador, where the effect on employment (Y_{1t}) was considerably positive according to the results of the first model.

3) Peru, where the effect on GDP per capita (Y_{2t}) was considerably negative according to all models' results.

4) Ecuador, where the effect on GDP per capita (Y_{2t}) was fairly negative based on the results of the third model.

5) Argentina, where the effect on GDP per capita (Y_{2t}) was fairly positive based on the results of the third model.

6) Brazil, where the effect on external debt (Y_{3t}) was considerably positive based on the results of the first, third and fourth models.

7) Ecuador, where the effect on external debt (Y_{3t}) was considerably positive according to all models' results. Thanks to the results of the second model, it was also possible to calculate the long-run effect, which resulted considerably positive.

8) Peru, where the effect on per capita consumption (Y_{4t}) was considerably negative according to the results of the first, third and fourth models and fairly negative according to the second model's

⁹⁶ Look at Tables 5 to 19 in the Appendix.

results. In the latter occurrence, it was also possible to calculate the long-run effect, which resulted considerably negative.

9) Argentina, where the effect on per capita consumption (Y_{4t}) was fairly positive according to the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted considerably positive.

10) Chile, where the effect on industrial value added (Y_{5t}) was considerably negative according to all models' results.

11) Ecuador, where the effect on industrial value added (Y_{5t}) was fairly positive according to the results of the third and fourth models.

12) Brazil, where the effect on industrial value added (Y_{5t}) was fairly negative according to the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted, conversely, considerably positive. This indicates a phenomenon of perverse persistence that will not be considered in the following analysis.

13) Ecuador, where the effect on citizen satisfaction with the quality of public governance (Y_{6t}) was considerably negative according to the results of the first, third and fourth models.

14) Colombia, where the effect on citizens' satisfaction with the quality of public governance (Y_{6t}) was fairly negative according to the results of the second model. In this occurrence, it was also possible to calculate the long-run effect, which resulted considerably negative.

15) Peru, where the effect on citizens' satisfaction with the quality of public governance (Y_{6t}) was fairly positive according to the results of the third model.

5.3.3 Statistically Significant results about FDI Flows

Statistically significant results regarding FDI flows from China (X_{3t}) emerged in the cases of:

1) Ecuador, where the effect on employment (Y_{1t}) was considerably negative according to the results of the first and fourth models.⁹⁷

2) Peru, where the effect on employment (Y_{1t}) was fairly negative based on the results of the first and fourth models.⁹⁸

3) Ecuador, where the effect on external debt (Y_{3t}) was slightly positive according to all models' results. In this occurrence, it was also possible to calculate the long-run effect, which resulted fairly positive.⁹⁹

⁹⁷ See Appendix, Table 6.

⁹⁸ See Appendix, Table 20.

⁹⁹ See Appendix, Table 11.

4) Chile, where the effect on industrial value added (Y_{5t}) was fairly negative based on the results of the first and fourth models.¹⁰⁰

5) Ecuador, where the effect on industrial value added (Y_{5t}) was fairly positive according to the results of the first and fourth models.¹⁰¹

6. Analysis

In light of the above, this section is devoted to explaining the possible reasons behind the statistically significant results listed in the previous one. Therefore, a deductive approach was adopted. The following explanations are based as much on economic theory as on some information about the economies of the countries examined. The explanations offered are not intended to be fully comprehensive, since this is an end beyond the objectives of the present study and its research questions, but simply to offer the economic rationale that may have determined the statistically significant results obtained. Hence, the section is divided into three paragraphs, like the previous one. Specifically, each paragraph is devoted to explaining the reasons behind the effects of each of the independent variables, namely aid, trade and FDI flows, on the dependent variables for which statistically significant results were obtained. A subparagraph has been thus devoted to each dependent variable, with an initial indication of the number of the corresponding finding in the previous section to which the following explanation refers.

6.1 Illustrating the Effects of Aid

About the effects of Beijing's aid listed in Section 5.3, the following explanations are provided:

Finding 1) The fact that aid has a positive impact on GDP per capita, but of very small or insignificant magnitude in the short run and more significant in the long run, is confirmed by several studies in economic theory.¹⁰² Besides, it appears that the effects are all the better the more aid takes the form of loans, rather than grants, which seem on the contrary to have a negative effect.¹⁰³ In this regard, the effects are usually all the more positive the more aid is directed to the public investment sector than to consumption.¹⁰⁴ Unconstrained aid flows, such as grants, would most likely be consumed rather than invested.¹⁰⁵ Therefore, the results obtained in Chile about the effect of aid on GDP per capita are in line with prevailing economic theory. Indeed, about 60 % of Chinese aid to

¹⁰⁰ See Appendix, Table 14.

¹⁰¹ See Appendix, Table 15.

¹⁰² Nowak-Lehmann, Dreher, Herzer, Klasen and Martínez-Zarzoso (2012).

¹⁰³ Hailat and Magableh (2018).

¹⁰⁴ Djankov, Montalvo, and Reynal-Querol (2006).

¹⁰⁵ *Ibidem*.

Santiago has been loans over the past decade, favoring its direction towards investment rather than consumption by the competent public institutions.

Finding 2) The improvement in Chile's external debt may lie in the fact that, as reported above, the aid received from China was invested, rather than consumed. Of the possible ways in which aid was invested, two are particularly plausible.¹⁰⁶ In the first case, Santiago used some of the Chinese aid to directly finance its external debt payments. In the second, the country invested Chinese aid to promote particularly profitable economic activities that allowed it to devote increasing funds to reducing its foreign liabilities, keeping taxation levels constant. Probably, both dynamics occurred to bring about a positive effect both in the short run and in the long run.

Finding 3) The improvement in per capita consumption in Argentina is a result is in line with most of the literature, which states that while the effects of aid on private consumption is usually positive, it is much less clear what effects it has on investment, government consumption and overall development.¹⁰⁷ In this regard, although the result may seem on the surface to be good news, it does not seem to be an indicator of the country's development over the past decade. Indeed, as previously sated, aid is all the more effective in promoting a country's economic development the more it is invested, rather than consumed, with aid in the form of loans playing a key role in encouraging this to occur. In this regard, virtually all of Beijing's aid to Buenos Aires has taken the form of loans over the past decade, thus favoring its investment rather than its consumption based on the reasoning proposed above. The fact that these loans have fostered private consumption suggests that they have not been directed towards investment by competent Argentinian institutions, thus hampering rather than promoting the country's development. In this regard, it seems no coincidence that, based on the empirical analysis, aid from Beijing, as much as it has stimulated private consumption, does not seem to have fostered equally appreciable growth in per capita GDP over the past decade, which, on the contrary, also seem to have generally followed a rather erratic trend based on World Bank's data.¹⁰⁸

Finding 4) The worsening of industry's contribution to GDP in Brazil seems to have a specific explanation. Specifically, the massive aid received from Beijing may have had a negative effect on the industry's competitiveness due to an appreciation of the real exchange rate.¹⁰⁹ The plausibility of this reasoning is strengthened by the fact that Brazil's real exchange rate has tended to appreciate and

¹⁰⁶ Qayyum and Haider (2012).

¹⁰⁷ Snyder (1996).

¹⁰⁸ World Bank (2022)

¹⁰⁹ Turnovsky, Tekin, and Cerra (2008).

exports to the rest of the world have followed a rather fluctuating trend over the past 10 years.¹¹⁰ Hence, Beijing's aid can be presumed to have played a major role in this process. Due to the lower competitiveness of its products in international markets, foreign demand for imports of industrial products from Brazil have shrunk, contributing significantly to a reduction in the industry's contribution to the country's GDP. This seems to be one of the few plausible explanations, especially given that half of the Chinese aid was directed to the energy sector,¹¹¹ a dynamic that usually favors industrialization and improves industrial value added.¹¹² Certainly, the relatively low level of human capital and an eroding level of democracy, especially during the Bolsonaro presidency, have not supported industrialization either. Indeed, according to several studies, the latter two factors are usually found to be effective in mitigating the negative effects of foreign aid on industrialization.¹¹³

6.2 Explaining the Impact of Trade

About the effects of trade with China listed in Section 5.3, the following explanations are provided:

Findings 1) and 2) The positive effect of trade on employment in Brazil and Ecuador over the last decade could be explained by the fact that in such developing countries, where unskilled labor is abundant, the demand for unskilled workers increased with rising trade, since exports of goods that use this factor more intensively increased while, simultaneously, also imports of products that use skilled labor more intensively increased.¹¹⁴ Hence, the explanation for this effect could be given by the fact that Brazil and Ecuador specialized in the production of unskilled labor-intensive goods such as raw materials or light manufacturing and, consequently, created jobs for unskilled workers. This is probably what has happened considering that these two countries, both of which have a large endowment of unskilled workers, exported to China mainly food or mineral products and imported principally manufacturing or high-tech products from Beijing.

Findings 3), 4) and 5) A stream of the literature proposes that, for less developed countries, international trade influence both growth and real income in a significantly negative way in the short-run (while positively in the long-run), especially if characterized by high openness to trade, a low level of financial development and high inflationary pressures.¹¹⁵ The effectiveness of openness to

¹¹⁰ World Bank (2022)

¹¹¹ AidData (2024)

¹¹² Welle-Strand, Ball, Hval, and Vlaicu (2012).

¹¹³ Oumbe, Djeunankan, and Mougol (2024).

¹¹⁴ UNCTAD Secretariat (2013).

¹¹⁵ Kim, Lin, and Suen (2016).

trade in promoting economic growth and individual income is contingent upon structural reforms, especially financial development. Developing countries typically require substantial finance and investment from the global economy to foster their industrialization, which is key in boosting production and particularly exports. Enhanced exports are indeed fundamental for these countries in sustaining economic growth. On the other hand, inflationary pressures could adversely impact economic growth and, specifically, real income growth, especially by reducing the country's purchasing power, thus the real value of wages, and increasing the interest rates at which the country is forced to repay foreign investment and loans, which, as mentioned, they usually extremely need. Indeed, if interest rates were too high, foreign investors might be disincentivized from investing in the country as they would be unsure of its solvency, thus restricting its access to the international capital market. Consequently, the reason why trade with China may have had a negative effect on the real income of Peru and Ecuador may have been determined by the fact that the two countries, characterized by a relatively low level of financial development and hit by increasing inflationary pressures in the second half of the last decade, have also close trade relations with Beijing, indicating a high openness to trade with China. Specifically, always considering structural problems such as the low level of financial development and inflationary pressures, the fact that opening up to trade with China has resulted in a negative effect on per capita income is probably due to Beijing's great commercial importance to both countries, which is high enough to even influence their individual wealth appreciably. As regards the case of Argentina, mainstream literature proposes several ways through which trade may promote real income growth, for instance through exports, the efficient allocation of resources, factor accumulation, technology diffusion, and knowledge spillovers.¹¹⁶ It is likely that the positive effect of trade with China on real income growth in Argentina was due, despite extremely high inflation, to the steady increase in exports from Buenos Aires in the last decade, as well as to the other above-mentioned factors.

Findings 6) and 7) Based on economic theory, the present value of external debts is equivalent to the current value of future trade balances. Essentially, the future trade balances are fundamental to ensure the repayment of present external debts. Indeed, host countries' economies rely on trade surpluses to generate the necessary funds for repaying their external debts. Therefore, a larger trade surplus provides a better ability to manage a greater foreign debt.¹¹⁷ The positive effect of trade with China on the external debts of Brazil and Ecuador is consistent with this reasoning since both have consistently accumulated trade surpluses vis-à-vis the PRC between 2012 and 2022. Given Beijing's

¹¹⁶ Were (2015).

¹¹⁷ Hung (2022).

trade importance to both countries, this surplus then likely allowed them to repay a significant portion of their foreign debts over the past decade.

Findings 8) and 9) By reducing prices and expanding the range of products available to consumers, trade especially benefits middle- and lower-income households, such as those usually composing the wide majority of developing countries' population. More specifically, according to economic theory, in any trade model, there is an enhancement in consumption efficiency when an economy transition from autarky to free trade. In other words, there is a rise in national welfare. This outcome was proved in several economic models, including the Ricardian model, the immobile factor model, the specific factor model, the Heckscher-Ohlin model, the simple economies-of-scale model, and the monopolistic competition model. The outcome can also be demonstrated if there are disparities in demand among countries. Each of these models proves that a country is likely to have superior choices available in consumption due to free trade. While it is relatively simple to describe gains in consumption efficiency for an individual consumer, it is much more challenging to explain consumption efficiency conceptually for the economy in its entirety. Nonetheless, when aggregate indifference curves are employed to illustrate the benefits of trade, it becomes feasible to show an aggregate enhancement in consumption efficiency. However, it is essential to be careful when interpreting this properly. An aggregate indifference curve relies on the assumptions that all consumers possess identical preferences and there is no redistribution of wealth as a result of economic changes. Since drawing such an aggregate indifference curve is beyond the scope of this study, the difference in the effects of trade on Argentina and Peru's per capita consumption could be explained simply by the fact that while trade with China seems to add welcome options for Argentinians, thus contributing to an increase in total per capita consumption, the opposite occurs in the case of Peru where, on the contrary, trade with China seems to reduce the amount of welcome options, probably due to the latter's substitution with unwelcome ones, contributing to a decline in total per capita consumption.

Findings 10), 11) and 12) The level of a country's economic openness can significantly affect its pattern of industrialization and specialization. According to Heckscher-Ohlin theory, if countries engage in free trade, they should specialize in producing commodities in which they have a comparative advantage. In labor-abundant countries, trade liberalization would likely result in a shift of production from capital-intensive import substitutes towards labor-intensive exportables. If this shift occurs, industrialization in those countries is expected to increase because of the heightened demand for labor. Otherwise, it is projected to remain the same or even decrease. In light of the above,

what occurred in Brazil, Chile and Ecuador appears consistent with economic theory. Indeed, Brazil and Chile are two countries that have a significantly more developed and, more importantly, diversified industrial sectors than Ecuador.¹¹⁸ This means that a greater portion of Brazilian and Chilean industrial production is devoted to the production of capital-intensive import substitutes, in which Beijing, however, has a comparative advantage. The results suggest that the relationship with China harms most of the industrial sectors in the above two economies, which are probably still in their embryonic or developmental stages and do not offer a comparative advantage over their more advanced Chinese counterparts. Ecuador, on the other hand, with a relatively small and undiversified economy, more dependent than those of Brazil and Chile on labor-intensive exports, such as oil and minerals, appears to have been better able to leverage its comparative advantage in such sectors to foster its industrialization.

Findings 13), 14) and 15) Countries with a high share of resource-intensive goods, such as fuels and minerals, in total exports or poor governance do not benefit from trade at all.¹¹⁹ An increased extraction and export of primary resources in these countries will result in a deterioration of governance. Indeed, trade liberalization can exacerbate institutional weaknesses by bolstering the political power of a small elite of large exporters, who have a vested interest in maintaining weak institutions. The detrimental impact of trade on institutions is most likely to occur when a small country acquires a sufficiently large share of global exports in sectors that are marked by economic profits.¹²⁰ This seems to be the case in Ecuador and Colombia, which are traditionally two countries not characterized by good governance practices. Specifically, Ecuador has consistently been one of the world's leading, if not the leading, exporter of shrimps over the last decade.¹²¹ In relation to its relationship with China, these exports have steadily accounted for a substantial percentage (around 50 % or more) of total exports to Beijing, which has been found to be the main import destination for this product.¹²² It is therefore possible that such a concentration in exports and the resulting power of a small percentage of exporters, especially towards China, has negatively impacted the quality of public governance. A similar reasoning can be applied to the case of Colombia, where, for example, crude oil exports have steadily weighed about 30 % of the country's total exports to the rest of the world and about 50 % of total exports to Beijing over the past decade.¹²³ The case of Peru is different. Indeed, although the country's exports have also been extremely concentrated in the export of raw

¹¹⁸ The Observatory of Economic Complexity (2022).

¹¹⁹ Busse and Groning (2008).

¹²⁰ *Ibidem*.

¹²¹ The Observatory of Economic Complexity (2022).

¹²² *Ibidem*.

¹²³ *Ibidem*.

materials, especially copper ore and gold, both to Beijing (about 60 %) and to the rest of the world (about 30 %),¹²⁴ it nevertheless appears that trade with China has had a positive effect on the quality of public governance. This may be due to the fact that Peru, which was the first South American country to establish formal bilateral ties with China since the Qing Dynasty in 1875,¹²⁵ as well as currently the host of one of the largest Chinese communities in South America,¹²⁶ has developed over time several effective mechanisms for managing the bilateral relationship. Such mechanisms thus enabled it to better handle any issues raised by bilateral trade with Beijing than Ecuador and Colombia, which are countries whose relations with Beijing have been strengthened only in the last decade. This dynamic may explain why trade with China impacted more positively on Peruvian public opinion's confidence in the institutions' ability to guide economic development.

6.3 Commenting the Spillovers of FDI Flows

About the effects of FDI flows listed in Section 5.3, the following explanations are provided:

Findings 1) and 2) The negative impact of FDI flows on employment in Ecuador and Peru may stem from the fact that these flows, although they stimulate economic activity and employment in certain sectors, may also result in job losses that can arise from increased competition, technological advancements that tend to shift production towards more capital intensive products, or from the adoption of different business practices.¹²⁷ The employment in host countries may be also influenced by economic conditions and labor market characteristics.¹²⁸ As regards the countries examined, there is substantial evidence that Chinese infrastructure projects, concentrated mainly in the mining sector, created thousands of jobs.¹²⁹ However, it seems plausible that Chinese firms, by virtue of their likely competitive superiority and clout in the overall economies of the two countries, may have "crowded out" many local firms, especially in host economies' key sectors, thus coming to hold considerable influence in the labor market. Moreover, since the two economies are rather unsophisticated and undiversified,¹³⁰ Chinese companies may have introduced technological improvements, which made production more capital-intensive, and different business practices, such as may be the employment of non-local workers given the relatively low skill level of the local ones. This seems to be supported by the fact that local communities in the two countries often complained about the fact that too many workers were Chinese, usually in an estimated 40 to 50 %, as well as

¹²⁴ *Ibidem.*

¹²⁵ Creutzfeldt (2019).

¹²⁶ Palma (2022).

¹²⁷ Vacaflares, Mogab, and Kishan (2017).

¹²⁸ *Ibidem.*

¹²⁹ Carvalho (2019).

