Exploring the interactions between local public opinion, the media, and foreign policy toward Chinese investments in Ecuador

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Abstract

In an increasingly polarizing world, the debate on the importance of public opinion in shaping foreign policy decisions has been raging over. This study explores the interactions between Chinese investment and credit and public opinion about China in Ecuador from 2012 to 2021 through two classical international relations theories: the realist and liberal hypotheses. Ecuador was selected as a case study because it is among the four Latin American countries that have received the most significant amounts of Chinese loans in the 21st century. We use a mixed methods approach combining a time series regression model to explore the evolution of Ecuadorian public opinion, as well as media content analysis of mainstream Ecuadorian news on Chinese investments. To run the regression model, we draw upon Latin American Public Opinion Project (LAPOP) survey waves. LAPOP is a unique survey exploring public opinion on foreign policy in Latin America in general and in Ecuador in particular. The media content analysis was based on top three newspapers in Ecuador by circulation: El Comercio, El Telégrafo, and El Universo. Research findings suggest that a realist approach contributes more to understanding attitudes of Ecuador’s foreign policymakers regarding Chinese investments over the years. In effect, Ecuadorian foreign policymakers seemingly ignore local public opinion when defining the country’s relations with China. The realist perspective allows to interpret the untangling between public opinion and Ecuadorian foreign policy because of the volatility of Ecuadorian public opinion about China, as evidenced by LAPOP surveys. Another explaining factor is the limited influence of Ecuadorian citizens living in provinces with a strong Chinese economic presence. Finally, the combined results of our newspaper content analysis and our regression study demonstrate that despite being systematically exposed to mainstream news which are predominantly negative regarding Chinese finance in Ecuador, a high proportion of Ecuadorian newspaper readers maintain a positive opinion about China. Further research on Chinese public diplomacy efforts in the country is needed to fully disaggregate the impact of Chinese loans and investments on public opinion about China in Ecuador. This could provide timely information about the complex dynamics of public perceptions and foreign relations in a moment where political and economic hegemonies are being rapidly reshaped.

Keywords

Public opinion about China, Ecuador, foreign policy, Ecuadorian media, Chinese credit and investment, time series regression, content analysis
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List of abbreviations

2SLS – Two-staged least squares
AIP – Annual investment plan
ATDL – Asociación Técnica de Diarios Latinoamericanos (Technical Association of Latin American Daily Newspapers)
CCS – Coca Codo Sinclair
CCTV – China Central Television
CICDHA – Colectivo sobre Financiamiento e Inversiones Chinas, Derechos Humanos y Ambiente (Collective on Chinese Finance and Investment, Human Rights and the Environment)
CNPC – China National Petroleum Company
COVID-19 – coronavirus disease 2019
EDC – Economic development corporation
FDI – Foreign direct investment
GDP – Growth domestic product
GLS – Generalized least squares
HDI – Human development index
ICSID – International Centre for Settlement of Investment Disputes
IMF – International Monetary Fund
IR – International relations
KW – kilowatt
LAPOP – Latin American Public Opinion Project
LIBOR – London Inter-bank Offered Rate
MNC – multinational companies
OECD – Organization for Economic Co-operation and Development
OLS – ordinary least squares
PRC – People’s Republic of China
UN – United Nations
US – United States
1. Introduction

Over the past two decades, China has become an important lender, investor, and trade partner for many developing countries. Beijing is already believed to have surpassed all Paris Club\(^1\) creditors in global development finance, and Chinese investments and loans overseas are as sizeable as those of the World Bank and the International Monetary Fund (Ray & Simmons, 2022; Morris et al., 2020; Dreher et al., 2021; Horn et al., 2021). Even though, there is little empirical research on what impact Chinese finance has had on public opinion in the Global South and what factors encourage their citizens to think positively or negatively about Chinese investment and credit (McCauley et al., 2022; Eichenauer et al., 2021). Moreover, the literature on the relationship between foreign aid and public opinion has largely focused on public reactions in donor countries in the West due to a scarcity of data from recipient states (Milner & Tingley, 2013).