¹³⁰ The Observatory of Economic Complexity (2022).

about low wages, wrongful dismissals, long working hours, and violations of safety regulations.¹³¹ These practices came to represent a disincentive to work, probably negatively contributing to employment, especially considering the above-mentioned high influence on the labor market likely held by Chinese companies.

Finding 3) According to economic theory, external debt is one of the most significant determinants of FDI inflows. The theory states that an increased external debt leads to higher taxes which deter foreign direct investors. Thus, government should not heavily rely on external borrowing to finance economic growth as it might adversely affect a country's FDI inflows. Conversely, a decrease in external debt attracts FDI that will eventually lead to a reduction in the budget deficit. This is because FDI inflows may lead to job creation which in turn can boost tax revenues. Other findings also suggest that external debt can have a favorable impact on FDI if it is allocated into the construction of critical infrastructures.¹³² Indeed, building critical infrastructure usually allows for increased productivity and returns, which makes it easier to repay foreign debts and, consequently, attract more FDI. In the case of Ecuador, it is likely that Beijing's FDI flowed as a result of a rather low external debt as early as 2012 (18 % of GDP).¹³³ However, they are unlikely to have contributed to an increase in tax revenues, since, as reported in the previous point, China's FDI did not produce an improvement in employment and therefore may not have had a positive effect on tax revenues from labor taxation. Therefore, the positive relationship between FDI and external debt could be mainly explained by the fact that a large part of the latter, which was already low in 2012, was most likely earmarked for the construction of critical infrastructure. The fact that foreign debts were incurred primarily for the construction of critical infrastructure seems plausible, since, according to the literature, it represents a traditional dynamic through which developing countries finance their own development.¹³⁴ Following this reasoning, it seems no coincidence that in turn Beijing's FDI has been allocated mainly to projects critical to the country's development, such as mines, power plants and infrastructure. Hence, China's FDI, flanking Quito's debts to foreign countries to finance the construction of critical infrastructure, contributed to increased productivity and returns in key sectors of the economy, which had a positive effect on the country's ability to repay foreign debt.

Findings 4) and 5) According to the literature, the most important way FDI may enhance industrial value added is through technological spillovers, intended as transfer of both goods and

¹³¹ ISHR (2023).

¹³² Azolibe (2022).

¹³³ World Bank (2022).

¹³⁴ Panizza (2008).

knowledge.¹³⁵ The primary channels through which they tend to occur are enhanced competition, employment of local workers, demonstration of technology, and higher standards.¹³⁶ Particularly prominent among these, in the specific case of Ecuador, may be the demonstration of technology and improved standards, especially in the mining and agribusiness sectors. This is because FDI, as highlighted above, has not contributed to an improvement in employment and has brought in firms with an excessive competitive advantage and mastery of sectors for there to be really an enhanced competition. Specifically, Beijing owns two of the country's most important mines¹³⁷ and is the main consumer of the country's second most exported product, shrimps.¹³⁸ In this regard, China's FDI over the last decade has focused on increasing mineral extraction in the former case and shrimps' production and quality standards in the latter to support its own growing demand. Evidently, they have been successful in increasing the share of Ecuador's industrial value added in relation to GDP, especially considering how much weight the mining and agribusiness sectors have for Ecuadorian economy and the leading role played by China as a top import destination for both of them. This dynamic has most probably been made possible mainly by Beijing's import in Ecuador of more advanced resource extraction technologies and higher quality standards.

However, FDI may also have negative impacts on the host economy industrialization, such as in the case of Chile. This usually occurs when foreign firms retain too much control in establishing the level of technology transfer.¹³⁹ Indeed, this level may be profitable for them but suboptimal for the host country's economy. Moreover, FDI on export goods produces few beneficial spillovers.¹⁴⁰ Indeed, the latter will be stronger if FDI are invested on products aimed at the local market as opposed to export. Furthermore, technology transferring links between foreign firms and the rest of the economy tends to be stronger if some industry already exists within the relevant sector, adding to existing competition.¹⁴¹ In light of the above, the negative effect of Beijing's FDI on Chilean industrial value added could be due to the fact that in the last decade they have been mainly for export sectors, such as mining, or those in which China did not meet equal rivals, such as electricity and infrastructure. This pattern of Beijing's FDI most likely prevented the country from improving its industrial value added by withholding the technology needed to do so in key sectors of the economy.

¹³⁵ Soreide (2001).

¹³⁶ *Ibidem*.

¹³⁷ Quiliconi and Vasco (2021).

¹³⁸ The Observatory of Economic Complexity (2022).

¹³⁹ Soreide (2001).

¹⁴⁰ Sahoo and Dash (2022).

¹⁴¹ Bjorvatn (2000).

7. Concluding Remarks

In light of the analysis conducted in this chapter, 24 statistically significant results were obtained, including 4 related to the effects of aid, 15 related to the effects of trade, and 5 related to the effects of FDI flows. Hence, the results obtained, unfortunately but as was expected, did not prove to be statistically significant for all output variables for all countries examined. As evident, the largest number of statistically significant results have been obtained for trade with China, while the one for which fewer statistically significant results have been obtained is development aid. However, this was expected since the latter represented for each country the variable for which there was the least data: a deficiency that was made up for by substituting the mean value for the missing data. Furthermore, the model that returned statistically significant results most often is the second one. This is most probably due to the fact that the three independent variables chosen for analysis are subject to a multicollinearity phenomenon, which is evidently mitigated by the addition of the endogenous lagged variable to the equation of model 2. The multicollinearity phenomenon points out that there is a high correlation between the explanatory variables in the model. This is not surprising since, when one country has bilateral economic relations with another, trade with as well as aid and FDI directed to the latter are usually interlinked. Moreover, the effects of the independent variables on a specific outcome variable resulted opposite at times, with the consequence that the impact of China's foreign policy approach of which aid, trade and FDI are understood here as key components, on the development of the selected countries was unclear. For example, while trade with China resulted to positively impact employment in Ecuador, FDI flows from Beijing did not. In light of the above, it was not possible to answer unambiguously to the first research question, reiterated below:

Did Chinese foreign aid, trade and FDI, understood as basic components of China's foreign policy approach, foster development in Latin American countries between 2012 and 2022?

Nor it was possible to determine whether H1 is true or false. However, as was outlined in section 6., the statistically significant information distilled from the empirical analysis allowed for a differentiated explanation by country for several output variables, adopting a deductive approach. The explanations offered were not intended to be fully comprehensive, since this is an end beyond the objectives of the present study and its two research questions, but simply to offer the economic rationale that may have determined the statistically significant results obtained. However, they may provide a starting point for further research in the field of development studies of Latin American countries, representing the most original contribution of the thesis.

Chapter 3: The Cases of Chile, Brazil, and Ecuador

1. Introduction

The purpose of this chapter is to investigate some case studies for exploring the effectiveness of China's foreign policy approach in promoting development. In order to do so, three countries have been identified, namely Chile, Brazil, and Ecuador. There are several reasons behind this selection. First, the three case studies were selected because the results obtained for each country seem to confirm the theory advanced in the hypothesis H2, reiterated below:

H2: The impact of Chinese aid, trade and FDI on the development of partner countries depends on their degree of democracy. Chinese foreign policy approach in Latin American democracies leads to better development outcomes, or is more effective, than lower-scoring countries on the Democracy Index.

In this regard, Chile is a country on the threshold of being classified in all respects as "developed", being already classified as a "full democracy" by the Democracy Index 2022,¹⁴² and a "developing high-income" country by the World Bank.¹⁴³ Brazil, on the other hand, represents a country still in the midst of development, and is classified as a "flawed democracy" and a "developing upper-middle income" country. Ecuador is a country that has yet to fully trigger its development potential and is classified as a "hybrid regime" and a "developing middle-income" country. Secondly, the three countries were selected because, based on the results obtained in the previous chapter, they appear to be those for which the estimated models most often produce statistically robust results. Third, they were chosen because those for which there were fewer missing data on development aid from Beijing. Lastly, each of the above three countries has received a high amount of aid from China over the past decade, appearing in the top-10 aid-receiving countries in tenth (Chile), first (Brazil) and second place (Ecuador), respectively.¹⁴⁴

In the next sections, the three case studies will be analyzed one by one, so as to highlight the specifics that may have influenced the effectiveness of China's foreign policy approach in each. Each case study will include the following subsections: background information on the country's economic and social situation, a brief summary of the results of China's foreign policy approach on the six

¹⁴² Economist Intelligence Unit (2023).

¹⁴³ Hamadeh, Van Rompaey, and Metreau (2024).

¹⁴⁴ AidData (2024).

outcome variables analyzed in the previous chapter, a summary of both political and economic relations with China over the past decade, and some critical remarks. In the section on political relations, the evolution of bilateral relations with the United States was also illustrated to better contextualize the selected countries' political moves within the broader competition between the American and Chinese superpowers. Moreover, in the last subsection devoted to critical remarks, macroeconomic theory was essential for reworking the explanations provided in the previous chapter in light of the contextual information provided in the present one. Therefore, the theory also proved central to the identification of the answer to the thesis' second research question, the pursuit of which this chapter is aimed at.

In illustrating the effects of the independent variables on the outcome variables, the following criteria were followed for each of the three countries selected for analysis. First, the statistically significant results were reported. Next, all remaining results that were not statistically significant were also exhibited, with an indication of the sign of the effect that the independent variables appear to have had on the outcome variables in all models where the independent variables appeared. However, cases in which the models returned mixed results were also reported. In these cases, the effect of the independent variables was considered to be of the same sign as that returned by the model that was better able to explain the variability of the specific outcome variable, namely, with the highest R^2 . The effect of China's foreign policy approach was finally defined "positive" when all three variables were all found to have a positive effect on a given output variable ("negative" in the opposite cases), while "more positive than negative" when two out of three variables were found to have a positive effect on a given output variable, while only one was found to have a negative effect ("more negative than positive", in the opposite cases). This methodology was followed in order to facilitate critical remarks about the effects of China's foreign policy approach on each outcome variable for the three countries. Nevertheless, the critical remarks should be read with extreme caution since, as will become evident, they are also based on data that are not statistically significant.

The sources used in the writing of this chapter were mainly existing literature, data from the analysis conducted in the previous chapter, primary sources such as official documents, surveys, and databases as well as news from established newspapers. After studying each partner country, a brief comparison of cases will be conducted to draw conclusions to answer the second research question, reiterated below:

If the effectiveness of China's foreign policy approach on partner countries' development differed in the last decade, what factors or mechanisms drove this difference?

The main evidence that has emerged is that the role of agency in the relationship with China is a key factor in determining the effectiveness of Beijing's foreign policy approach. The agency of Latin American countries seems to be fundamentally the result of a very specific factor: the level of democracy. Indeed, higher levels of democracy appear to be strongly related, on the one hand, to the ability of the political leadership to manage, without severe ruptures, the relationship with Beijing and, on the other hand, to the capacity of public institutions to scrupulously oversee Chinese penetration of markets and, especially, its access to key natural resources and critical infrastructure. Specifically, based on the qualitative analysis, China's effectiveness in promoting development seem to be much better the more the ease for Beijing's to access natural resources and critical infrastructure is lower while Latin American countries' strategic clarity and continuity as well as the competence of their public institutions is higher. As the case studies will show, these conditions seem to be better met the higher the level of democracy in partner countries.

2. Case 1: Chile

2.1 Country's Profile: Richness, Full Democracy, and Institutional Competence

Classified as a high-income developing country by the World Bank, Chile is the fifth largest economy and the seventh most populous country in Latin America, with a GDP of US\$301 billion¹⁴⁵ and a population of 19.6 million in 2022. It is also the country with the second highest GDP per capita in South America, behind Uruguay. Chilean economy experienced significant growth in the decade leading up to the pandemic, averaging a GDP growth of 2.94 % between 2009 and 2019. However, the economy saw a considerable contraction in 2020 (-6.1 %), but immediately rebounded in 2021 with 11.7 % growth and continued to grow in 2022 (2.4 %), albeit below the Latin American average (3.9 %). The country has no significant levels of inequality, with a Gini Index at 0.43 and a poverty rate at 6.5 %.

The agricultural sector contributes to 3.5 % of the GDP and employs 6 % of the working population. The country primarily produces fish and fruits, and it is also a major global wine producer.

¹⁴⁵ All economic data in this section (2.1) are taken from World Bank (2022), except otherwise indicated.

The industry contributes to about 32 % of the GDP and employs 23 % of the working population. Chile is one of the most industrialized countries in Latin America, with prominent sectors including mining (copper, coal, and nitrate) and manufacturing (food processing, chemicals, wood). Chile is the world's leading producer of copper. Beyond copper, Chile is also a major global provider of gold, lithium, molybdenum, and silver. Particularly, Chile enjoys the largest lithium deposits, accounting for 36 % of the world's total, and it is the second largest producer globally, contributing 32 % of the global supply.¹⁴⁶

The services sector contributes to 54.3 % of the GDP and employs 71 % of the working population. The sector has been consistently growing in recent decades, reinforced by the rapid development of communication and information technology, access to education and an increase in specialist skills and knowledge among the workforce. Among the highest-growing sectors in recent years are tourism, retail, and telecommunications.

In 2022, the country's top three exports were copper ore (23 %), refined copper (18 %), carbonates (7.8 %), fish fillets (3.9 %) and raw copper (3 %), exporting mainly to China (38.8 %), followed by the United States (14 %) and Japan (7.5 %).¹⁴⁷ Importantly, in 2022, Chile was the world's biggest exporter of copper ore, refined copper, carbonates, pitted fruits, and molybdenum ore. On the other hand, the top imports were refined petroleum (11.9 %), cars (5 %), crude petroleum (4.8 %), delivery trucks (3.5 %) and petroleum gas (2.8 %), importing mostly from China (25.8 %), followed by the United States (22.4 %) and Brazil (9.5 %).

In 2022, the country ranked 71st out of 124 countries in terms of economic complexity.¹⁴⁸ Chile ranked 59th out of 190 economies for overall ease of doing business in the World Bank's most recent "Ease of Doing Business" survey for 2020, achieving a score (72.6) slightly lower than the average score for Latin America and the Caribbean (79.6). Besides, it ranked as 27th out of 180 countries on Transparency International's 2022 Corruption Perception's Index.¹⁴⁹ Moreover, in comparison to the regional rank of the 2022 Democracy Index, Chile (8.22) scored significantly above the average of the region (5.79), with a difference of 2.43 points.¹⁵⁰ As for the same Index, the country should be considered an "full democracy".

¹⁴⁶ Magri (2023).

¹⁴⁷ All economic data included in this subparagraph ("In 2022...Brazil (9,5%)") are retrieved from The Observatory of Economic Complexity (2022).

¹⁴⁸ The Observatory of Economic Complexity (2022).

¹⁴⁹ Transparency International (2024).

¹⁵⁰ Economist Intelligence Unit (2023).

2.2 The Positive Effects of China's Foreign Policy Approach on Chilean Development

Based on the results about the effects of Beijing's foreign policy approach obtained in the second chapter, the statistically significant results were as follows:

- 1) China's aid had a slight positive effect on GDP per capita.
- 2) China's aid had a slight positive effect on external debt.
- 3) Trade with China had a considerable negative effect on industrial value added.
- 4) China's FDI had a fairly negative effect on industrial value added.

As for the rest of the results, although they were not found to be statistically significant, it is reported below that:

1) China's aid seems to have tendentially had a positive effect on employment, consumption per capita and industrial value added. Looking at the effect of aid on citizens' satisfaction with the quality of public governance, although the models returned mixed results, the second one, that is, the one that can best explain its variability, returned a positive effect which is the only one that will be considered.

2) Trade with China appears to have tendentially had a negative effect on GDP per capita and consumption per capita, while a positive one on employment, external debt, and citizens' satisfaction with the quality of public governance.

3) China's FDI seem to have tendentially had a negative effect on external debt and citizens' satisfaction with the quality of public governance while a positive one on employment, GDP per capita and consumption per capita.

Consequently, attempting to describe the overall impact of Beijing's foreign policy approach, of which aid, trade and FDI are understood here as key components, on the economy of Chile, with extreme caution, it can be argued that:

1) The effect on the employment rate appears to have been quite positive, since all three explanatory variables appear to have had a positive impact.

2) The effect on GDP per capita appears to have been more positive than negative, since both aid and FDI appear to have had a positive impact, while only trade had a negative one.

3) The effect on external debt appears to have been more positive than negative, since both aid and trade appear to have had a positive impact, while only FDI had a negative one.

4) The effect on per capita consumption appears to have been more positive than negative, since both aid and FDI appear to have had a positive impact, while only trade had a negative one.

5) The effect on industrial value added appears to have been more negative than positive, since both trade and FDI appear to have had a negative impact, while only aid had a positive one.

6) The effect on citizens' satisfaction with the quality of public governance appears to have been more positive than negative, since both aid and trade appear to have had a positive impact, while only FDI had a negative one.

Consequently, China's overall approach to development in Chile seems to have been quite positive, with five out of six outcome variables impacted more positively than negatively. Indeed, only Chilean industrial value added has been impacted more negatively than positively as proven by the reported statistically significant results regarding the effects of trade with China and FDI on this output variable.

2.3 Chile's External Relations in the Last Decade: A Solid, Long-Standing Partnership with Both Beijing and Washington

Chile stands out as a pioneering example in Latin America for its relations with China. In 1970, this country became the first in South America to establish diplomatic relations with Beijing. At the regional level, it was the second country to do so. In 1982, it became the first Latin American country to agree on a joint venture with China. In 1999, it was the first Latin American country to support China's entry into the WTO. In 2004, it became the first Latin American country to recognize China as a market economy. In 2005, it was the first country to sign a Free Trade Agreement (FTA) with Beijing.¹⁵¹

In 2012, both countries mutually opted to elevate their comprehensive cooperative relationship, established in 2004, to the level of a "strategic partnership". This involved implementing enhanced political and economic cooperation mechanisms.¹⁵²

In 2015, Chile signed a Memorandum of Understanding (MoU) to improve the existing free trade agreement (FTA) between the two countries, which has been in place since 2006.¹⁵³ The

¹⁵¹ Gachúz (2012).

¹⁵² Global Times (2012).

¹⁵³ China's Ministry of Commerce (2015).

memorandum of understanding addressed cutting-edge topics that were not encompassed in the original FTA text, including e-commerce, public sector procurement, and financial services. In turn, the Central Bank of Chile and the People's Bank of China agreed to engage in currency swaps. It was also determined that the China Construction Bank, which is the second largest in China and recently established in Chile, will serve as the clearing bank for all renminbi transactions.

In 2016, the two countries further upgraded their ties from “strategic partnership” to “comprehensive strategic partnership”.¹⁵⁴ In 2018, Chile officially joined China’s BRI.¹⁵⁵ In 2019, Chile was granted membership to the Asian Infrastructure Investment Bank, a Chinese institution that finances projects related to the BRI, although official entry into the institution did not take place until July 2021.¹⁵⁶

In the early months of the pandemic in 2020, Chile received medical supplies worth US\$9.5 million through donations from several Chinese firms, foundations, and provinces as well as China’s central government.¹⁵⁷ As a result, Chile became the third most important beneficiary of Chinese medical assistance in Latin America, ranking below only Brazil (US\$23 million) and Venezuela (US\$43 million).¹⁵⁸

Currently, Santiago enjoys the highest number of partnership and cooperation mechanisms with Beijing at the regional level.¹⁵⁹

On the other hand, the United States sees Chile among its closest allies in Latin America. The U.S. also represents Chile’s second largest trading partner¹⁶⁰ and investor.¹⁶¹ The great support of the United States is mainly due to the fact that the country is currently the most solid democracy in South America, and it supports more than any other country in the region the values most cherished by Americans. A prime example of cooperation includes the landmark 2003 Chile–United States Free Trade Agreement.¹⁶² The latter is the U.S. oldest FTA with a Western Hemisphere partner since the

¹⁵⁴ Ministry of Foreign Affairs of the People’s Republic of China (2016b).

¹⁵⁵ Belt and Road Portal (2018).

¹⁵⁶ Urdinez (2020).

¹⁵⁷ Urdinez (2021).

¹⁵⁸ *Ibidem*.

¹⁵⁹ Fernandez (2022).

¹⁶⁰ The Observatory of Economic Complexity (2022).

¹⁶¹ InvestChile (2023). Note: Journal Article based on data retrieved from the Central Bank of Chile.

¹⁶² Office of the United States Trade Representative (2003).

renegotiation of the North American FTA.¹⁶³ The special support of Americans for Santiago should be further evident in the fact that Chile was the first South American country to gain membership in the Organization for Economic Co-operation and Development in 2010,¹⁶⁴ as well as the only Latin American country to be included in the U.S. Visa Waiver Program in 2014.¹⁶⁵ More generally, excellent bilateral ties have remained stable throughout the past decade, although natural rotations in the leadership due to presidential systems in both countries have sometimes led to the abandonment of initiatives started by predecessors, causing disappointment.

2.4 Sino-Chilean Economic Relationship: Burgeoning Trade, Limited Aid and FDI

This section will examine Sino-Chilean economic ties over the past decade, focusing in more detail not only on the three basic components of China's foreign policy approach, namely aid, trade and FDI, but also on the primary sectors of economic cooperation between the two countries.

2.4.1 Aid

Based on data from AidData, Chile has been provided a total of US\$458 million in aid from China over the past decade.¹⁶⁶ The total amount can be broken down as follows: US\$417 million, which accounts for 91 %, is classed as "Other Official Flow"; US\$40 million, equivalent to 8.7 %, is defined as "Vague"; and the remaining US\$561,000, equal to 0.3 %, is classified as "Official Development Assistance". More specifically, US\$268 million, that is, about 60% of the total, was provided in the form of loans, while the remaining amount was given as grants. Significantly, out of the total aid, a substantial US\$268 million was allocated to the "Energy" sector, US\$189 million to the "Health" sector, and US\$561,000 to the "Transport and Storage" sector, making these sectors top three recipients.

2.4.2 Trade

China's is currently Chile's leading trading partner. Bilateral trade between Santiago and Beijing surged to US\$67.6 billion in 2022, more than doubling compared to 2012.¹⁶⁷ More precisely, Chile's exports to China have more than doubled, while Beijing imports in Chile have nearly doubled. In 2022, Chile boasted a significant bilateral trade surplus of US\$22.5 billion, mostly driven by the export of mining products such as copper ore, refined copper, and carbonates.¹⁶⁸ On the other hand, China mostly imported cars, broadcasting equipment and delivery trucks.¹⁶⁹ In 2022, Chile

¹⁶³ U.S. Mission in Geneva (2023).

¹⁶⁴ OECD (2010).

¹⁶⁵ Hankinson (2023).

¹⁶⁶ AidData (2024).

¹⁶⁷ IMF (2024).

¹⁶⁸ The Observatory of Economic Complexity (2022).

¹⁶⁹ *Ibidem*.

experienced a significant trade surplus with China in the exports of mineral products, metals, and chemical products while China had a substantial trade surplus with Chile in the exports of machinery, textiles, and transportation equipment.¹⁷⁰

2.4.3 FDI Flows

As regards investment, between 2012 and 2022, cumulative net FDI flows to Chile from China amounted to more than US\$1.5 billion, with an average annual net flow of US\$138.9 million.¹⁷¹ Chinese investment have predominantly targeted natural resources, specifically the extraction of copper and lithium, construction (with a focus on the transport sector) and the energy sector. Beijing experienced many difficulties in the access of the latter sectors. For instance, Chile's nationalized copper industry, managed by the Chilean state company COLDELCO, has hindered significant investment by PRC-based firms, in contrast to the conspicuous Chinese mining investments in neighboring Peru.¹⁷² Moreover, the current Boric government's announced intention to nationalize the lithium industry and create a state-owned lithium firm similar to CODELCO has further discouraged Chinese investment.¹⁷³ In the construction sector, Chile's competitive formal public procurement process, supervised by technically competent evaluation and oversight institutions, for long hindered China's ability to secure infrastructure projects in the region through the "state-to-state" agreements that Chinese companies had previously used in developing countries.¹⁷⁴ However, in the electricity sector, despite several initial setbacks, China's State Grid company managed in the end to gain sole control over 54 % of the country's electricity customers.¹⁷⁵ Therefore, it seems unsurprising that, according to data from the Central Bank of Chile, Beijing's investment is comparatively lower than that of several other Latin American countries, not even ranking among the top five investors in terms of FDI stocks in 2022.¹⁷⁶

2.5 Critical Remarks

Chile is one of the most advanced economies in the region and a full democracy. Despite solid relations with Washington, the country can reasonably be considered the one in the region that has also had the strongest political ties with Beijing, not only in the past decade but also in the last half century. The country has been among the top 10 recipients of aid and China's second largest regional trading partner, behind only Brazil, over the past decade. Only funding from Beijing has remained

¹⁷⁰ *Ibidem.*

¹⁷¹ Statista (2024).

¹⁷² Ellis (2023b).

¹⁷³ Villegas and Scheyder (2023).

¹⁷⁴ Ellis (2023b).

¹⁷⁵ *Ibidem.*

¹⁷⁶ Central Bank of Chile (2024).

quite low, mainly due to effective supervision of competent public institutions on foreign investment and hostile takeovers. As previously highlighted, the relationship with China appears to have had a beneficial effect on all development indicators examined, except industrial value added. The general positive effect of China's foreign policy approach appears to be due generally to the competence of the Chilean public institutions as well as China's difficult access to key infrastructure and natural resources, added to the common strategic will to keep nurturing a bilateral relationship that has been solid for several decades. It is also noteworthy that this expressed willingness has not produced any cracks in relations between Santiago and Washington. The most interesting aspect of the Chilean case is that despite the fact that the country is heavily dependent on China economically as evidenced by the fact that almost 40 % of the country's total exports are sent to Beijing, the competence of public institutions has enabled Chile to reap several benefits from the bilateral relationship without becoming a victim of possible predatory behaviors on the part of the PRC. Moreover, despite such close relations with Beijing, Santiago also does not appear to have suffered any significant cracks in the solid relationship with Washington. Most importantly, the information provided in this section appears to reinforce the arguments proposed in the previous chapter to explain the statistically significant results for Chile.

As regards development assistance, the positive effect of Beijing's aid on GDP per capita seems to be evidently due to the fact that 60 % of it is allocated in the form of loans and to the energy sector. As outlined, the fact that aid is transferred in the form of loans rather than grants makes it easier for aid to be invested to increase productivity in profitable activities rather than consumed, while the investment of aid in the energy sector usually represents a dynamic that fosters higher productivity. Hence, the higher returns from the combination of these two effects led both to an increase in per capita consumption and to an increased ability to repay its foreign liabilities.

Concerning trade, specifically as for the negative effects of the latter on industrial value added, these are due to the fact that, as pointed out, Chile is an economy that can be considered developed, with several established industrial sectors which, however, do not appear to possess a comparative advantage over China. The penetration of Chinese industrial products into the Chilean market, particularly evident in the composition of the trade balance, and the competitive superiority of Beijing's products over local ones, which also seems to be reflected in higher per capita consumption, although the latter does not represent a reliable result, must therefore have negatively impacted industry's contribution to the Andean country's GDP.

Regarding Chinese FDI, particularly as for the negative effects of the latter on industrial value added, these are due to the fact that most of China's investments have been directed to the mining sector, particularly the extraction of copper and lithium. Indeed, the investment on extractive activities of both these materials has been for export to China. Besides, there has also been a gradual penetration and control by Beijing of the country's major infrastructure projects, particularly in the transportation sector, systematically bypassing local firms in the awarding of government contracts. As detailed in the previous chapter, the fact that FDI is mainly directed to export sectors, such as mining, and those where there is insufficient competition, such as transport infrastructure, is usually a dynamic that negatively impacts a country's industrial value added.

3. Case 2: Brazil

3.1 Country's Profile: Big Economy, Widespread Inequality and Flawed Democracy

Classified as an upper middle-income developing country by the World Bank, Brazil is the country with the largest economy and population in Latin America, with a GDP of 1.92 trillion¹⁷⁷ and a population of 215 million in 2022. Besides, it is the world's fifth largest¹⁷⁸ and seventh most populous country¹⁷⁹ as well as among the ten largest economies in the world.¹⁸⁰ Brazilian economy experienced a moderate but appreciable growth in the decade leading up to the pandemic, achieving an average of 1.3 % growth per year. However, the economy saw a significant contraction in 2020 (-3.3 %) and eked out soft growth in 2021 (5 %) and 2022 (2.9 %) below the Latin America average, weighed on by socio-political instability. Brazil is one of the countries with the highest levels of inequality in the world, with an extreme concentration of wealth, highlighted by a Gini Index at 0.52 and a poverty rate at 27 %.

Agriculture accounts for 6.8 % of the GDP and employs about 9 % of the working population. In the 1960s and 1970s, Brazil's agricultural economy shifted from exporting coffee, sugar, and cacao to being a major global supplier of soya beans (and soya bean derivatives), maize, cotton, sugar, coffee, orange juice, beef, and ethanol.

Industry in Brazil accounts for 20.7 % of GDP and occupies about 20 % of the labor force. The country ranks seventh globally in terms of oil production, producing 4.28 million barrels per day

¹⁷⁷ All economic data in this section (3.1) are taken from World Bank (2022), except otherwise indicated.

¹⁷⁸ Statista (2024).

¹⁷⁹ *Ibidem*.

¹⁸⁰ IMF (2024).

and holding a 4 % share of the global market.¹⁸¹ Furthermore, it enjoys a substantial capacity to generate renewable energy, with a remarkable 84 % capacity compared to the global average of 38 %. This energy is primarily derived from hydropower but also includes contribution from solar and wind sources.¹⁸² More precisely, Brazil is dependent upon hydropower for as much as 66 % of its energy needs.¹⁸³ Furthermore, Brazil particularly holds a significant position in the international mining industry. It is the leading producer of niobium, the second largest producer of iron ore globally, the fifth largest producer of lithium and an important producer of bauxite, gems, gold, manganese, quartz, and tin.¹⁸⁴ The sector has a substantial impact on the country's economy, with a yearly contribution of 2% to 4% of the GDP.¹⁸⁵

Lastly, the country has a strong service sector which accounts for 58.9 % of the GDP and employs 71 % of the working population. The public service sector encompasses both national and regional bureaucracies, public utilities, and a plethora of special agencies. The private sector comprises several sub-sectors, including travel and tourism, financial services, transportation, repairs, and retail sales.

In 2022, Brazil's top three categories of exported goods were soybeans (13.8 %), crude petroleum (12.6 %), and iron ore (8.8 %), with China figuring as the top export destination (26.4 %), followed by the United States (10.7 %) and Argentina (4.5 %).¹⁸⁶ Interestingly, the country also resulted as the world's biggest exporter of soybeans, raw sugar, frozen bovine meat, poultry meat and coffee. Brazil imports mainly manufactured or processed products. In 2022, the country's top three imports were refined petroleum (8.5 %), crude petroleum (3.2 %) and motor vehicles, included their parts and accessories (2.9 %), with China as the leading importer (23.7 %), followed by the United States (18.3 %) and Germany (5 %).

In 2022, the country ranked 49th out of 124 countries in terms of economic complexity.¹⁸⁷ Brazil ranked 124th out of 190 economies for overall ease of doing business in the World Bank's most recent "Ease of Doing Business" survey for 2020, achieving a score (59.1) noticeably lower than the average score for Latin America and the Caribbean (79.6). Besides, it ranked as 94th out of

¹⁸¹ U.S. Energy Information Administration (2023).

¹⁸² Delivorias (2022).

¹⁸³ U.S. Energy Information Administration (2021).

¹⁸⁴ Delivorias (2022).

¹⁸⁵ *Ibidem*.

¹⁸⁶ All economic data included in this subparagraph ("In 2022...Germany (5%)") are retrieved from The Observatory of Economic Complexity (2022).

¹⁸⁷ The Observatory of Economic Complexity (2022).

180 countries on Transparency International's 2022 Corruption Perception's Index.¹⁸⁸ Moreover, in comparison to the regional rank of the 2022 Democracy Index, Brazil (6.78) scored above the average of the region (5.79), with a difference of 0.99 points.¹⁸⁹ As for the same Index, the country should be considered a "flawed democracy".

3.2 The Mixed Effects of China's Foreign Policy Approach on Brazilian Development

Based on the results about the effects of the Beijing's development approach obtained in the second chapter, the statistically significant results were as follows:

- 1) China's aid had a fairly negative effect on industrial value added.
- 2) Trade with China had a considerably positive effect on the employment rate.
- 3) Trade with China had a considerably positive effect on the external debt.
- 4) Trade with China had a fairly negative effect on industrial value added.

As for the rest of the results, although they were not found to be statistically significant, it is reported below that:

1) Beijing's aid appears to have tendentially had a negative effect on employment, GDP per capita, external debt, consumption per capita as well as the level of citizen satisfaction with public governance.

2) Trade with China appear to have tendentially had a negative effect on GDP per capita and consumption per capita. Looking at the effect of trade on citizens' satisfaction with the quality of public governance, although the models return mixed results, the second one, that is, the one that can best explain its variability, returned a negative effect which is the only one that will be considered.

3) China's FDI appears to have tendentially had a negative effect on GDP per capita and industrial value added while positive on employment, external debt, per capita consumption, and citizens' level of satisfaction with public governance.

Consequently, wanting to describe the overall impact of China's foreign policy approach, of which aid, trade and FDI are understood here as key components, on the Brazilian economy, with extreme caution, it can be said that:

¹⁸⁸ Transparency International (2024).

¹⁸⁹ Economist Intelligence Unit (2023).

1) The effect on employment rate can be described as more positive than negative since trade and FDI seem to impact positively while only aid negatively.

2) The effect on GDP per capita appears to be negative, since all three variables appear to have a negative effect.

3) The effect on external debt seems to be more positive than negative since both trade and FDI seem to impact positively while only aid negatively.

4) The effect on per capita consumption seems to be more negative than positive since both aid and trade seem to impact negatively while only FDI positively.

5) The effect on industrial value added seems to be negative, since all three variables appear to impact negatively.

6) The effect on citizens' satisfaction with the quality of public governance seems to be more negative than positive, since aid and trade seem to impact negatively, while only FDI positively.

Consequently, the overall effect of Chinese approach to Brazilian development seems to be ambiguous, if not more negative than positive. Indeed, while it appears to contribute to higher employment and lower external debt, it also seems to negatively impact GDP per capita, consumption per capita, industrial value added as well as citizens' satisfaction with the quality of public policies.

3.3 Beyond Talk, Really Solid Partners? Brazil's Oscillations in Political Relations with Beijing and Washington

In 2009, following the Global Financial Crisis of 2007-2008, Brasilia and Beijing strengthened their ties through their co-participation in the BRICS, a group consisting of the five major emerging economies of Brazil, Russia, India, China, and South Africa which holds an annual leaders' summit with a rotating presidency.¹⁹⁰ In 2012 both the Global Strategic Dialogue between the countries' respective Ministers of Foreign Affairs and the Ten-year Cooperation Plan (2012-2021) were established, upgrading bilateral relationship to the status of "comprehensive strategic partnership."¹⁹¹

During President Dilma Rousseff's tenure from 2011 to 2016, Brazil played a key role in establishing two new China-based financial institutions: the Asian Infrastructure Investment Bank and the New Development Bank (NDB).¹⁹² Beijing presented these institutions as alternatives aimed at restructuring the Western-dominated financial system and addressing developing countries'

¹⁹⁰ BRICS Information Centre (2009).

¹⁹¹ Ministry of Foreign Affairs of the People's Republic of China (2012).

¹⁹² Duarte (2023).

country's increasing investment needs. During this period, although Brazil maintained a constructive and functional relationship with China, it struggled to expand its cooperative agenda due to its industrial sector's negative reaction to the competition with Chinese products, which led to fears of deindustrialization. The domestic turbulence that ensued contributed to political instability in Brazil and hindered the pursuit of more ambitious foreign policy objectives in the relationship with China.

After the departure of Dilma Rousseff as president, Michel Temer, the new president of Brazil from 2016 to 2018, immediately traveled to Hangzhou, China, to participate in the G20 Leaders' Summit.¹⁹³ His center-right neoliberal coalition regarded China pragmatically, recognizing it as a crucial economic partner and prospective investor in the privatization of Brazil's infrastructure projects under the Program for Partnerships and Investments.¹⁹⁴ However, Temer's tenure was brief, and the legitimacy of his government was disputed, forcing him to mostly concentrate on domestic affairs.