It is widely recognized that favorable public opinion in the host country can secure long-term political and economic benefits for the country pursuing foreign policy interests there (Nye, 1990; Disdier & Mayer, 2007). Moreover, it is worth noting that the public can influence decision-making in both domestic and foreign policy (Holsti, 1992; Burstein, 2003; Morales Castillo et al., 2015). The influence of public opinion on officials’ responsiveness depends, however, on the salience of the particular issue that the public is concerned about. In addition, it also depends on the role of interest organizations, i.e., interest groups and social movements, political parties, and economic elites, in shaping public opinion (Burstein, 2003). Public opinion about China in the Global South is particularly important for Beijing because its foreign policy strategy is based on a win-win narrative of cooperation with developing countries (Bernal-Meza, 2016). Ever since Chinese General Secretary Xi Jinping (2013 – present) envisaged win-win cooperation as the cornerstone of a new type of international relations system, this characteristic has become a guiding philosophy for Chinese diplomacy (MFA, 2016). Moreover, the growing geopolitical struggle between the United States and China implies that both countries are competing not only for political and economic dominance, but also for the hearts and minds of people around the world.

\(^1\) The Paris Club is a group of officials from major lender countries (mostly Western), whose function is to find cooperative and sustainable solutions to the payment problems faced by indebted countries.
In Latin America, most of the countries that support the “One China” policy have enjoyed close trade and investment ties with Beijing during China’s economic rise (Jenkins & Dussel Peters, 2009). The “One China” policy implies official recognition of the government of the People’s Republic of China (PRC) as the only legitimate government of China, and of Taiwan as an integral territory of the PRC. However, only four Latin American countries, namely Venezuela, Brazil, Argentina, and Ecuador, received most of the Chinese loans (ECLAC, 2021). The latter stands out as a particular case due to the relatively small size of its economy and its heavy reliance on Chinese lending during the presidency of Rafael Vicente Correa Delgado (2007-2017), when the country had difficulty accessing financing from multilateral creditors and Western governments. This occurred due to Correa’s decision to default on the country’s sovereign debt in 2008 (Garzón & Castro, 2018). Similarly, Chinese finance rescued countries such as Venezuela, Myanmar, Cambodia, and Zimbabwe, when they faced obstacles in obtaining financing from Western-led international financial organizations (Mattlin & Nojonen, 2015).

In 2017, Chinese loans accounted for more than 10% of Ecuador’s GDP (Horn et al., 2021). China has also become one of Ecuador’s most important trading partners and investors (Herrera & Lee, 2017). However, Chinese investments and loans come with some environmental and social issues (Garzón & Castro, 2018). Chinese economic engagement in Ecuador has been to some extent inconsistent with the national policy strategy “Living Well” (Buen vivir in Spanish), which prioritizes environmental protection (CEPAL, 2022). Given the above, the research question of this dissertation is as follows: To what extent has Ecuador’s foreign policy on Chinese loans and investments contributed to the public opinion about China among Ecuadorians?

To answer this question, we explore five Latin American Public Opinion Project (LAPOP) surveys conducted in Ecuador in 2012, 2014, 2016/2017, 2018/2019 and most recently in 2021, combined with data on Chinese credit and investment in Ecuador. LAPOP data is a unique, open-access source for studying public opinion about China in Latin America. The core survey question we rely on is as follows: “Do you trust the Chinese government?”. Because China uses state-owned enterprises and banks to deliver investments and loans around the world, we believe that it is very likely that people associate Chinese foreign direct investment and credit with the Chinese government. Data for 2021 are presented only as descriptive statistics due to the huge negative impact of the coronavirus (COVID-19) on
China’s reputation worldwide and, therefore, the inability to disaggregate the impact of Chinese investment and credit on public opinion in Ecuador that year (Ameyaw-Brobbey, 2021).

Drawing on LAPOP data, we seek to find out whether Chinese finances contribute to the way people of Ecuador view Beijing, and whether the country’s overall foreign policy toward China is consistent with Ecuadorian public opinion. It is believed that the lion’s share of Chinese public diplomacy in Latin America lies mainly in economic interactions due to the lack of strong historical ties and the existence of cultural barriers (Eichenauer et al., 2021). Therefore, to find a sound causal relationship between Chinese credit and investment and Ecuadorians’ perceptions of China, we run logistic regressions with year- and region-fixed effects, controlling for different categories of variables that may influence Ecuadorians’ public opinion of China and are available in LAPOP surveys and other public data sources. These include Chinese loans and investments distributed across Ecuadorian provinces, frequency of news viewing, political regime preferences, ideological views of Ecuadorians, as well as other control variables, such as income and education levels, age, gender, religiosity, rural or urban residence.