Sino-Brazilian relations have since become increasingly difficult over the last decade, transitioning into a new stage following the election of far-right Brazilian president, Jair Bolsonaro (2018 - 2022), and the beginning of the trade war between China and the United States. Bolsonaro consistently expressed anti-China sentiments over the years and made history as the first Brazilian presidential candidate to visit Taiwan since diplomatic relations were established with China in the 1970s.¹⁹⁵ During his campaign, he pledged to shift the country's foreign relations towards a closer relationship with the United States.¹⁹⁶

As of January 2020, Bolsonaro halted Brazil's participation in the Community of Latin American and Caribbean States (CELAC), an interlocutor that Beijing deems crucial for its engagement with Latin America and the Caribbean.¹⁹⁷ By the subsequent June, Brazil had become the epicenter of the pandemic, with the highest daily mortality rate globally. The country currently results the sixth country in the world for total Covid-19 reported cases and, more importantly, the second country in the world for Covid-19 deaths.¹⁹⁸

¹⁹³ Ministry of Foreign Affairs of the People's Republic of China (2016a).

¹⁹⁴ Tyler and Ambrosano (2016).

¹⁹⁵ Stuenkel (2018).

¹⁹⁶ *Ibidem*.

¹⁹⁷ Valente (2020).

¹⁹⁸ WHO (2024).

During the pandemic, several public figures referred to SARS-CoV-2 as a "Chinese-virus," and this word gained significant traction on the internet.¹⁹⁹ Concurrently, there was a widespread increase in conspiracy theories about the virus's source and a growing distrust towards vaccines.²⁰⁰ Due to the growing difficulties and inefficiencies in collaborating with Brazil's federal government, Chinese diplomats and local/state government officials started exploring alternative solutions, while still maintaining open diplomatic channels. Due to the decentralized nature of Brazil's federal government, Brazilian governors and mayors have begun visiting China and collaborating with Chinese authorities in order to establish partnerships.²⁰¹

Chinese public diplomacy in Brazil was particularly intense during the pandemic and aimed to connect with local audiences.²⁰² The success of the initiative depended on the involvement of non-state actors, including civil society organizations, Chinese firms, and members of the Chinese diaspora. China's four consulates significantly intensified their public relations endeavors, which included generous contributions of medical equipment.²⁰³ China's delegates increased their visibility and accessibility, participated in events, connected with local personalities, published in the local media, and maintained an active presence on social media. Amidst and also following the pandemic, the economic interests of Bolsonaro government's supporters have been crucial in maintaining open communication channels with China and pragmatically opting to foster cooperation in establishing a commercial partnership. Remarkably, however, Brazil has not yet joined the BRI.²⁰⁴

On the other hand, as regard the relationship with the U.S., the establishment of Brazilian-American relations go back to 1824, just two years its declaration of independence, which made the United States the second country in the world to recognize its statehood after Argentina.²⁰⁵ The relationship between both countries represents the two most populated and powerful countries on the Americas, being the most dominant in South America and North America respectively. The United States is currently Brazil's top foreign investor²⁰⁶ and second largest trading partner, behind China.²⁰⁷ Nevertheless, relations between the two countries seem to have been rather fluctuant over the past decade. Specifically, there has been a period of tension in relations over the June 2013 revelation of

¹⁹⁹ De Andrade, Barreto, Herrera-Feligueras, Ugolini and Lu (2021).

²⁰⁰ *Ibidem*.

²⁰¹ Urdinez (2023).

²⁰² Stuenkel (2020).

²⁰³ *Ibidem*.

²⁰⁴ Moura (2023).

²⁰⁵ U.S. Embassy and Consulates in Brazil (2024a).

²⁰⁶ U.S. Department of State (2023).

²⁰⁷ The Observatory of Economic Complexity (2022).

U.S. mass surveillance programs in Brazil after there had been proof of American spying on Brazilian President Dilma Rousseff.²⁰⁸ She cancelled a scheduled visit to the U.S. in September 2013 in protest over such revelations.²⁰⁹ Relations have improved markedly since Rousseff's official visit on June 30, 2015, to the United States, nearly two years after she had canceled a previous state visit to the United States over the spying scandals.²¹⁰ From 2016 to 2019, under Obama (and then Donald Trump) and Michel Temer, relations were still fairly positive. In 2019 with the victory of Jair Bolsonaro, the two countries approached again, signing deals in the areas of trade, research, security and defense. For instance, in March 2019, Brazil's president Jair Bolsonaro announced at the White House that American citizens would no longer require a travel visa to visit the country for up to two 90-day periods per year, beginning in June 2019.²¹¹ In July 2019, Brazil also became a Major Non-NATO Ally of the United States.²¹² When Joe Biden became U.S. President in 2021, relations cooled somewhat due to political disagreements between Bolsonaro and Biden, but when Lula returned to the presidency again in late 2022, relations between the U.S. and Brazil have stabilized once more. This occurred although Biden and Lula have had their share of disagreements, including Lula's stance on the Russia-Ukraine war.²¹³

3.4 The Growing Strength of Sino-Brazilian Economic Relations: Beyond Political Leadership Reversals

This section will analyze Sino-Brazilian economic relations over the past decade, focusing in more detail not only on the three key elements of China's foreign policy approach, namely aid, trade and FDI, but also on the main areas of economic cooperation between the two countries.

3.4.1 Aid

According to data from AidData, Brazil has been awarded a total of US\$14.5 billion in aid from China over the past decade.²¹⁴ Of this amount, US\$14 billion, equivalent to 96.5 %, was classified as "Other Official Flows", US\$54 million, equivalent to 3.4 %, as "Official Development Assistance", and residual US\$808,000 as "Vague". More specifically, US\$14 billion, that is, the 96.5% of total aid, was supplied in the form of loans, while the rest of the funds was provided as grants. Notably, of that aid, US\$7 billion has been allocated to the "Energy" sector, another US\$7 billion to the "Industry/Mining/Construction" sector while US\$166 million to the "Transport and Storage" sector. The latter constitute the three sectors that received the most funding.

²⁰⁸ Winter (2013).

²⁰⁹ Boadle (2013).

²¹⁰ Harris (2015).

²¹¹ Herrmann (2019).

²¹² U.S. Embassy and Consulates in Brazil (2024b).

²¹³ Paraguassu (2023).

²¹⁴ AidData (2024).

3.4.2 Trade

China became Brazil's first trading partner in 2009.²¹⁵ In terms of trade, Beijing has not only consistently been Brazil's top partner during the 2010s, but also further grown its significance, boasting a strong trend in this reg. Bilateral trade between Brazil and China in 2022 was equal to US\$170.6 billion in 2022, doubling from 2012.²¹⁶ More precisely, exports from China to Brazil have almost doubled, whilst Beijing's imports from the country have more than doubled. In 2022, Brazil achieved a substantial trade surplus of US\$46.8 billion surplus in Brazil's favor, primarily fueled by the export of lower value-added agricultural goods as well as mining and petroleum products. Brazil primary exports to China included soybeans, iron ore and crude petroleum, while its main imports from Beijing encompassed semiconductor devices, pesticides, and broadcasting equipment.²¹⁷ The same year, Brazil accumulated a significant trade surplus with China in the export of mineral products, especially iron ore and lithium, vegetable products, particularly soybeans and corn, animal products, especially bovine meat, while China had a substantial net trade with Brazil in the export of machinery, chemical products, and metals.²¹⁸

3.4.3 FDI Flows

Concerning investment, between 2012 and 2022, cumulative net FDI flows to Brazil from China exceeded US\$3.6 billion, with an average annual net flow of US\$335.7 million.²¹⁹ This accounted for about 40 % of China's investment in the region over the past decade.²²⁰ Moreover, the data reveals that Chinese firms undertook 176 projects between 2007 and 2020, with a combined investment value of US\$66.1 billion.²²¹ During this period, Brazil received over half of Chinese investment in South America²²². Chinese firms are currently engaged in projects in 23 out of the 27 Brazilian states.²²³ The nature of these investment shifted over the period, centering on commodities until 2010, the industrial sector from 2010 to 2013, services in 2014, and shifting to electricity and infrastructure from that year onwards. The latter sectors keep dominating the range of Chinese investments in Brazil.²²⁴

²¹⁵ Moore (2009).

²¹⁶ IMF (2024).

²¹⁷ The Observatory of Economic Complexity (2022).

²¹⁸ *Ibidem*.

²¹⁹ Statista (2024).

²²⁰ Busilli and Jaime (2021).

²²¹ Garcia, Rodriguez, Brito and Grinsztejn (2023).

²²² Cariello and Augusto de Castro Neves (2022).

²²³ Ellis (2023a).

²²⁴ Torres (2020).

3.5 Critical Remarks

Brazil is the region's largest economy and a flawed democracy. Although relations with Beijing have suffered violent shocks in recent years, as those with Washington, the country can reasonably be considered the one in the region that has had the most significant ties with China in terms of their impact on global economic and political affairs in the last fifteen years. Over the past decade, Brazil has been the top destination of aid and FDI from China, as well as its main trading partner in Latin America. The complementarity of the two economies was evident especially in the clean energy sectors, mining, and agribusiness sectors, which led Beijing to also invest substantially in the infrastructure sector to fully implement and enhance the economic relationship between the two countries. As highlighted, however, the solid relationship with Beijing in terms of aid, trade and investment has led to ambiguous development results. This ambiguity appears to be due generally to the weakness of Brazilian institutions and Beijing's relatively easy access to and control of the country's key natural resources and infrastructure, combined with a discontinuity in the strategic orientation of Brazilian presidents vis-à-vis China and the United States. Significantly, however, the information provided in this section appears to reinforce the arguments proposed in the previous chapter to explain the statistically significant results about the effects of China's foreign policy approach on Brazilian development.

As regards development assistance, although almost all of the aid has been provided in the form of loans, a dynamic that favors its investment in profitable activities rather than their consumption, and about half of it directed to the energy industry, a dynamic that usually contributes to increased productivity, it has not contributed to an improvement in Brazilian industrial value added, but rather to its deterioration. One of the few valid explanations for this result is that, because the aid from Beijing was really conspicuous, it determined an appreciation of the real exchange rate, which in turn led to a loss of industry competitiveness. This seems to be borne out by the fact that Brazil's real exchange rate has continued to appreciate recently, the fluctuating trend of exports to the rest of the world over the past decade, and the growing concern of the political class about a de-industrialization of the economy.

These concerns also seem to be in line with the finding that trade with China has positively impacted employment, as this dynamic has been fostered by an increasing concentration of labor toward unskilled labor-intensive sectors and where the country possesses a comparative advantage over China, namely the agricultural and mining sectors. Also in light of this dynamic, it is therefore not surprising that trade with China has also contributed negatively, like aid, to lower industrial value

added. Growing demand from Beijing for agricultural and mining products, however, contributed to a substantial increase in exports to China, which in turn led to an increased ability of Brasilia to repay its external liabilities. In particular, this has been possible due to a continuous and substantial accumulation of trade surpluses vis-a-vis Beijing over the past decade.

4. Case 3: Ecuador

4.1 Country's Profile: Poverty, Poor Democracy, and Institutional Backwardness

Classified as a middle-income developing country by the World Bank, Ecuador is the eighth largest economy and the eighth most populous country in Latin America, with a GDP of around US\$115 billion²²⁵ and a population of 18 million in 2022. Ecuador's economy experienced significant growth in the decade leading up to the pandemic, averaging a GDP growth of 2.6 % between 2009 and 2019. However, the economy saw a considerable contraction in 2020, and eked out soft growth in 2021 and 2022, below the Latin American average.

The country has fair levels of inequality, with a significant concentration of wealth, highlighted by a Gini Index at 0.46 and a poverty rate of 25.2 %. Ecuador has also one of the highest hunger rates in South America, impacting about 2.5 million people.²²⁶ Besides, more than one third of the population suffers from moderate or severe food insecurity.²²⁷

The primary sector accounts for 8.84 % of the GDP and employs about 32 % of the working population. The country's most abundant products include exotic fruits, especially bananas and pineapples, and vegetables, particularly green plantains and broccoli. Interestingly, Ecuador is the leading world's exporter of bananas. Quito is also a major producer of cacao and shrimps.

Industry accounts for 31.5 % of the GDP and employs 17 % of the population. Most industrial firms are involved in the processing of agricultural, marine and forest products. Guayaquil and its surroundings serve as the primary industrial center, with Quito ranking as the second most significant, followed by Cuenca in third place.²²⁸ Approximately 75 % of Ecuador's industries is located in this network of metropolitan areas. Ecuador's most valuable mineral exports are gold, copper, and silver. In 2022, the mining industry generated 180,000 jobs and made a significant contribution of

²²⁵ All economic data in this section (4.1) are taken from World Bank (2022), except otherwise indicated.

²²⁶ IFAD (2024).

²²⁷ *Ibidem*.

²²⁸ International Trade Administration (2024).

US\$590 million in taxes and royalties to the Ecuadorian government.²²⁹ Analysts predict that mining has the potential to become the third largest export by 2025, generating over US\$4 billion in annual export revenues and accounting for 15 % of total exports.²³⁰ The country's most crucial resource is undoubtedly its oil reserves. According to a survey by the Spanish Institute for Commerce (ICEX), Ecuador's country risk is strongly affected by the price of oil.²³¹ Therefore, Ecuador's accessibility to international financial markets relies heavily on its capacity to harness the benefits of oil.

Services contributes to 53.7 % of the GDP and employs 51 % of the population. This sector includes communications, financial services, parcel delivery, tourism, transportation, and utilities. The informal work sector is another major economic force in the service industry, providing many people with a source of income during cycles of limited availability of formal employment. Specifically, 54 % of employment is attributed to the informal sector.²³²

In 2022, Ecuador's top categories of exported goods were crude petroleum (30.8 %), crustaceans (22.1 %), bananas (10.2 %), refined petroleum (4.6 %), and processed fish (4.1 %), with the United States (27.3 %) as the top destination for Ecuadorian exports, followed by China (17.1 %) and Panama (13.8 %).²³³ Interestingly, in 2022, Ecuador's was the world's biggest exporter of crustaceans and bananas. On the other hand, the top imports were refined petroleum (15.3 %), coal tar oil (5.6 %), cars (4 %), petroleum gas (2.5 %) and soybean meal (2.2 %), importing mostly from the United States (25.6 %), China (22.6 %), and Colombia (6 %).

In 2022, the country ranked 102nd out of 124 countries in terms of economic complexity.²³⁴ Ecuador ranked 129th out of 190 economies for overall ease of doing business in the World Bank's most recent "Ease of Doing Business" survey for 2020, achieving a score (57.7) noticeably lower than the average score for Latin America and the Caribbean (79.6). Indeed, economic, commercial, and investment policies are subject to frequent changes and this pattern can increase the risks and costs of doing business in Ecuador. Besides, it ranked as 115th out of 180 countries on the Transparency International's 2022 Corruption Perception's Index.²³⁵ Moreover, in comparison to the regional rank of the 2022 Democracy Index, Ecuador scored below the average of the region (5.79),

²²⁹ *Ibidem.*

²³⁰ *Ibidem.*

²³¹ Gonzalez, Fellmann, Larequi, Klinnert and Asturias (2022).

²³² International Trade Administration (2024).

²³³ All economic data in this subparagraph ("In 2022...Colombia (6%)") are retrieved from The Observatory of Economic Complexity (2022).

²³⁴ The Observatory of Economic Complexity (2022).

²³⁵ Transparency International (2024).

with a difference of 0.10 points.²³⁶ As for the same Index, the country should be considered an “hybrid regime”.

4.2 The Mixed Effects of China’s Foreign Policy Approach on Ecuadorian Development

Based on the results about the effects of the Beijing’s foreign policy approach obtained in the second chapter, the statistically significant results were as follows:

- 1) Trade with China had a considerable positive effect on employment.
- 2) Trade with China had a fairly negative effect on GDP per capita.
- 3) Trade with China had a considerable positive effect on external debt.
- 4) Trade with China had a fairly positive effect on industrial value added.
- 5) Trade with China had a considerable negative effect on citizens’ satisfaction with the quality of public governance.
- 6) China’s FDI had a considerable negative effect on employment.
- 7) China’s FDI had a slight positive effect on external debt.
- 8) China’s FDI had a fairly negative effect on industrial value added.

As for the rest of the results, although they were not found to be statistically significant, it is reported below that:

1) Aid from Beijing appear to have tendentially had a negative effect only on employment, while a positive one on GDP per capita, external debt, consumption per capita, industrial value added and citizens’ satisfaction with the quality of public governance.

2) Trade with China appear to have tendentially had a fairly negative effect on consumption per capita.

3) China’s FDI appear to have tendentially had a negative effect on GDP per capita and consumption per capita, while a positive one on citizens’ satisfaction with the quality of public governance.

Consequently, attempting to describe the overall impact of China’s foreign policy approach, of which aid, trade and FDI are understood here as key components, on the economy of Ecuador, with extreme caution, it can be argued that:

²³⁶ Economist Intelligence Unit (2023).

1) The effect on the employment rate seems to have been more negative than positive, since both aid and FDI seem to impact negatively, while only trade positively.

2) The effect on GDP per capita seems to have been more negative than positive, since both imports and FDI seem to impact negatively, while only trade positively.

3) The effect on external debt appears to have been quite positive, since all three variables appear to have impacted positively.

4) The effect on per capita consumption seems to have been more negative than positive, since both trade and FDI seem to impact negatively, while only aid positively.

5) The effect on industrial value added seems to have been more positive than negative, since both aid and trade seem to impact positively, while only FDI negatively.

6) The effect on citizens' satisfaction with the quality of public governance seems to have been more positive than negative, since both aid and FDI seem to impact positively, while only trade negatively.

Consequently, the effects of China's overall foreign policy approach on Ecuadorian development appear ambiguous. Indeed, while it seems to have a positive impact on external debt, industrial value added and citizens' satisfaction with the quality of public governance, it seems also to have a negative effect on the employment rate, GDP per capita and consumption per capita.

4.3 Quito and the Superpower Competition between Beijing and Washington: The Decline of Relations with China and the Rapprochement with the U.S.

The development of China-Ecuador relations was primarily driven by market forces. Before 2007, trade and investment with China had experienced moderate growth. The annual average of Ecuadorian exports to China was approximately US\$44 million from 2001 to 2006.²³⁷ Ecuador, like several other countries in Latin America, benefited from China's expanding middle class and need for natural resources during the early 2000s.

China's opportunities expanded following Ecuador's debt default in 2008, when international financial institutions and private financiers became reluctant to lend to the Correa regime (2007 – 2017). Hence, Chinese policy banks began to provide substantial loans, a share of which Ecuador would be compelled to allocate towards investment projects to be executed by Chinese firms. In the decade following Correa's ascent to power, exports to China experienced a twentyfold growth,

²³⁷ IMF (2024).

reaching about US\$890 million in 2017.²³⁸ China also became Ecuador's second largest trading partner that year.²³⁹ During the same period, China transitioned from being a negligible investor (ranking 136th position in 2005) to becoming one of the top five countries in terms of FDI in the country.²⁴⁰ Its position subsequently declined during the pandemic in 2020 and 2021, only to rebound in 2022.²⁴¹ During this period, Chinese policy bank loans in Ecuador exceeded US\$15 billion, establishing the Andean country as the fourth highest receiver of Chinese financing in the region. This ranking sees Ecuador behind only Venezuela and Brazil, both of which have far larger economies.²⁴²

China's financing was marked by relatively high interest rates—averaging about 6-7 %—and a dearth of transparency, as contract provisions were not made available to the public.²⁴³ Furthermore, several loans were intended to be partially repaid through the delivery of crude oil at reduced prices. Many of these deliveries are still awaiting completion. Chinese policy banks also adopted this “oil-for-loans” strategy in Venezuela, which became heavily indebted to Beijing. These loans are thus indicative of China's resource-focused strategy in Ecuador.

President Correa paid two official visits to China during his tenure, once in 2007²⁴⁴ and again in 2015.²⁴⁵ Meanwhile, Xi Jinping visited Ecuador in 2016 and exploited the occasion to establish a “strategic partnership.”²⁴⁶ Xi also inaugurated the Chinese-financed Coca Codo Sinclair hydroelectric facility, worth US\$3 billion and built by a Chinese construction company. These trips were significant in showing the mutual political and economic interests to strengthen bilateral ties.

In recent years, Ecuadorian officials, entrepreneurs, and civil society groups have significantly reassessed China's role. The growing distrust of Ecuadorians toward China has been determined by several factors, especially a change in administration in Ecuador, a series of scandals related to Chinese investment projects, and Beijing's increasing assertiveness towards Quito.

²³⁸ *Ibidem.*

²³⁹ *Ibidem.*

²⁴⁰ The People's Map of Global China (2022).

²⁴¹ Statista (2024).

²⁴² Peters (2019).

²⁴³ Valencia (2022).

²⁴⁴ The Office of the Chargé d' Affaires of the People's Republic of China in the Republic of Lithuania (2007).

²⁴⁵ Embassy of the People's Republic of China in the Kingdom of Saudi Arabia (2015).

²⁴⁶ Xinhua News (2016).

As regards the political transition in Ecuador, soon after being elected in 2017, Lenín Moreno, Correa’s former vice president and designated successor, betrayed his mentor. This occurrence would result in a fundamental shift in the country's foreign policy. Although the Moreno administration (2017 – 2021) did not openly criticize China, authorizing the country's entry into the BRI in December 2018,²⁴⁷ it distanced itself from China and began a rapprochement with the U.S. government.²⁴⁸ In late 2020, Moreno’s political shift reached its peak, endorsing the “Clean Network” initiative which was advocated by the Trump administration to discourage countries from adopting Chinese 5G technology.²⁴⁹

The reassessment of China’s value as a partner at societal level has been primarily affected by corruption scandals associated with Chinese investment projects, as well as criticisms of their construction, labor, and environmental standards. The Coca Codo Sinclair hydroelectric facility cited above was one of the most emblematic examples of these occurrences.²⁵⁰ Ecuadorian stakeholders have also complained about the terms of Chinese credit lines, citing a lack of transparency and an imbalance in the benefits received. China, in particular, is criticized for receiving hefty interest payments and oil exports at reduced prices tied to loans. Moreover, Beijing has been accused by international and national media outlets of “exporting” an authoritarian surveillance system to Ecuador through the implementation of its Ecu-911 system. The latter, originally designed to prevent crime exploiting camera technology, has allegedly been misused by the Correa government to monitor political opponents.²⁵¹

In 2020, two events had a significant influence on how Ecuadorians perceive China, although, overall, they generally tend to have a positive image of China’s vaccine diplomacy and health equipment donations during the pandemic.²⁵² In the face of considerable financial strain, Ecuador began bilateral talks to revise the repayment conditions of several Chinese loans. Amidst this process, Ecuador’s shrimp producers encountered a predicament when China, their primary export market, halted exports due to the presence of COVID-19 residues on the packaging.²⁵³ After a few weeks, the appearance of several hundred Chinese fishing vessels near Ecuadorian protected marine zone of

²⁴⁷ Yongqi (2018).

²⁴⁸ Ellis (2017).

²⁴⁹ U.S. Department of State (2021).

²⁵⁰ Casey and Krauss (2018).

²⁵¹ Mozur, Kessel, and Chan (2019).

²⁵² Embassy of the People’s Republic of China in Solomon Islands (2021).

²⁵³ Valencia (2020).

Galapagos Islands nearly triggered a diplomatic crisis.²⁵⁴ Some in Ecuador interpreted these occurrences as China exerting pressure to maintain a dominant position in debt renegotiations.

Nevertheless, the Ecuadorians' reevaluation of China's significance as an economic and political partner has not impeded the upward trend of bilateral trade. Indeed, despite its center-right ideology and affinity with the U.S., the current administration of President Guillermo Lasso (2021 – present) sought to establish a free trade agreement with Beijing on pragmatic grounds. The agreement was ultimately achieved in May 2023, granting preferential access to 99.6 % of Ecuador's current export to China, primarily consisting of agricultural and agro-industrial products.²⁵⁵ Based on projections from the Ministry of Production, Foreign Trade, Investments, and Fisheries, it is expected that in the initial year of the agreement's implementation, exports would experience a 22.8 % growth, while imports would witness a 39.1 % increase.²⁵⁶ It is also projected that Ecuadorian exports will experience an annual growth rate of 8.4 % and imports will grow by 7.8 % until 2030.²⁵⁷

Concerning the relationship with the U.S., the United States is currently Ecuador's principal trading partner²⁵⁸ and foreign direct investor.²⁵⁹ American ties with Ecuador were limited during the administration of Rafael Correa, who frequently criticized the United States, rejected counter-narcotics cooperation, abandoned his country's bilateral investment treaty with the U.S., and strengthened ties with U.S. adversaries in the region. The election of President Lenín Moreno in 2017 and Moreno's unexpected shift toward the center offered the United States an ideologically aligned partner in Quito. Center-right President Guillermo Lasso, elected in 2021, is a similarly compatible partner. Beyond ideological affinities between Quito and Washington and growing U.S.-China tensions, the United States' waning influence in the Western Hemisphere has increased the importance of Ecuador for U.S. foreign policy. In late 2020, the two countries signed a "phase one" trade deal largely centered on investment, while negotiations on a comprehensive trade agreement have stalled.²⁶⁰ In August 2021, the Ecuadorian Congress rejoined the International Centre on Settlement of Investment Disputes (ICSID).²⁶¹ This action, paired with other liberalizing reforms and greater confidence in the rule of law, has offered U.S. firms greater protections when investing in the South American country. The U.S.-Ecuador Partnership Act, passed by the Senate Foreign Relations

²⁵⁴ Collins (2020).

²⁵⁵ Belt and Road Portal (2023).

²⁵⁶ Central Bank of Ecuador (2024).

²⁵⁷ *Ibidem*.

²⁵⁸ The Observatory of Economic Complexity (2022).

²⁵⁹ International Trade Administration (2024).

²⁶⁰ U.S. Embassy and Consulates in Ecuador (2020).

²⁶¹ International Institute for Sustainable Development (2021).

Committee in March 2022, would build on political cooperation, directing the U.S. executive branch to deepen its relationship with Ecuador on a series of issues.²⁶² In July 2022, Ecuador joined the Alliance for Development in Democracy (ADD), a political bloc composed of Costa Rica, the Dominican Republic, and Panama, which has received rhetorical support from the United States.²⁶³

4.4 The Growing Imbalance of Sino-Ecuadorian Economic Relationships in the Last Decade: China's Extractive Approach at Its Best

This section will look at Sino-Ecuadorian economic relations over the past decade, examining in more detail not only the three basic components of China's foreign policy approach, namely aid, trade and FDI, but also the main areas of bilateral economic cooperation between the two countries.

4.4.1 Aid

According to data extracted from AidData,²⁶⁴ Ecuador has received a sum of US\$2.4 billion in aid from China over the past decade. Of this amount, US\$2 billion, equivalent to 83.3 %, was classified as "Other Official Flows", US\$272 million, equivalent to 11.3 %, as "Official Development Assistance", and residual US\$2 million as "Vague". More specifically, US\$2 billion, that is, 83.3% of total aid, took the form of loans, the rest as grants. Most importantly, of that aid, US\$1 billion went to the "Industry/Mining/Construction" sector, US\$745 million to the "Energy" sector, and US\$94 million to the "Transport and Storage" sector, to cite the most important three.

4.4.2 Trade

China is currently Ecuador's second largest trading partner, behind the United States. Between 2019 and the first half of 2022, however, Beijing figured Ecuador's main non-oil trade partner, surpassing the Americans who historically held the top position.²⁶⁵ Furthermore, bilateral trade between Quito and Beijing reached US\$13.1 billion in 2022, almost quadrupling from 2012.²⁶⁶ More specifically, exports from China to Ecuador have increased three times, while Beijing's imports from Ecuador have increased about seven times. In 2022, the trade balance featured an inconspicuous US\$0.53 billion surplus in Ecuador's favor, albeit due primarily to the nation's export of lower value-added agricultural and mining products as well as petroleum. Indeed, the main Ecuadorian exports to China were crustaceans (69.7 %), copper ore (19.7 %), precious metal ore (3.23 %), crude petroleum (1.65 %) and bananas (1.65 %) while it principally imported from Beijing cars (5.51 %), delivery trucks (3.9 %) and broadcasting equipment (3.52 %).²⁶⁷ More specifically, Ecuador had a large net

²⁶² U.S. Congress (2022).

²⁶³ Meyer (2022).

²⁶⁴ AidData (2024).

²⁶⁵ Central Bank of Ecuador (2024).

²⁶⁶ IMF (2024).

²⁶⁷ The Observatory of Economic Complexity (2022).

trade with China in the exports of animal products, mineral products, and vegetable products, while China had a large net trade with Ecuador in the exports of machinery, transportation equipment, and metals.²⁶⁸

4.4.3 FDI Flows

Between 2012 and 2022, cumulative net FDI flows to Ecuador from China amounted to more than US\$1 billion, with an average annual net flow of US\$101.5 million.²⁶⁹ Ecuador's oil has been traditionally the first target of major Chinese investment. However, conspicuous investment has been made by Chinese companies also in the mining, infrastructure, and agricultural sectors. Specifically, the major focus of Beijing has been on oil extraction, copper mining and the construction of hydroelectric plants and highways. Significantly, China owns the country's two most strategic mines, Mirador and San Carlos Panantza²⁷⁰, and, the most advanced hydroelectric facility, Coca Codo Sinclair, which supplies about 30 % of the national energy needs.²⁷¹

4.5 Critical Remarks

Ecuador is a middle-income country and a hybrid regime. Relations with Beijing, which were practically irrelevant before the Global Financial Crisis of 2007 - 2008, have only strengthened since mainly on the basis of purely economic considerations. Over the past decade, despite the modest size of its economy, Ecuador has been the fourth largest receiver of aid and among the top three countries in terms of FDI received from Beijing. In addition to this, it is noteworthy that the country has seen its trade volumes with China increase at twice the rate of the two significantly larger and more developed economies previously analyzed, Chile and Brazil. However, based on the results of the analysis outlined in the previous chapter, the general effects of Beijing's foreign policy approach on Ecuadorian development, as in the case of Brazil, seems to have been ambiguous. This ambiguity may be generally due to the weakness of domestic institutions and China's relatively simple access to and control of key local natural resources and infrastructure, combined with a marked discontinuity in the strategic orientation of Ecuadorian presidents vis-à-vis China and the United States. Specifically, unlike in the case of Brazil, where the leadership's approach seems to have been oscillatory, there seems to be a much sharper split between Rafael Correa's presidency in the first half of the 2012-2022 decade, with a markedly preferential approach toward Beijing rather than Washington, and the subsequent presidencies of Lenín Moreno and Guillermo Lasso in the second half of the decade, with the clear goal of diminishing China's clout in the country and drawing closer

²⁶⁸ *Ibidem.*

²⁶⁹ Statista (2024).

²⁷⁰ Quiliconi and Vasco (2018).

²⁷¹ Luist (2018).

to the United States. About Brazil, strategic vagueness was also evident during the Bolsonaro presidency, in which political leadership at the national level manifested markedly anti-Chinese rhetoric, while local governments, given the federal structure of the Brazilian state, pursued an independent favorable policy toward Beijing. Besides, the information provided in this section seems to reinforce the arguments proposed in the previous chapter regarding the effects of China's foreign policy approach on Ecuadorian development.

As regards trade, as a small, undiversified, and unsophisticated economy and thus possessing a comparative advantage only in low value-added sectors, such as mining or agriculture, the relationship with China seems to have contributed to further specialization in the production of such labor-intensive unskilled goods, of which the country has an abundant endowment. This dynamic, aided by the fact that the country, given its low level of diversification, does not suffer from competition from Chinese products in other industries, seems to have contributed to greater industrialization and employment, especially in sectors in which the country is specialized which constitute the largest share of the economy. Moreover, especially the low level of financial development, coupled with an increasing openness to trade with Beijing and a slight increase in inflationary pressures, seems to explain China's negative effect on per capita GDP. Nevertheless, this openness to trade with Beijing, combined with China's growing trade weight for the country, also seems to have contributed to Quito's greater ability to repay its foreign debt. This, in particular, has been made possible by the continued accumulation of trade surpluses over the past decade. Structural weakness of institutions as well as an excessive concentration of shrimp and copper exports to China appear to be the main culprits in the deterioration of public confidence in the ability of public governance to guide economic development. This dynamic is likely due to the formation of pressure groups by exporters who have an interest in maintaining, if not strengthening, poor public governance practices.

Concerning Chinese FDI, as for the negative effect of the latter on employment, this appears to be because Beijing-owned companies or businesses are likely to have increasing control over large shares of not only strategic sectors, such as mining or energy, but also other industrial and service sectors in which they are likely to have a significant comparative advantage over local firms. This means that any disincentivizing practices for local people to work could have a negative impact on overall employment. This seems to be what has occurred since many local workers have often complained about disincentive practices, such as the assumption of too many Chinese workers, usually in an estimated 40 to 50 %, as well as low wages, wrongful dismissals, long working hours,

and violations of safety regulations. However, continued Chinese penetration into the Ecuadorian economy through investment also seems to have contributed to greater industrialization. This seems to be mainly due to the direction of Chinese investment toward sectors where the country has a comparative advantage, especially mining, a dynamic that has contributed to further specialization and an increase in Ecuadorian industrialization. However, it cannot be ruled out also that the likely Chinese penetration in several other industrial and service sectors may have contributed to eventual technological spillovers, which in turn have further boosted industrialization, which is still too embryonic to suffer from competition with Chinese products. In any case, the flow of FDI from Beijing has also contributed to a greater ability on the part of the country to repay its external liabilities. This has been possible, in addition to the already low external liabilities in 2012 that attracted more and more Chinese investment, mainly because of their direction toward building critical infrastructure, which usually has the capacity to increase a country's overall productivity, and thus its returns from taxes, on a like-for-like basis. Part of those increased returns through taxes then appears to have been successfully allocated to repaying foreign debt by competent public institutions.

5. Concluding Remarks

This section is devoted to comparing the main evidence that emerged in each case study analyzed in this chapter for the purpose of answering the second research question, reiterated below:

If the effectiveness of China's foreign policy approach on partner countries' development differed in the last decade, what factors or mechanisms drove this difference?

An indispensable premise is that a common denominator that emerged from the analysis of the three selected countries is that Beijing appears to be primarily interested in mineral and agricultural products in all three cases. The effectiveness of China's foreign policy approach, consequently, does not appear to have been determined so much by how Beijing approached these countries but rather by the latter's agency, understood as their ability to leverage their relationship with China to further their own development goals. The agency of such countries seems to be the result of a very specific factor: the level of democracy. Specifically, higher levels of democracy appear to be strongly related, on the one hand, to the ability of the political leadership to manage, without severe ruptures, the relationship with Beijing and, on the other hand, to the capacity of public institutions to scrupulously oversee Chinese penetration of markets and, especially, its access to key natural resources and critical infrastructure. In light of the results of this chapter, the answer to the question above is that there appear to be four main factors, related to the democracy level of a specific

country, that led to different effectiveness of China's foreign policy approach on the development of the three countries selected.

First, the effectiveness of China's foreign policy approach seems to be positively correlated to the competence of public institutions. Indeed, it seems that the more competent public institutions are, the more effectively they are able to supervise economic activity, particularly with regard to procurement operations, foreign investment screening and hostile take-overs.

Second, the effectiveness of China's foreign policy approach appears to be positively correlated with the presence of continuity in a country's strategic orientation toward Beijing. Continuity of strategic orientation is simply understood as the continued willingness to cooperate with Beijing on a pragmatic basis, regardless of the political ideology of the leadership. Indeed, the more continuous a country was in its strategic orientation toward China, the better the effectiveness of the bilateral relationship in promoting its development. Constancy in strategic orientation enables the building of mutual trust and the continuous refinement of the appropriate mechanisms for managing and implementing the relationship, leading to better development results.

Third, the effectiveness of Beijing's foreign policy seems to be all the less the more strategic clarity of a country is lower. The cases of Brazil and Ecuador are illustrative in this regard. Indeed, both countries have been discontinuous in their strategic orientation toward China over the past decade, but Brazil has expressed a less clear strategic line than Ecuador's. This seems to be matched in the case of Brazil by even worse development effects than Ecuador in relation to its relationship with China. Indeed, while in Brazil Rousseff and Temer tried to maintain good relations with both Beijing and Washington only to be supplanted by Bolsonaro's anti-Chinese radicalism, Ecuadorian presidents have all expressed a clear strategic line, radically pro-Chinese in Correa's case, pro-American in the cases of Moreno and Lasso. About Brazil, strategic vagueness was also evident during the Bolsonaro presidency, in which political leadership at the national level manifested markedly anti-Chinese rhetoric, while local governments, given the federal structure of the Brazilian state, pursued an independent, often favorable policy toward Beijing. Therefore, the strategic clarity of Ecuadorian leadership, even when not favorable to China, has probably produced fewer negative results than in Brazil because it has more easily allowed the creation and implementation of a relationship based on pragmatism. In the case of Chile, besides strategic continuity, the transparency of leadership and institutions in relations with Beijing and Washington has allowed Santiago to benefit from both, without producing cracks in either relationship.