We selected these variables to test a series of hypotheses regarding the importance of public opinion in foreign policy decisions through the lenses of two of the most influential schools of thought of the international relations field: the realist and the liberal schools. Taking the risk of oversimplifying a complex matter, we could state that realists advocate disregarding public opinion when making foreign policy choices due to the natural volatility of public perceptions, while liberals propose an active public involvement in foreign policy decision-making because they believe that public opinion regarding foreign policy choices is, in fact, consistent and, most importantly, influential. We use conceptual elements from political ideology, regime preferences, and control variables to test the stability and consistency of Ecuadorian public opinion toward China. In addition, we use the binary variable of Chinese economic presence by province to explore the influence of public opinion on foreign policy decisions and to illustrate attitudes towards China in Ecuadorian society. Finally, our analysis of how often and in what way China gets reported in the news sheds light on the role of Ecuadorian media in shaping (or not) local public opinion.

Since the media consumption variable in our regression is likely to have a low explanatory power due to the heterogeneity of media coverage on China and heterogeneity of the Ecuadorian public itself, we opted to complement our regression with media content
analysis. We focused our news content analysis on two most important events in the economic relationship between China and Ecuador, that is, the construction of the Coca Codo Sinclair hydroelectric dam as part of Ecuador’s ambitious clean energy transition plan and the Chinese investment in the country’s largest mine project, Mirador. Our media sample consisted of the Ecuadorian three most popular newspapers – El Comercio, El Universo, and El Telégrafo. Our content analysis helped delve more into possible factors that may affect China’s image in Ecuador and answer the question of whether the media plays a vital role in shaping the perception of China among Ecuadorians. We limited our analysis to local media news, although there are public diplomacy efforts of China to improve its image worldwide in general and in Ecuador in particular, which are reflected in the international media. This limitation is discussed in the chapter on methodology.

We aim at contributing to the academic debate between realists and liberals regarding the importance of public opinion in foreign policy decisions in the Global South countries, in an era in which power (in)balances are quickly being reshaped. As the existing literature on the relationship between foreign policy and public opinion, and foreign policy-media-public opinion nexus, described more in detail in the Chapter 2, indicates, there is still no consensus whether politicians should consider public opinion when making foreign policy choices, at least, from a pragmatic point of view and not taking into account ethical considerations about citizens’ rights to representation.

Our results, obtained through descriptive statistics and regression analysis, will demonstrate that Ecuadorian policymakers have so far largely ignored local public opinion regarding Chinese investment and credit, particularly in provinces with Chinese economic presence. On the other hand, according to the results, Ecuador’s public opinion about Beijing and its economic activities in the country has been volatile, that is, it has lacked consolidation to effectively influence foreign policy decisions. Despite the predominantly negative coverage on China, it seems that the local media, mostly controlled by the interest groups that opposed close cooperation between the two countries during Correa’s presidency, have failed to form a consistent public opinion about China in Ecuador. We believe that both countries have room for improvement in terms of their foreign policy strategies toward each other. In seeking more investments and credits to boost the economy, the Ecuadorian government should listen more to the local population and know their interests in order to avoid possible social tensions and negative environmental consequences from investment projects. In turn, China can become
more involved in the processes of prior consultation with the local communities and invest more in the preliminary study of projects it is involved.

This paper is structured as follows: Chapter 2 will cover the theoretical framework, i.e., the relationship between public opinion and foreign policy and the role of the media in shaping public opinion regarding foreign policy, as well as a literature review on the impact of Chinese investment on China’s image in Latin America. The research hypotheses will also be outlined there. Chapter 3 will present the methodology, empirical strategy and explore the data analyzed. Chapter 4 will provide background information on financial relations between China and Ecuador from 2010 to 2021. Chapter 5 will explore the main findings of the study. Chapter 6 will present the conclusions, discussion of results, and suggestions for future research.
2. Theoretical framework

This chapter presents the epistemological field of the study. The first part defines public opinion and presents an ongoing academic debate on the importance of local public opinion for foreign policy between two classical schools of international relations: realists and liberals (Almond, 1950; Lippmann, 1922; Holsti, 1992). Even though we marginally use the constructivist theory, our focus is on realism and liberalism. In part two, the importance of the media in shaping public opinion regarding foreign policy is highlighted through the theoretical lens of strategic actorliness of the media. In part three of this chapter, we present the growing literature on public opinion about China in Latin America. Part four presents the hypotheses we will test in the study, which are derived from our analysis of the theoretical framework.

2.1 Foreign policy-public opinion nexus

The classic definition of public opinion refers to “those opinions held by private persons which governments find it prudent to heed” (Key, 1961, p. 14). There are other definitions of public opinion from various fields, ranging from philosophy to marketing. According to Page et al. (1987), “public opinion is supposed to be the great engine of democracy, determining the actions of governments”. We will focus on the classic definition offered by Key, which we find more sophisticated.

International relations scholars have long theorized about the importance of public opinion in foreign policy decision-making (Lippmann, 1922; Almond, 1950; Holsti, 1992; Foyle, 1997; Jacobs & Sdhapiro, 1999; Morales Castillo et al., 2015). Holsti (1992) emphasizes that the role of public opinion in foreign policy has been particularly contentious between representatives of the two most prominent schools of IR thinking: realism and liberalism. It is worth noting that the constructivist theory has also made valuable contributions to the topic of the relationship between public opinion and foreign policy, adopting the lens of social structures. Wendt (1995, p. 73) defines social structures as “elements based on common understanding shaped by ideas, material resources, and practices”. Emphasizing the important role of people’s ideas or beliefs in shaping foreign policy, Goldstein and Koehane (1993) argue that socially constructed ideas can influence policy by affecting government strategies and becoming embedded in institutions. Despite the theoretical richness of constructivism and its importance to this topic, we focus below on the debates of the classical IR schools due to the long-standing controversy and, therefore, inconclusive literature.
Realists argue that the approach to foreign policy decision-making should be top-down because of the public’s lack of awareness of international affairs, which translates into inconsistent views (Morales Castillo et al., 2015). Public opinion is seen by realists as an obstacle to sound diplomacy because the public is not always aware of states’ national interests (Holsti, 1992; Foyle, 1997). Holsti (1992, p. 440) explains the realists’ logic as follows: “The effective conduct of diplomacy requires secrecy, flexibility, and other qualities that would be seriously jeopardized were the public to have a significant impact on foreign policy”. Critically analyzing the role of public opinion in the foreign policy of the Western democracies during World War I, Lippmann (1922, p. 175) concludes that democracies are likely to violate their notions of public participation when it comes to foreign policy, since the public normally worries only about self-sufficiency within national borders, and for most people “life outside the national boundaries is more distinctly alien than any life within”. Nearly thirty years after Lippmann, Almond (1950) empirically proves his conclusions by analyzing polling data in the United States after World War II. According to Holsti (1992), the so-called Lippmann-Almond consensus, which was virtually uncontested until U.S. citizens’ reaction to the Vietnam War, is based on three fundamental pillars: the volatility of public opinion, the lack of structure and consistency in public attitudes toward foreign policy, and the very limited impact of public opinion on foreign policy decisions.

As mentioned above, the events in Vietnam and the subsequent negative reaction of U.S. citizens to their country’s military involvement was the first serious challenge to the Lippman-Almond consensus in the West. This gave a strong impetus to the liberal view that the public should and can play a vital role in foreign policy decision-making (Holsti, 1992; Morales Castillo et al., 2015). The liberal approach suggests that in democratic societies, decision makers should be constrained by the public in both foreign policy and domestic affairs, since the public usually opposes incoherent foreign policy decisions, such as engaging in wars (Holsti, 1992). One of the most influential advocates of this approach was U.S. President Thomas Woodrow Wilson (1913-1921), therefore adherents of liberal ideas linking public opinion and foreign policy are often called Wilsonian liberals (Foyle, 1997). Nevertheless, even countries that the West does not consider democratic sometimes rely on public opinion in their foreign policy choices. The most notable example is China’s anti-Japanese stance, which was partly reinforced by Chinese public opinion hostile to Japan, leading to massive anti-Japanese protests in China in 2005 and 2012 (Kang, 2013; Hyun et al., 2014). It is important to note,
however, that in countries that the West perceives as non-democratic, the state can control public opinion through unfree media and tight control of the Internet (Hyun et al., 2014).