Fourth, the effectiveness of China's foreign policy approach appears to be negatively correlated with Beijing's ability to easily access a given country's key natural resources and critical infrastructure. Indeed, the less easy this possibility was for China, the better the effectiveness of the bilateral relationship in promoting the partner country's development. However, this does not seem to imply that China's access to raw materials and infrastructure must be denied in order to achieve positive results, but simply properly supervised and managed, as the successful case of Chile shows.

The above conditions seem to be better met the higher the level of democracy in partner countries.

These remarks should not be interpreted as axioms but rather as preliminary findings. Indeed, it is important to bear in mind that the empirical basis derived in the previous chapter to support the qualitative analysis carried out in the present one returned mostly non-significant results, on which the cautious generalizations drawn are highly dependent. Moreover, the remarks are based on the analysis conducted on only three case studies, which is insufficient to draw firm conclusions. Nevertheless, the analysis seems to confirm H2, namely that higher levels of democracy are associated with a country's better ability to mediate engagement with China and thus with better development outcomes. Indeed, higher levels of democracy appear to be strongly related, on the one hand, to the ability of the political leadership to manage, without severe ruptures, the relationship with Beijing and, on the other hand, to the capacity of public institutions to scrupulously oversee Chinese penetration of markets and, especially, its access to key natural resources and critical infrastructure. Specifically, based on the qualitative analysis, China's effectiveness in promoting development seem to be much better the more the ease for Beijing to access natural resources and critical infrastructure is lower while Latin American countries' strategic clarity and continuity as well as the competence of their public institutions is higher. These conditions seem to be better met the higher the level of democracy in partner countries.

Conclusions

The two research questions of the thesis were:

- 1) Did Chinese foreign aid, trade and FDI, understood as basic components of China's foreign policy approach, foster development in Latin American countries between 2012 and 2022?
- 2) If the effectiveness of China's foreign policy approach on partner countries' development differed in the last decade, what factors or mechanisms drove this difference?

Before answering these questions, a brief illustration of the characteristics of China's development aid regime, whose importance as a tool of Chinese foreign policy has grown noticeably in the last decade, especially in the Global South, the historical evolution of relations between Beijing and Latin American countries, and a review of the literature about the effects of aid, trade and FDI on growth has first been provided. In light of the above, the basic hypotheses underlying the research as well as their fundamental assumptions were then set forth. The two hypotheses were:

H1: Chinese aid, trade and FDI are directly associated with development in Latin American countries.

H2: The impact of Chinese aid, trade and FDI on the development of partner countries depends on their degree of democracy. Chinese foreign policy approach in Latin American democracies leads to better development outcomes, or is more effective, than lower-scoring countries on the Democracy Index.

In order to answer the research questions and test the hypotheses, it was decided to adopt a two-part mixed methods approach of conducting a quantitative econometric analysis and comparative case studies. Specifically, the first method was adopted in the second chapter to answer the first research question, while the second method was adopted in the third chapter to answer the second research question. Quantitative analysis about the effects of Chinese aid, trade and FDI on development was carried out on a sample of six Latin American countries - Argentina, Brazil, Chile, Colombia, Ecuador and Peru - and on six development indicators, namely employment, GDP per capita, external debt, consumption per capita, industrial value added and citizens' satisfaction with the ability of public governance to promote economic development. The qualitative analysis focused instead on the case studies of Brazil, Chile and Ecuador. Specifically, the main findings from the study are as follows.

In relation to the first research question, mainly due to an insufficient number of statistically significant results, it has not been possible to conclude anything general, either at the regional or individual country level, about the effects of aid, trade and investment on development. This occurred also because aid, trade and investment often tended to have contradictory effects with respect to each other, which made it very difficult to figure out which effect prevailed over the others. Consequently, it cannot also be concluded whether H1 is true or false. Moreover, the least number of statistically significant results were unfortunately obtained precisely about the effects of the variable of greatest interest, development aid. The main reason for this seems to have been the absence of complete data on aid from China, which was attempted to be remedied by resorting to the inclusion of the mean value of the available data in place of the missing data. The analysis also showed the presence of multicollinearity, meaning that the models often failed to explain the effects of the independent variables, namely aid, trade and FDI flows, in a statistically significant way, partly because of their high mutual correlation. This is particularly evident from the fact that the highest number of statistically significant results was obtained through the second model in which, in addition to all three independent variables being present, a lagged endogenous variable was also included. However, econometric analysis returned some statistically significant and economically meaningful results at the individual country level, to which an explanation based on economic theory and some contextual information has been provided.

Concerning the second research question, a common denominator that emerged from the qualitative analysis is that Beijing appears to be primarily interested in mineral and agricultural products in all three case studies selected. The effectiveness of China's foreign policy approach, consequently, does not appear to have been determined so much by how Beijing approached these countries but rather by the latter's agency, understood as their ability to leverage their relationship with China to further their own development goals. The agency of such countries seems to be fundamentally the result of a very specific factor: the level of democracy. Indeed, higher levels of democracy appear to be strongly related, on the one hand, to the ability of the political leadership to manage, without severe ruptures, the relationship with Beijing and, on the other hand, to the capacity of public institutions to scrupulously oversee Chinese penetration of markets and, especially, its access to key natural resources and critical infrastructure. Specifically, based on the qualitative analysis, China's effectiveness in promoting development seem to be much better the more the ease for Beijing to access natural resources and critical infrastructure is lower while Latin American countries' strategic clarity and continuity as well as the competence of their public institutions is

higher. These conditions seem to be better met the higher the level of democracy in partner countries. Besides offering a possible answer to the second research question, this point seems to confirm the plausibility of H2, although the analysis of only three case studies, also based on not statistically significant results, does not allow to draw firm conclusions either.

The main message of the thesis is that it is possible to conclude very little with an acceptable margin of certainty about the effects of China's aid, trade and FDI on the development of Latin American countries. Thus, it would also be unwise to make any inferences about the power that returns to Beijing from its relationships with regional countries to be exploited within the broader competition in the Global South with Washington to redefine the international order. However, although China's preferences are directed toward mineral and agricultural resources and thus often takes an extractive stance, leading observers to believe that the relationship with China tends to have negative effects on a Latin American country's economic development, the relationship with Beijing may prove beneficial all the same. Specifically, this may occur if the partner state can manage the relationship well, not causing sudden cracks, and carefully supervise China's access to key natural resources and critical infrastructure. These capabilities usually seem to be associated with higher levels of democracy, which are also matched by more competent political leadership and public institutions. Consequently, agency by Latin American countries seems to have played a key role in determining the results of China's foreign policy approach on their development. Nonetheless, it is important to acknowledge the risk of overestimating agency in order to avoid attributing "underdevelopment" in Latin American countries only to internal factors. Indeed, it is always necessary to consider also the realities and structural conditions of global politics and economics when exploring agency. Hence, it is essential to acknowledge China's escalating clout and power in terms of its capacity to extract and exploit resources.

Bibliography

Adeniyi, O. A., Omisakin, D. O. A., Egwaikhide, F., and Oyinlola, A. (2012). Foreign direct investment, economic growth and financial sector development in small open developing economies. *Economic Analysis & Policy*, 42(1).

Agosin, M. R., and Machado, R. (2005). Foreign investment in developing countries: does it crowd in domestic investment? *Oxford Development Studies*, 33(2), 149-162.

Agosin, M. R., and Mayer, R. (2000). Foreign direct investment: does it crowd in domestic investment. In *United Nations Conference on Trade and Development Geneva, Switzerland, Working Paper* (Vol. 146).

Ahmad, E., and Hamdani, A. (2003). The role of foreign direct investment in economic growth. *Pakistan Economic and Social Review*, 29-43.

AidData. (2024). *Global Chinese development finance*. <https://china.aiddata.org/>.

Aitken, B. J., and Harrison, A. E. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *American Economic Review*, 89(3), 605-618.

Alfaro, L., Chanda, A., Kalemli-Ozcan, S., and Sayek, S. (2004). FDI and economic growth: the role of local financial markets. *Journal of International Economics*, 64(1), 89-112.

American University. (2022). *Survey of opinion leaders: assessments of China's role in Latin America and the Caribbean*.
https://www.american.edu/centers/latin-american-latino-studies/upload/survey-report_2022_01-20-finalfinal-7570.pdf.

Ang, J. B. (2009). Financial development and the FDI-growth nexus: the Malaysian experience. *Applied Economics*, 41(13), 1595-1601.

Anwar, S., and Nguyen, L. P. (2011). Foreign direct investment and export spillovers: evidence from Vietnam. *International Business Review*, 20(2), 177-193.

Azolibe, C. B. (2022). External debt accumulation and foreign direct investment inflows in Sub-Saharan Africa: analysing the interaction effects of selected macroeconomic factors. *Review of Black Political Economy*, 49(3), 327–352.

Barrell, R., and Pain, N. (1997). Foreign direct investment, technological change, and economic growth within Europe. *The Economic Journal*, 107(445), 1770-1786.

Barro, R. J. (2001). Human capital and growth. *The American Economic Review*, 91(2), 12-17.

Basu, P., and Guariglia, A. (2007). Foreign direct investment, inequality, and growth. *Journal of Macroeconomics*, 29(4), 824-839.

Belt and Road Portal. (2018). *Chile joins China's Belt and Road Initiative*. <https://eng.yidaiyilu.gov.cn/p/70834.html>.

Belt and Road Portal. (2023). *China, Ecuador signs free trade agreement*. <https://eng.yidaiyilu.gov.cn/p/317963.html>.

Bengoa, M., and Sanchez-Robles, B. (2003). Does foreign direct investment promote growth? Recent evidence from Latin America. *Universidad de Cantabria, mimeo*.

Bjorvatn, K. (2000). FDI in LDCs: facts, theory and empirical evidence. *NHH Brage – Open institutional repository*. <https://openaccess.nhh.no/nhh-xmlui/handle/11250/166018>.

Boadle, A. (2013). Brazil's Roussef calls off state visit to U.S. over spying. *Reuters*. <https://www.reuters.com/article/idUSDEE98G0EG/>.

Borensztein, E., De Gregorio, J., and Lee, J. W. (1998). How does foreign direct investment affect economic growth? *Journal of International Economics*, 45(1), 115-135.

Bräutigam, D., and Gallagher, K. P. (2014). Bartering globalization: China's commodity-backed finance in Africa and Latin America. *Global Policy*, 5(3), 346-352.

Brems, H. (1970). A growth model of international direct investment. *The American Economic Review*, 60(3), 320-331.

BRICS Information Centre. (2009). *Joint statement of the BRIC countries' leaders. Yekaterinburg, Russia, June 16, 2009.* <http://www.brics.utoronto.ca/docs/090616-leaders.html>.

Brown, W. (2012). A question of agency: Africa in international politics. *Third World Quarterly*, 33(10), 1889-1908.

Busilli, V. S., and Jaime, M. B. (2021). Chinese investments in Brazil: economic diplomacy in bilateral relations. *Contexto Internacional*, 43(3), 541–564.

Busse, M. and Groning, S. (2008). Does trade openness lead to better governance? *Hamburg Institute of International Economics*. <https://www.etsg.org/ETSG2009/papers/groning.pdf>.

Cariello, T. and Augusto de Castro Neves, L. (2022). “China’s growing presence in Brazil and Latin America” in Wang, H. and Miao, L. (2022). Transition and opportunity. Strategies from business leaders on making the most of China’s future. *Center for China & Globalization*. pp 73-87. https://www.researchgate.net/publication/358670560_China's_Growing_Presence_in_Brazil_and_Latin_America.

Carkovic, M., and Levine, R. (2002). Does foreign direct investment accelerate economic growth. *University of Minnesota Department of Finance Working Paper*.

Carnegie Endowment for International Peace. (2012). *Conditionality in China’s aid model*. <https://carnegieendowment.org/2012/01/10/conditionality-in-china-s-aid-model-event-4024>.

Carvalho, R. (2019). How Chinese projects are tearing communities in Ecuador apart. *South China Morning Post*. <https://multimedia.scmp.com/week-asia/article/3011618/beijing-conquest-latin-america/chapter02.html>.

Casey, N. and Krauss, C. (2018). It doesn't matter if Ecuador can afford this dam. China still gets paid. *The New York Times*.

<https://www.nytimes.com/2018/12/24/world/americas/ecuador-china-dam.html>.

Central Bank of Chile. (2024). *Foreign direct investment by country, economic sector, and region*. <https://www.bcentral.cl/en/web/banco-central/areas/statistics/foreign-direct-investment>.

Central Bank of Ecuador. (2024). *Subscription of the free trade agreement with China*. <https://www.bce.fin.ec/en/press-release/subscription-of-the-free-trade-agreement-with-china-a-great-opportunity-for-ecuador>.

The People's Map of Global China. (2022). *Ecuador - The People's Map of Global China*. <https://thepeoplesmap.net/country/ecuador/>.

China's Ministry of Commerce. (2015). *China and Chile sign the memorandum of understanding for upgrading the FTA*.

http://fta.mofcom.gov.cn/enarticle/enchile/enchilenews/201505/21775_1.html.

Custer, S., Dreher, A., Elston, T. B., Fuchs, A., Ghose, S., Lin, J., ... and Zhang, S. (2023). Tracking Chinese development finance: an application of AidData's TUFF 3.0 methodology. *Williamsburg, VA: AidData at William & Mary*.

CIDCA. (2021). *China International Development Agency, Ministry of Foreign Affairs and Ministry Commerce Order (No.1, 2021) "foreign aid management measures"*. http://www.cidca.gov.cn/2021-08/31/c_1211351312.htm.

Collins, D. (2020). Alarm over discovery of hundreds of Chinese fishing vessels near Galápagos' Islands. *The Guardian*.

<https://www.theguardian.com/environment/2020/jul/27/chinese-fishing-vessels-galapagos-islands>.

Creutzfeldt, B. (2019). Overcoming the greatest distance: China in Latin America. *E-International Relations*.

<https://www.e-ir.info/2019/02/27/overcoming-the-greatest-distance-china-in-latin-america/>.

Croese, S. (2013). Uncovering African agency: Angola's management of China's credit lines. *South African Journal of International Affairs*, 20(3), 460–462.

Damijan, J. P., Knell, M., Majcen, B., and Rojec, M. (2003). The role of FDI, R&D accumulation and trade in transferring technology to transition countries: evidence from firm panel data for eight transition countries. *Economic Systems*, 27(2), 189-204.

De Andrade, F. M. R., Barreto, T. B., Herrera-Feligueras, A., Ugolini, A., and Lu, Y. (2021). Twitter in Brazil: discourses on China in times of coronavirus. *Social Sciences & Humanities Open*, 3(1), 100118.

De La Torre, A., and Ize, A. (2019). Latin American growth: a trade perspective. *World Bank Policy Research Working Paper*, (8871).

De Mello Jr., L. R. (1997). Foreign direct investment in developing countries and growth: a selective survey. *The Journal of Development Studies*, 34(1), 1-34.

Delivorias, A. (2022). Brazil's economy – Challenges for the new president. *European Parliamentary Research Service - Briefing*.
[https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/738196/EPRS_BRI\(2022\)738196_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/738196/EPRS_BRI(2022)738196_EN.pdf).

Djankov, S., and Hoekman, B. (2000). Foreign investment and productivity growth in Czech enterprises. *The World Bank Economic Review*, 14(1), 49-64.

Djankov, S., Montalvo, J. G., and Reynal-Querol, M. (2006). Does foreign aid help. *Cato Journal*, 26(1), 1-28.

Duarte, L. (2023). Brazil's contentious recent road to building a strategic partnership with China. *Center for Latin American & Latino Studies*.
<https://www.american.edu/centers/latin-american-latino-studies/upload/iwpr-china-brazil-final.pdf>.

Dutt, A. K. (1998). Direct foreign investment, transnational corporations and growth: some empirical evidence and a North-South model. In *Transnational Corporations and the Global Economy* (164-191). London: Palgrave Macmillan UK.

Economist Intelligence Unit. (2023). *Democracy Index 2022 | Economist Intelligence Unit*. <https://www.eiu.com/n/campaigns/democracy-index-2022/>.

Ellis, R. E. (2017). Ecuador under President Moreno: rethinking the U.S. relationship. *Global Americans*.

<https://globalamericans.org/ecuador-president-moreno-rethinking-u-s-relationship-latin-americas-left/>.

Ellis, R. E. (2023a). The state of and prospects for Brazil's relations with China. *Global Americans*. <https://revanellis.com/the-state-of-and-prospects-for-brazils-relations-with-china>.

Ellis, R. E. (2023b). China's advance in Chile. *Dialogo Americas*. <https://revanellis.com/chinas-advance-in-chile.html>.

Embassy of the People's Republic of China in Solomon Islands. (2021). *Xi Jinping speaks with Ecuadorian President Guillermo Lasso on the phone*. http://sb.china-embassy.gov.cn/eng/zgyw_12/202108/t20210831_8900559.htm.

Embassy of the People's Republic of China in the Kingdom of Saudi Arabia. (2015). *Li Keqiang meets with President Rafael Correa of Ecuador*. http://sa.china-embassy.gov.cn/eng/zgyw/201501/t20150112_1647958.htm.

Fernandez, P. A. (2022). Chile's once-pioneering relationship with China is turning into dependency. *MERICs - Mercator Institute for China Studies*. <https://merics.org/en/chiles-once-pioneering-relationship-china-turning-dependency>.

Gachúz, J. C. (2012). Chile's economic and political relationship with China. *Journal of Current Chinese Affairs*, 41(1), 133–154.

Garcia, A., Rodriguez E. M., Brito, M. C. and Grinsztejn, C. (2023). Chinese investments in Brazil: investment data, public policies for investment facilitation and the case of the Manaus industrial pole. *BRICS Policy Center*.

https://bricspolicycenter.org/wp-content/uploads/2023/07/BRICS_ChinaBrasil-7.pdf.

Global Times. (2012). *China, Chile decides to upgrade ties to strategic partnership*.

<https://www.globaltimes.cn/content/717426.shtml>.

Gonzalez, A., Fellmann, C., Larequi, J., Klinnert, J., and Asturias, R. (2022). Ecuador country report. *Navarra Center for International Development*.

<https://ncid.unav.edu/download/file/fid/3611>.

Görg, H., and Greenaway, D. (2004). Much ado about nothing? Do domestic firms really benefit from foreign direct investment? *The World Bank Research Observer*, 19(2), 171-197.

Haibing, Z. (2017). The development and transformation of China's foreign aid. *Parallel Perspectives on the Global Economic Order: A US-China Essay Collection*. Washington: Centre for Strategic and International Studies.