In his extensive literature review, Holsti (1992) emphasizes that most empirical studies on the relationship between public opinion and foreign policy after the Vietnam War have found that public opinion among U.S. citizens regarding foreign policy events, such as U.S. involvement in conflicts abroad, approval of foreign aid to third countries, or U.S.-Soviet relations, was fairly stable, consistent, and had some degree of influence on decision-making. Some quantitative studies have gone even further and highlighted the extremely strong influence of public opinion on foreign policy. For example, Monroe argued that U.S. foreign policy was largely consistent with public opinion (92% percent), and Page and Shapiro found a high degree of congruence between changes in public opinion and shifts in foreign policy, with opinion changing often before policy than the other way around (Foyle, 1997).

Morales Castillo et al. (2015) empirically found that Latin Americans are consistent in their foreign policy views. The authors argue that the population’s ideological views are likely to play the most important role in consistency, as this variable is statistically significant in their multivariate model. All of this literature, based on the Wilsonian liberal approach, suggests that public opinion cannot be ignored when making important foreign policy decisions. In some cases, however, democratically elected politicians continue to rely on the realist approach. For example, despite the high unpopularity of sending troops to Afghanistan among the publics of all European NATO member states, their governments did not withdraw military presence until very recently (Kreps, 2010). This indicates that the debate between realists and liberals is ongoing and more empirical evidence is needed to prove or disprove one or the other.

Most importantly, however, the reaction to the Vietnam War in the United States has prompted scholars to go beyond mere support for the liberal approach or a critical assessment of realist postulates regarding public influence on foreign policy (Foyle, 1997; Jacobs & Shapiro, 1999). Researchers’ main interest has shifted to explaining why public opinion influences foreign policy choices in some situations and does not in others. Foyle (1997) argues that elite beliefs and views on the role of public opinion in foreign policy play a decisive role in the decision-making process. He emphasizes that decision makers rely heavily on normative and practical beliefs to guide their foreign policy choices. According to Foyle, “normative beliefs consist of an individual’s judgment concerning the desirability of input from public opinion affecting foreign policy choices, while practical beliefs represent the decision maker’s
assessment of the necessity of public support of a foreign policy for it to be successful” (Foyle, 1997, p. 145). Figure 1 shows Foyle’s matrix of four types of decision makers: delegate, executor, pragmatist, and guardian. Based on archival documents, in the author’s qualitative content analysis of the normative and practical foreign policy beliefs of U.S. President Dwight D. Eisenhower (1953-1961) and Secretary of State John Foster Dulles (1953-1959), Foyle found that both politicians were pragmatists. Their beliefs therefore explain the U.S. response to the Chinese offshore islands’ crisis, which was to propose the use of UN engagement mechanisms, instead of US unilateral intervention. Archival documents proved that Eisenhower and his secretary of state looked back on US public opinion polls. The public in the United States was against the U.S. intervention in the conflict. Based on this, we expect that our analysis of public opinion about Chinese investments and credits in Ecuador will help characterize Rafael Correa (2007-2017), Lenin Boltaire Moreno Garcés (2017-2021), and Guillermo Alberto Santiago Lasso Mendoza (2021 – present) in terms of considering public opinion in foreign policy decisions regarding financial relations with China.

<table>
<thead>
<tr>
<th>Is It Desirable for Input from Public Opinion to Affect Foreign Policy Choices?</th>
<th>Is Public Support Necessary?</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>Yes</td>
<td>Delegate</td>
<td>Executor</td>
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<tr>
<td>No</td>
<td>Pragmatist</td>
<td>Guardian</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1. Public opinion beliefs orientation. Adapted from Foyle (1997, p. 145).