<https://www.csis.org/development-and-transformation-chinas-foreign-aid>.

Hailat, M. A., and Magableh, S. (2018). Foreign aid and per-capita GDP: an empirical study of Jordan. *Journal of Economic & Management Perspectives*, 12(1), 48-60.

Hamadeh, N., Van Rompaey, C., and Metreau, E. (2024). World Bank Group country classifications by income level for FY24 (July 1, 2023- June 30, 2024). *World Bank Blogs*.

<https://blogs.worldbank.org/en/odata/new-world-bank-group-country-classifications-income-level-fy24>.

Hankinson, S. (2023). Chile Out? A safe Visa Waiver Program requires tough standards. *The Heritage Foundation*.

<https://www.heritage.org/homeland-security/commentary/chile-out-safe-visa-waiver-program-requires-tough-standards>.

Harris, G. (2015). Dilma Rousseff of Brazil visits U.S. amid turbulence at home. *The New York Times*.

<https://www.nytimes.com/2015/07/01/world/americas/leader-of-brazil-visits-amid-home-turbulence.html>.

Harrison, A., and Rodríguez-Clare, A. (2010). Trade, foreign investment, and industrial policy for developing countries. *Handbook of Development Economics*, 5, 4039-4214.

Hermes, N., and Lensink, R. (2003). Foreign direct investment, financial development and economic growth. *The Journal of Development Studies*, 40(1), 142-163.

Herrmann, M. (2019). Brazil waives visa requirements for U.S. citizens. *Forbes*. <https://www.forbes.com/sites/micheleherrmann/2019/03/21/brazil-waives-entry-visa-requirements/?sh=2404ecb33470#781546863347>.

Herzer, D. (2012). How does foreign direct investment really affect developing countries' growth? *Review of International Economics*, 20(2), 396-414.

Howitt, P., and Aghion, P. (1998). Capital accumulation and innovation as complementary factors in long-run growth. *Journal of Economic Growth*, 3, 111-130.

Hu, A. G., and Jefferson, G. H. (2003). FDI impact and spillover: evidence from China's electronic and textile industries. *The World Economy*, 25 (8), 1063-1076.

Hung, L.D. (2022). External debts and trade balance: an international evidence. *Hal – Open Science*. <https://hal.science/hal-03863192/document>.

IMF. (2024). *IMF data*. <https://data.imf.org/regular.aspx?key=61013712>.

International Institute for Sustainable Development. (2021). *Ecuador rejoins the ICSID Convention*. <https://www.iisd.org/itn/en/2021/10/07/ecuador-rejoins-the-icsid-convention/>.

International Trade Administration. (2023). *Chile - Agricultural sector*. <https://www.trade.gov/country-commercial-guides/chile-agricultural->

Lehoczki, B. (2015). Relations between China and Latin America: inter-regionalism beyond the triad. *Society and Economy. In Central and Eastern Europe | Journal of the Corvinus University of Budapest*. 37(3), 379-402.

Lessmann, C. (2013). Foreign direct investment and regional inequality: a panel data analysis. *China Economic Review*, 24, 129-149.

Liu Z. and Liu X. (2022). Is China's infrastructure development experience unique? *Journal of Chinese Economic and Business Studies*, 21(3), 323-340.

Liu, X., Burridge, P., and Sinclair, P. J. (2002). Relationships between economic growth, foreign direct investment and trade: evidence from China. *Applied Economics*, 34(11), 1433-1440.

López-Córdova, E., Hernandez, G. E., and Monge-Naranjo, A. (2003). NAFTA and manufacturing productivity in Mexico [with comments]. *Economía*, 4(1), 55-98.

Lucas Jr., R. E. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22(1), 3-42.

Luist, L. (2018). Ecuador will hire an international firm to audit its largest hydroelectric plant. *La RepúblicaEC*.

<https://www.larepublica.ec/blog/2018/06/01/ecuador-contratara-firma-internacional-para-realizar-auditoria-a-su-mayor-hidroelectrica/>.

Magri, C. (2023). A journey through Chile's lithium landscape. *Columbia Global Centers*. <https://globalcenters.columbia.edu/news/journey-through-chiles-lithium-landscape>.

Marantidou, V., and Glosserman, B. (2015). China's double standard? Fighting corruption at home, turning a blind eye abroad. In *PacNet No. 13, Pacific Forum. Center for Strategic and International Studies (CSIS)*. <https://www.files.ethz.ch/isn/189192/Pac1513.pdf>.

McDonough, P. (1980). Dependent development: the alliance of multinational, state, and local capital in Brazil. *American Political Science Review*, 74(1), 234-235.

Meyer, P. J. (2022). Alliance for Development in Democracy: background for roundtable. *Congressional Research Service*.
<https://www.congress.gov/117/meeting/house/115169/documents/HMTG-117-FA07-20220930-SD001.pdf>.

Ministry of Foreign Affairs of the People's Republic of China. (2016a). *Xi Jinping meets with President Michel Temer of Brazil*.
https://www.fmprc.gov.cn/eng/topics_665678/2016zt/XJPCXBZCESGJTLDLDRDSYCFHJCXYGHD/201609/t20160906_704089.html.

Ministry of Foreign Affairs of the People's Republic of China. (2016b). *China, Chile lift ties to comprehensive strategic partnership*.
https://www.fmprc.gov.cn/mfa_eng/sp/201611/t20161125_468064.html.

Ministry of Foreign Affairs of the People's Republic of China. (2012). *Premier Wen Jiabao holds talks with Brazilian President Dilma Roussef*.
https://www.fmprc.gov.cn/eng/gjhdq_665435/3447_665449/3473_665008/3475_665012/201206/t20120626_594730.html.

Miquel-Florensa, J. (2007). Aid effectiveness: a comparison of tied and untied aid. *York University, Canada*.
http://dept.econ.yorku.ca/research/workingPapers/working_papers/2007/April2007_TiedUntied.pdf.

Moore, M. (2009). China overtakes the US as Brazil's largest trading partner. *The Telegraph*.
<https://www.telegraph.co.uk/finance/economics/5296515/China-overtakes-the-US-as-Brazils-largest-trading-partner.html>.

Mora, F. O. (1999). Sino-Latin American relations: sources and consequences: 1977–1997. *Journal of Interamerican Studies and World Affairs*, 41(2), 91–116.

Morreale, B., and Jain, P. (2019). Foreign aid and Asian donors. *The SAGE Handbook of Asian Foreign Policy*, SAGE, Tokyo, Japan, 500-520.

Moura, R. (2023). Argentina and Brazil's divergent approaches to China's Belt and Road. *The Diplomat*.

<https://thediplomat.com/2023/11/Argentina-and-brazils-divergent-approaches-to-chinas-belt-and-road/>.

Mozur, P., Kessel, M. J., and Chan, M. (2019). Made in China, exported to the world: the surveillance state. *The New York Times*.

<https://www.nytimes.com/2019/04/24/technology/ecuador-surveillance-cameras-police-government.html>.

Musibah, A. S., Shahzad, A., and Fadzil, F. H. B. (2015). Impact of foreign investment in the Yemen's economic growth: the country political stability as a main issue. *Asian Social Science*, 11(4), 102.

Nowak-Lehmann F., Dreher, A., Herzer, D., Klasen, S. and Martínez-Zarzoso, I. (2012). Does foreign aid really raise per capita income? A time series perspective. *The Canadian Journal of Economics*, 45(1), 288-313.

OECD. (2007). *OECD glossary of statistical terms*.

https://www.oecd-ilibrary.org/economics/oecd-glossary-of-statistical-terms_9789264055087-en.

OECD. (2008). *History: the DAC and efforts to untie aid*.

[https://www.oecd.org/dac/untiedaid/untyingaidtherighttochoose.htm#:~:text=One%20major%20issue%20has%20been,\(%E2%80%9Ctied%20aid%E2%80%9D\)](https://www.oecd.org/dac/untiedaid/untyingaidtherighttochoose.htm#:~:text=One%20major%20issue%20has%20been,(%E2%80%9Ctied%20aid%E2%80%9D)).

OECD. (2010). *Chile's accession to the OECD*.

<https://www.oecd.org/chile/chilesaccessiontotheoecd.htm>.

Office of the United States Trade Representative. (2003). *United States and Chile sign historic free trade agreement*.

<https://ustr.gov/about-us/policy-offices/press-office/press-releases/archives/2003/june/united-states-and-chile-sign-historic-freetr>.

Oumbe, H. T., Djeunankan, R., and Mougno, A. K. A. (2024). Analysing the effect of foreign aid on industrialization: evidence from Africa. *International Economics*, 100498.

Palma, P. (2022). The Chinese in Peru. *Oxford Research Encyclopedia of Latin American History*.
<https://oxfordre.com/latinamericanhistory/view/10.1093/acrefore/9780199366439.001.0001/acrefore-9780199366439-e-1023>.

Panizza, U. (2008). Domestic and external public debt in developing countries. *United Nations Conference on Trade and Development Discussion Paper No. 188*.
<https://dx.doi.org/10.2139/ssrn.1147669>.

Paraguassu, L. (2023). Brazil's Lula says "neither Putin nor Zelensky ready for peace". *Reuters*.
<https://www.reuters.com/world/americas/brazils-lula-says-neither-putin-nor-zelenskiy-ready-peace-2023-08-02/>.

Paszak, P. (2020). China's growing influence in international organizations. *Warsaw Institute*.
<https://warsawinstitute.org/chinas-growing-influence-international-organizations/>.

Peters, E. D. (2019). China's financing in the Latin America and the Caribbean. *Universidad Nacional Autonoma de Mexico*.
https://dusselpeters.com/CECHIMEX/20191001_CECHIMEX_REDALC_Chinas_financing_in_Latin_America_and_the_Caribbean_Enrique_Dussel_Peters.pdf.

Prasad, E. (2011). The renminbi rises but will not rival the dollar. *Brookings Institute*.
<https://www.brookings.edu/articles/the-renminbi-rises-but-will-not-rival-the-dollar/>.

Przeworski, A. (1995). *Sustainable democracy*. Cambridge University Press.

Qayyum, U., and Haider, A. (2012). Foreign aid, external debt and economic growth nexus in low-income countries: the role of institutional quality. *The Pakistan Development Review*, 51(4), 97–115.

Quiliconi, C., and Vasco, P. R. (2021). Chinese mining and indigenous resistance in Ecuador.

Carnegie Endowment for International Peace.

<https://carnegieendowment.org/2021/09/20/chinese-mining-and-indigenous-resistance-in-ecuador-pub85382#:~:text=Mergers%20and%20acquisitions%20have%20been,heavily%20involves%20state%20firms.>

Reis, A. B. (2001). On the welfare effects of foreign investment. *Journal of International Economics*, 54(2), 411-427.

Romero, J. (2012). Foreign direct investment and economic growth in Mexico: 1940-2011. *Economic Research*, 71 (282), 109-147.

Rostow, W. W. (1990). *The stages of economic growth: a non-communist manifesto*. Cambridge University.

Sahoo, P. and Dash, R. K. (2022). Does FDI have differential impacts on export? *International Economics*, 172, 227-237.

Shalal, A. (2021). Report shows China's growing clout at World Bank, global institutions. *Reuters*.

<https://www.reuters.com/business/finance/report-shows-chinas-growing-clout-world-bank-global-institutions-2021-11-18/>.

Smarzynska, B. K. (2002). Determinants of spillovers from foreign direct investment through backward linkages. *World Bank Policy Research*, 1-29.

Snyder, D. W. (1996). Foreign aid and private investment in developing economies. *Journal of International Development: The Journal of the Development Studies Association*, 8(6), 735-745.

Soreide, T. (2001). FDI and industrialization. *Michelsen Institute of Development Studies and Human Rights, Working Paper 2001 No. 3*.

<https://www.cmi.no/publications/file/942-why-technology-transfer-and-newindustrial.pdf>.

Statista. (2024). *Statista – The statistics portal*. <https://www.statista.com/>.

Stuenkel, O. (2018). Brazil-China ties to face test under Bolsonaro. *Americas Quarterly*. <https://www.americasquarterly.org/article/brazil-china-ties-to-face-test-under-bolsonaro/>.

Stuenkel, O. (2020). China's diplomats are going on the offensive in Brazil. *Foreign Policy*. <https://foreignpolicy.com/2020/05/15/chinas-diplomats-are-going-on-the-offensive-in-brazil/>.

Suanes, M., and Roca-Sagalés, O. (2015). Foreign direct investment, economic growth and inequality in Latin America. *The Economic Quarter*, 82 (327), 675-706.

Svensonn, J. (2000a). When is foreign aid policy credible? Aid dependence and conditionality. *Journal of Development Economics*, 61(1), 61-84.

Svensson, J. (2000b). Foreign aid and rent-seeking. *Journal of International Economics*, 51(2), 437-461.

Tan, B. W., and Tang, C. F. (2016). Examining the causal linkages among domestic investment, FDI, trade, interest rate and economic growth in ASEAN-5 countries. *International Journal of Economics and Financial Issues*, 6(1), 214-220.

The Observatory of Economic Complexity. (2022). *The Observatory of Economic Complexity – OEC world*. <https://oec.world/en/>.

The Office of the Chargé d' Affaires of the People's Republic of China in the Republic of Lithuania. (2007). *Ecuadorian President to visit China*. http://lt.china-office.gov.cn/eng/xwdt/200711/t20071114_2689002.htm.

The State Council of the People's Republic of China. (2021). "Chinese international development cooperation in the new era" *White Paper*. <http://english.mee.gov.cn/Resources/publications/Whitep/202101/P020210122374486901993.pdf>.

The State Council of The People's Republic of China. (2014). *China's foreign aid (2014)*. http://english.www.gov.cn/archive/white_paper/2014/08/23/content_281474982986592.htm.

The United Nations. (2014). “Country classification” - Table C “Developing economies by region”.

https://www.un.org/en/development/desa/policy/wesp/wesp_current/2014wesp_country_classification.pdf.

The World Bank. (2022). *World development indicators – World Bank*.

<https://wdi.worldbank.org/>.

Torres, G. B. (2020). Chinese foreign direct investment in Brazil: evolution, trends and concerns over critical infrastructure. *Pontificia Universidad Catolica de Rio de Janeiro, COLECCION, 31 (1)*.

<https://repositorio.uca.edu.ar/bitstream/123456789/9858/1/chinese-foreing-direct-investment%20%281%29.pdf>.

Transparency International. (2024). *2022 Corruption Perceptions Index: explore the results*.

<https://www.transparency.org/en/cpi/2022>.

Turnovsky, S. J., Tekin, S., and Cerra, V. (2008). Foreign aid and real exchange rate adjustments in a financially constrained dependent economy. *IMF Working Paper, 08(204)*, 1-45.

Tyler, C. D. and Ambrosano, T. (2016). Investment Partnership Program. *Hogan Lovells*.

<https://www.hoganlovells.com/~media/hogan-lovells/pdf/debt-capital-markets-global-insights/investment-partnership-program.pdf?la=en#:~:text=On%20September%2013%2C%202016%20Brazil,private%20sector%20in%20infrastructure%20projects>.

U.S. Congress. (2022). *United States - Ecuador Partnership Act of 2022*.

<https://www.congress.gov/bill/117th-congress/senate-bill/3591>.

U.S. Department of State. (2021). *The Clean Network – United States Department of State*.

<https://2017-2021.state.gov/the-clean-network/#:~:text=Ecuador%20supports%20the%20principles%20of,economic%20growth%20through%20digital%20transformation>.

U.S. Department of State. (2023). *2023 investment climate statement: Brazil*. <https://www.state.gov/reports/2023-investment-climate-statements/brazil/>.

U.S. Embassy and Consulates in Brazil. (2024a). *Bicentennial of U.S.-Brazil relations*. <https://br.usembassy.gov/bicentennial-of-u-s-brazil-relations/#:~:text=On%20May%2026%2C%201824%2C%20U.S.,with%20the%20newly%20born%20state.>

U.S. Embassy and Consulates in Brazil. (2024b). *Fact sheet: U.S. relations with Brazil*. <https://br.usembassy.gov/fact-sheet-u-s-relations-with-brazil/#:~:text=Brazil%20became%20a%20Major%20Non,and%20Brazilian%20defense%20technology%20companies.>

U.S. Embassy and Consulates in Ecuador. (2020). *United States and Ecuador sign new protocol on trade rules and transparency*. <https://ec.usembassy.gov/united-states-and-ecuador-sign-new-protocol-on-trade-rules-and-transparency/>.

U.S. Energy Information Administration. (2021). *Hydropower made up 66% of Brazil's electricity generation*. <https://www.eia.gov/todayinenergy/detail.php?id=49436>.

U.S. Energy Information Administration. (2023). *What countries are the top producers and consumers of oil?* <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>.

U.S. Mission in Geneva. (2023). *U.S. opening statement at the trade policy review of Chile*. <https://geneva.usmission.gov/2023/12/14/u-s-opening-statement-at-the-trade-policy-review-of-chile/>.

UNCTAD Secretariat. (2013). *The impact of trade on employment and poverty reduction*. https://unctad.org/system/files/official-document/cid29_en.pdf.

Urdinez, F. (2020). The accession of Latin American countries to the Asian Infrastructure Investment Bank: lessons from Brazil and Chile. *Asian Education and Development Studies*, 10(3), 374–385.

Urdinez, F. (2021). China's improvised mask diplomacy in Chile. *Carnegie Endowment for International Peace*.

<https://carnegieendowment.org/2021/04/06/china-s-improvised-mask-diplomacy-in-chile-pub-84251>.

Urdinez, F. (2023). Brazil economic ties with China flourish despite political shifts. *United States Institute of Peace*.

<https://www.usip.org/publications/2023/04/brazils-economic-ties-china-flourish-despite-political-shifts>.

USAID. (2024). *Foreign assistance*. <https://www.foreignassistance.gov/aid-trends>.

Vacaflares, D. E., Mogab, J. and Kishan. R. (2017). Does FDI really affect employment in host countries? Subsidiary level evidence. *The Journal of Developing Areas*, 51(2), 205–20.

Valencia, A. (2020). Ecuador says China restoring shrimp exports following COVID-19 dispute. *Reuters*.

<https://www.reuters.com/article/ecuador-economy/ecuador-says-china-restoring-shrimp-exports-following-covid-19-dispute-idUKL1N2FD2AY/>.

Valencia, A. (2022). Ecuador's president wants to untie oil output from debt on China visit. *Reuters*.