Despite its inconclusive nature, the literature on the liberal approach discussed above suggests that public opinion is consistent and has leverage over foreign policy choices, especially those related to military involvement and geopolitical confrontation, something that seems to be mostly based on the so-called “elite beliefs”. However, does the same rule apply to foreign policy decisions unrelated to issues of war - which pose direct risks to daily lives and livelihoods-, such as economic foreign policy, i.e., trade, foreign debt, and aid, whose impacts appear to be more diffuse and long-termed? It is worth noting that the existing literature on the relationship between economic foreign policy and local public opinion is thinner than the literature on foreign policy decisions on security and public opinion (Milner & Tingley, 2013), which highlights the importance of contributing to this gap. In some cases, the economic and political vectors of foreign policy are intertwined, making it complex to disaggregate the impact.
of economic foreign policy decisions on public opinion (Heilmann, 2016). Below we systematize the literature on foreign economic relations and public opinion into three main clusters: trade, aid, and foreign direct investment/credit policies.

Traditionally, researchers on trade relations have opted to use the realist approach while ignoring public opinion in foreign policy decisions due to the limited levels of public awareness and knowledge about trade decisions (Kono, 2008; Milner & Tingley, 2013). Even though, a growing literature points out that the Wilsonian liberal approach might be applicable to economic issues as well, particularly due to the important role of the public as consumers (Heilmann, 2016). Therefore, bottom-up boycotts of foreign goods in a host country, which are often provoked by another country’s hostile foreign policy, can force its government to change economic foreign policy attitudes (Heilmann, 2016; Eichenauer et al., 2021). Regarding the influence of public preferences on trade policy, Kono (2008) empirically found that, at least in democracies, public opinion pushes policymakers to adjust foreign policy choices depending on what people think about free trade or protectionism. Kono also emphasizes the importance of policymakers’ beliefs about the role of public opinion in foreign policy decisions, upholding Foyle’s assumption about the importance of politicians’ normative and practical beliefs. Kono’s study also draws on the theoretical assumption that in democratic regimes voters can punish incumbent politicians in the next election cycle for ignoring majority choices.

The literature on the relationship between foreign aid and public opinion has largely focused on public reactions in donor countries due to a lack of data from recipient states (Milner & Tingley, 2013). In their extensive review of the literature, Milner and Tingley (2013) note that there is strong empirical evidence that donor country aid policies often resonate with high public support for aid delivery. As public support for aid increases, so does donor country aid. Moreover, they outline that public opinion about aid, at least in the United States, is consistently driven by voters’ ideological preferences. Democratic Party supporters believe that the U.S. should spend more on overseas aid programs, while Republicans have traditionally favored reducing aid. This indicates that the Lippmann-Almond consensus may not be significant for the relationship between aid policy choices and public opinion at least in the U.S., although more empirical research is needed. In addition, some empirical evidence suggests that donor countries’ public opinion influences policy making when their governments cut aid due to economic crises (Heinrich et al., 2016). As the public is preoccupied with domestic prosperity during an economic downturn, they perceive aid as a burden on the budget, overestimating the actual amount of aid. As a result, Western governments often cut aid.
The literature on the relationship between foreign direct investment/lending and public opinion also points out that the latter may influence decision-making. For example, the public can seriously challenge lending policy of foreign creditors and the presence of multinational companies (MNCs) and foreign capital in host countries. Jakobsen and Jakobsen (2011) argue that anti-foreign capital sentiment prevalent in wide sectors of the Argentine population, and in some Central and East European countries during large-scale privatization programs in the 1990s proved a strong link between public preferences and policy actions detrimental to MNCs. Employing a time-series cross-section analysis of the relationship between public opinion and FDI in 42 non-OECD countries, the authors claim that public sentiments of economic nationalism and right-wing economic orientation among the population can constrain MNC capital. In the case of foreign loans, especially IMF credits, public opinion is not able to seriously influence the shaping of rejection policies, although mass mobilizations against the IMF, dubbed “IMF riots”, are seen as an effective tool to halt the implementation of some structural adjustment programs or force governments to renegotiate the terms of debt (Moosa & Moosa, 2019).