<https://www.reuters.com/markets/us/ecuadors-president-wants-untie-oil-output-debt-china-visit-2022-01-25/>.

Valente, J. (2020). Brazil quits Community of Latin American and Caribbean States. *Agencia Brasil*.

<https://agenciabrasil.ebc.com.br/en/politica/noticia/2020-01/brazil-quits-community-latin-american-and-caribbean-states>.

Villegas, A. and Scheyder, E. (2023). Chile plans to nationalize its vast lithium industry. *Reuters*.

<https://www.reuters.com/markets/commodities/chiles-boric-announces-plan-nationalize-lithium-industry-2023-04-21/>.

Welle-Strand, A., Ball, G., Hval, M. V., and Vlaicu, M. (2012). Electrifying solutions: can power sector aid boost economic growth and development? *Energy for Sustainable Development*, 16(1), 26-34.

Wen, Y., and Fortier, G. E. (2019). The visible hand: the role of government in China's long-awaited industrial revolution. *Journal of Chinese Economic and Business Studies*, 17(1), 9-45.

Were, M. (2015). Differential effects of trade on economic growth and investment: a cross-country empirical investigation. *Journal of African Trade*, 2(1-2), 71-85.

WHO. (2024). *WHO COVID-19 dashboard*. <https://data.who.int/dashboards/covid19/cases>.

Winter, B. (2013). Brazil's Rouseff wants U.S. apology for NSA spying. *Reuters*. <https://www.reuters.com/article/idUSBRE98314P/>.

Wintgens, S. (2022). China's footprint in Latin America. *European Union Institute for Security Studies (EUISS)*. <https://op.europa.eu/en/publication-detail/-/publication/e8c91940-4457-11ed-92ed-01aa75ed71a1/language-en>.

Wooster, R. B., and Diebel, D. S. (2010). Productivity spillovers from foreign direct investment in developing countries: a meta-regression analysis. *Review of Development Economics*, 14(3), 640-655.

World Economic Forum. (2021). *China's trade with Latin America is bound to keep growing. Here's why that matters*. <https://www.weforum.org/agenda/2021/06/china-trade-latin-america-caribbean/>.

Xinhua News. (2016). *China, Ecuador lift ties to comprehensive strategic partnership*. http://www.xinhuanet.com/english/2016-11/18/c_135841002.htm.

Yongqi, H. (2018). Belt & Road linkage urged with Ecuador. *China Daily*.
<https://www.chinadaily.com.cn/a/201812/14/WS5c12e69ea310eff303290ebc.html>.

Zimmermann, F., and Smith, K. (2011). More actors, more money, more ideas for international development co-operation. *Journal of International Development*, 23(5), 722-738.

APPENDIX

Important Notes:

- 1) Only tables containing statistically significant results have been reported below. Several other tables containing the results of experiments, however, have not been reported.
- 2) The criterion followed in numbering the tables is to follow the order in which statistically significant results were recapitulated in the thesis.
- 3) The following structure will be used for naming tables: Table (table number) - Table title
- 4) Reported values below are from my own calculations, which is why no sources have been reported for any of the tables.
- 5) The inscription “(E.L.V)” stands for “Endogenous Lagged Variable”, while “Est. Coeff.” stands for “Estimated Coefficient”.
- 6) The following signification codes: $0 < *** < 0.001 < ** < 0.01 < * < 0.05 < . < 0.1 < \circ < 1$ refer to the p-value of each estimated coefficient.
- 7) Each table reported for each independent variable (X_{1t}, X_{2t}, X_{3t}) in each of the four models: a measure of the model's ability to explain the variability of the output variable, namely the R^2 ; the estimated coefficient; an indication of the latter's significance (review the signification codes above); and its standard error in parentheses.

Summary Tables for Regressions' Results

Table 1 - Chile: Regressions' Results for Variable Y_{2t} by Model

| Chile - Regressions' Results for Variable Y_{2t} by Model | | | | |
|---|---------------------|----------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.404 | 0.918 | 0.329 | 0.316 |
| Est. Coeff. | | | | |
| X_{1t} | 0.302 ° (0.297) | 0.287 · (0.119) | 0.344 ° (0.291) | |
| X_{2t} | -0.453 ° (0.296) | -0.053 ° (0.136) | -0.495 ° (0.291) | -0.417 ° (0.295) |
| X_{3t} | 0.280 ° (0.298) | -0.111 ° (0.136) | | 0.326 ° (0.295) |
| Y_{t-1} (E.L.V) | | 0.932 *** (0.153) | | |

Table 2 - Chile: Regressions' Results for Variable Y_{3t} by Model

| Chile: Regressions' Results for Variable Y_{3t} by Model | | | | |
|--|---------------------|----------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.129 | 0.896 | 0.026 | 0.116 |
| Est. Coeff. | | | | |
| X_{1t} | -0.117 ° (0.359) | -0.287 · (0.137) | -0.068 ° (0.351) | |
| X_{2t} | -0.093 ° (0.358) | -0.095 ° (0.134) | -0.141 ° (0.351) | -0.107 ° (0.335) |
| X_{3t} | 0.327 ° (0.360) | 0.113 ° (0.138) | | 0.310 ° (0.335) |
| Y_{t-1} (E.L.V) | | 0.923 *** (0.139) | | |

Table 3 - Argentina: Regressions' Results for Variable Y_{4t} by Model

| Argentina: Regressions' Results for Variable Y_{4t} by Model | | | | |
|--|---------------------|---------------------|--------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.404 | 0.831 | 0.278 | 0.386 |
| Est. Coeff. | | | | |
| X_{1t} | 0.139 ° (0.298) | 0.362 · (0.181) | 0.216 ° (0.301) | |
| X_{2t} | 0.388 ° (0.302) | 0.346 · (0.175) | 0.485 ° (0.301) | 0.377 ° (0.286) |
| X_{3t} | -0.377 ° (0.309) | -0.287 ° (0.179) | | -0.407 ° (0.286) |
| Y_{t-1} (E.L.V) | | 0.693 ** (0.178) | | |

Table 4 - Brazil - Regressions' Results for Variable Y_{5t} by Model

| Brazil: Regressions' Results for Variable Y_{5t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.428 | 0.936 | 0.354 | 0.103 |
| Est. Coeff. | | | | |
| X_{1t} | -0.649 · (0.325) | 0.002 ° (0.150) | -0.598 · (0.319) | |
| X_{2t} | 0.436 ° (0.339) | -0.508 * (0.183) | 0.538 ° (0.319) | 0.185 ° (0.368) |
| X_{3t} | -0.302 ° (0.319) | -0.040 ° (0.121) | | -0.197 ° (0.368) |
| Y_{t-1} (E.L.V) | | 1.195 *** (0.173) | | |

Table 5 - Brazil: Regressions' Results for Variable Y_{1t} by Model

| Brazil: Regressions' Results for Variable Y_{1t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.695 | 0.709 | 0.651 | 0.673 |
| Est. Coeff. | | | | |
| X_{1t} | -0.169 ° (0.238) | -0.183 ° (0.252) | -0.208 ° (0.234) | |
| X_{2t} | 0.959 ** (0.247) | 1.124 * (0.400) | 0.880 ** (0.234) | 0.893 ** (0.222) |
| X_{3t} | 0.234 ° (0.233) | 0.281 ° (0.261) | | 0.261 ° (0.222) |
| Y_{t-1} (E.L.V) | | -0.189 ° (0.347) | | |

Table 6 - Ecuador: Regressions' Results for Variable Y_{1t} by Model

| Ecuador: Regressions' Results for Variable Y_{1t} by Model | | | | |
|--|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.481 | 0.487 | 0.136 | 0.401 |
| Est. Coeff. | | | | |
| X_{1t} | -0.320 ° (0.308) | -0.332 ° (0.335) | -0.390 ° (0.370) | |
| X_{2t} | 0.735 · (0.365) | 0.759 ° (0.403) | 0.309 ° (0.370) | 0.611 ° (0.346) |
| X_{3t} | -0.747 · (0.347) | -0.805 ° (0.433) | | -0.785 · (0.346) |
| Y_{t-1} (E.L.V) | | -0.092 ° (0.352) | | |

Table 7 - Peru: Regressions' Results for Variable Y_{2t} by Model

| Peru: Regressions' Results for Variable Y_{2t} by Model | | | | |
|---|---------------------|-------------------------|----------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.715 | 0.877 | 0.711 | 0.701 |
| Est. Coeff. | | | | |
| X_{1t} | 0.127 ° (0.214) | 0.080 ° (0.153) | 0.131 ° (0.202) | |
| X_{2t} | -0.828 * (0.265) | -0.774 ** (0.189) | -0.878 ** (0.202) | -0.780 * (0.242) |
| X_{3t} | 0.082 ° (0.253) | -0.127 ° (0.194) | | 0.091 ° (0.242) |
| Y_{t-1} (E.L.V) | | 0.468 ° (0.167) | | |

Table 8 - Ecuador: Regressions' Results for Variable Y_{2t} by Model

| Ecuador: Regressions' Results for Variable Y_{2t} by Model | | | | |
|--|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.467 | 0.498 | 0.318 | 0.290 |
| Est. Coeff. | | | | |
| X_{1t} | 0.476 ° (0.312) | 0.355 ° (0.384) | 0.431 ° (0.329) | |
| X_{2t} | -0.332 ° (0.370) | -0.249 ° (0.411) | -0.613 · (0.329) | -0.147 ° (0.377) |
| X_{3t} | -0.492 ° (0.351) | -0.341 ° (0.444) | | -0.436 ° (0.377) |
| Y_{t-1} (E.L.V) | | 0.262 ° (0.430) | | |

Table 9 - Argentina: Regressions' Results for Variable Y_{2t} by Model

| Argentina: Regressions' Results for Variable Y_{2t} by Model | | | | |
|--|---------------------|-------------------------|--------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.411 | 0.742 | 0.328 | 0.395 |
| Est. Coeff. | | | | |
| X_{1t} | 0.127 ° (0.297) | 0.323 ° (0.224) | 0.190 ° (0.290) | |
| X_{2t} | 0.466 ° (0.301) | 0.282 ° (0.225) | 0.545 · (0.290) | 0.456 ° (0.284) |
| X_{3t} | -0.304 ° (0.307) | -0.214 ° (0.222) | | -0.332 ° (0.284) |
| Y_{t-1} (E.L.V) | | 0.643 * (0.232) | | |

Table 10 - Brazil: Regressions' Results for Variable Y_{3t} by Model

| Brazil: Regressions' Results for Variable Y_{3t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.543 | 0.724 | 0.506 | 0.471 |
| Est. Coeff. | | | | |
| X_{1t} | 0.307 ° (0.291) | 0.113 ° (0.263) | 0.344 ° (0.279) | |
| X_{2t} | -0.871 * (0.302) | -0.335 ° (0.371) | -0.798 * (0.279) | -0.752 * (0.283) |
| X_{3t} | -0.216 ° (0.285) | -0.101 ° (0.246) | | -0.266 ° (0.283) |
| Y_{t-1} (E.L.V) | | 0.623 (0.314) | | |

Table 11 - Ecuador: Regressions' Results for Variable Y_{3t} by Model

| Ecuador: Regressions' Results for Variable Y_{3t} by Model | | | | |
|--|-----------------------|-------------------------|-----------------------|-----------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.937 | 0.980 | 0.894 | 0.937 |
| Est. Coeff. | | | | |
| X_{1t} | -0.029 ° (0.107) | 0.014 ° (0.067) | -0.053 ° (0.130) | |
| X_{2t} | -0.769 *** (0.127) | -0.366 * (0.138) | -0.920 *** (0.130) | -0.780 *** (0.113) |
| X_{3t} | -0.264 (0.121) | -0.196 * (0.077) | | -0.268 * (0.113) |
| Y_{t-1} (E.L.V) | | 0.513 * (0.145) | | |

Table 12 - Peru: Regressions' Results for Variable Y_{4t} by Model

| Peru: Regressions' Results for Variable Y_{4t} by Model | | | | |
|---|---------------------|-------------------------|----------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.601 | 0.788 | 0.601 | 0.583 |
| Est. Coeff. | | | | |
| X_{1t} | 0.142 ° (0.254) | 0.163 ° (0.200) | 0.143 ° (0.237) | |
| X_{2t} | -0.794 * (0.314) | -0.617 (0.259) | -0.811 ** (0.237) | -0.740 * (0.285) |
| X_{3t} | 0.027 ° (0.299) | -0.163 ° (0.250) | | 0.038 ° (0.285) |
| Y_{t-1} (E.L.V) | | 0.546 (0.238) | | |

Table 13 - Argentina: Regressions' Results for Variable Y_{4t} by Model

| Argentina: Regressions' Results for Variable Y_{4t} by Model | | | | |
|--|---------------------|-------------------------|--------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.404 | 0.831 | 0.278 | 0.386 |
| Est. Coeff. | | | | |
| X_{1t} | 0.139 ° (0.298) | 0.362 (0.181) | 0.216 ° (0.301) | |
| X_{2t} | 0.388 ° (0.302) | 0.346 (0.175) | 0.485° (0.301) | 0.377 ° (0.286) |
| X_{3t} | -0.377 ° (0.309) | -0.287 ° (0.179) | | -0.407 ° (0.286) |
| Y_{t-1} (E.L.V) | | 0.693 ** (0.178) | | |

Table 14 - Chile: Regressions' Results for Variable Y_{5t} by Model

| Chile: Regressions' Results for Variable Y_{5t} by Model | | | | |
|--|----------------------|-------------------------|---------------------|----------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.729 | 0.791 | 0.528 | 0.629 |
| Est. Coeff. | | | | |
| X_{1t} | 0.197 ° (0.200) | 0.176 ° (0.190) | 0.128 ° (0.244) | |
| X_{2t} | -0.796 ** (0.200) | -0.610 * (0.235) | -0.728 * (0.244) | -0.772 ** (0.198) |
| X_{3t} | -0.458 (0.201) | -0.352 ° (0.206) | | -0.428 (0.198) |
| Y_{t-1} (E.L.V) | | 0.319 ° (0.239) | | |

Table 15 - Ecuador: Regressions' Results for Variable Y_{5t} by Model

| Ecuador: Regressions' Results for Variable Y_{5t} by Model | | | | |
|--|--------------------|-------------------------|--------------------|------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.798 | 0.805 | 0.671 | 0.752 |
| Est. Coeff. | | | | |
| X_{1t} | 0.243 ° (0.192) | 0.200 ° (0.224) | 0.285 ° (0.229) | |
| X_{2t} | 0.388 ° (0.228) | 0.329 ° (0.274) | 0.648 * (0.229) | 0.482 (0.223) |
| X_{3t} | 0.455 (0.216) | 0.371 ° (0.293) | | 0.483 (0.223) |
| Y_{t-1} (E.L.V) | | 0.174 ° (0.379) | | |

Table 16 - Brazil: Regressions' Results for Variable Y_{5t} by Model

| Brazil: Regressions' Results for Variable Y_{5t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.428 | 0.936 | 0.354 | 0.103 |
| Est. Coeff. | | | | |
| X_{1t} | -0.649 · (0.325) | 0.002 ° (0.150) | -0.598 · (0.319) | |
| X_{2t} | 0.436 ° (0.339) | -0.508 * (0.183) | 0.538 ° (0.319) | 0.185 ° (0.368) |
| X_{3t} | -0.302 ° (0.319) | -0.040 ° (0.121) | | -0.197 ° (0.368) |
| Y_{t-1} (E.L.V) | | 1.195 *** (0.173) | | |

Table 17 - Ecuador: Regressions' Results for Variable Y_{6t} by Model

| Ecuador: Regressions' Results for Variable Y_{6t} by Model | | | | |
|--|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.518 | 0.530 | 0.424 | 0.447 |
| Est. Coeff. | | | | |
| X_{1t} | 0.303 ° (0.297) | 0.188 ° (0.430) | 0.339 ° (0.302) | |
| X_{2t} | -0.956 * (0.352) | -0.790 ° (0.564) | -0.733 * (0.302) | -0.839 * (0.333) |
| X_{3t} | 0.391 ° (0.334) | 0.358 ° (0.366) | | 0.426 ° (0.333) |
| Y_{t-1} (E.L.V) | | 0.180 ° (0.457) | | |

Table 18 - Colombia: Regressions' Results for Variable Y_{6t} by Model

| Colombia: Regressions' Results for Variable Y_{6t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.386 | 0.794 | 0.314 | 0.375 |
| Est. Coeff. | | | | |
| X_{1t} | 0.126 ° (0.353) | 0.334 ° (0.229) | 0.011 ° (0.325) | |
| X_{2t} | -0.468 ° (0.346) | -0.482 · (0.216) | -0.565 ° (0.325) | -0.434 ° (0.314) |
| X_{3t} | 0.323 ° (0.356) | 0.300 ° (0.223) | | 0.278 ° (0.314) |
| Y_{t-1} (E.L.V) | | 0.674 * (0.196) | | |

Table 19 - Peru: Regressions' Results for Variable Y_{6t} by Model

| Peru: Regressions' Results for Variable Y_{6t} by Model | | | | |
|---|---------------------|-------------------------|---------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.370 | 0.382 | 0.366 | 0.370 |
| Est. Coeff. | | | | |
| X_{1t} | -0.013 ° (0.319) | 0.041 ° (0.375) | -0.017 ° (0.299) | |
| X_{2t} | 0.557 ° (0.394) | 0.421 ° (0.579) | 0.610 ° (0.299) | 0.553 ° (0.351) |
| X_{3t} | -0.085 ° (0.376) | -0.165 ° (0.464) | | -0.086 ° (0.351) |
| Y_{t-1} (E.L.V) | | 0.153 ° (0.445) | | |

Table 20 - Peru: Regressions' Results for Variable Y_{1t} by Model

| Peru: Regressions' Results for Variable Y_{1t} by Model | | | | |
|---|---------------------|-------------------------|--------------------|---------------------|
| Models/Results | Model 1 | Model 2 (E.L.V.) | Model 3 | Model 4 |
| R^2 | 0.406 | 0.486 | 0.101 | 0.377 |
| Est. Coeff. | | | | |
| X_{1t} | 0.183 ° (0.310) | 0.200 ° (0.312) | 0.146 ° (0.356) | |
| X_{2t} | -0.190 ° (0.383) | -0.411 ° (0.447) | 0.238 ° (0.356) | -0.121 ° (0.349) |
| X_{3t} | -0.692 ° (0.365) | -0.608 ° (0.377) | | -0.679 ° (0.349) |
| Y_{t-1} (E.L.V) | | 0.394 ° (0.408) | | |