2.2 The role of the media in the relationship between public opinion and foreign policy

After examining the relative importance of public opinion in shaping foreign policy, the following question arises: What are the main determinants influencing public opinion? Existing literature suggests that people of different ages, education, religion, income, political preferences, and political knowledge tend to have different opinions on foreign policy issues (Holsti, 2004; Baumgartner et al., 2008). However, the media arguably occupies the most important place in shaping public opinion, serving as a source of information for the public and a tool of interest organizations (Baum & Potter, 2008; Soroka, 2003; Burstein, 2003). Baum and Potter (2008) point out that the media play the role of a discrete strategic actor, influencing every aspect of the relationship between public opinion and foreign policy. Building on previous literature, the authors present a complex scheme of interdependence between foreign policy decision makers and public opinion, introducing mass media, foreign actors, and events as interrelated variables, as shown in the Figure 2.
Figure 2. Causal relationships between public opinion, mass media and foreign policy. Adapted from Baum and Potter (2008, p. 41).

Despite the high relevance of the model, much of the cited literature focuses on U.S. public reactions to conflicts or crises, omitting the importance of foreign economic relations. Baum and Potter (2008) draw upon the idea of a foreign policy marketplace, that is, a place where the media trades information to the public. The authors argue that information about conflicts tends to be in higher demand among the public. The idea suggests that the public as consumers of information are more interested in news that cover hard politics. Moreover, they emphasize that the market equilibrium in the foreign policy marketplace has been disturbed from the outset because elites have an informational advantage about foreign policy issues. Thus, the media is affiliated with the elite enabling its access to information and helping provide adequate protection of the elite frames, while also addressing the information needs of audiences.

When foreign policy gets covered in media, public pays attention, and it is not limited to international conflicts only. Drawing on quantitative research, Soroka (2003) concludes that the media play a significant role in determining and shaping the public appeal of foreign policy topics, ranging from international crises to economic bilateral relations. Therefore, according to the author, it is important to distinguish between foreign policy salience and opinions about foreign policy. Soroka (2003) argues that the latter has to do with individuals’ political preferences, such as whether to increase defense spending or whether the United States should get involved in a foreign conflict. In contrast, the former has to do with the relative importance
of the issue to the subject—the degree to which individuals pay attention to foreign policy issues, for example, compared to all other issues. Soroka thus suggests that the salience of an issue determines the weight that foreign affairs have on public opinion, which can then influence the foreign policy-making process.

Although many studies support the liberal approach that public opinion can influence foreign policy decisions from international conflicts to foreign economic policy issues, the literature on the importance of public opinion in foreign policy is still inconclusive. There are cases where the realist approach better explains foreign policy choices other than public opinion, therefore more empirical research on the issue is needed. There seems to be more consensus on the important role of the media, affiliated with various interest organizations, in shaping public opinion. Overall, our review of the literature on the realist-liberal debate and the media as a strategic actor suggests that only by adopting an approach based on the relationship between public opinion, the media, and foreign policy can we draw a more complete picture of how and why public opinion can influence foreign policy making.

2.3 Previous studies on Latin America’s public opinion about China

Although the literature on the impact of the economic relationship between China and Latin American countries on public opinion in the region has been steadily growing, there are few case studies. Most authors concentrate on quantitative studies of regional public opinion about Chinese economic activity (Eichenauer, Fuchs, & Brückner, 2021; Feng & Zeng, 2021; Armony & Velásquez, 2015). However, each country has varying degrees of relationship with China, from merely trade relations to full-scale strategic partnerships involving strong business and investment ties. We found only two country-specific case studies on China’s economic ties and public opinion in Peru (Ratigan, 2021) and Brazil (Armony & Velásquez, 2016). However, neither study explicitly tests either the Lippmann-Almond realist hypothesis or the Wilsonian liberal assumption, mentioning only in passing the importance of public opinion in foreign policy decisions.

Given the aforementioned studies public opinion studies of the whole region of Latin America, the role of the media in relation to public opinion on foreign policy has been only described in two studies (Armony & Velásquez, 2015; Ratigan, 2021). It is worth noting that almost all the authors use the LAPOP database and additional open data sources to find causal
links between Chinese investments and loans or trade ties with China and public opinion in Latin American countries. Only Armony and Velásquez (2015) analyze public opinion from a different perspective, using online comments about China on Latin American media Facebook pages with high number of followers.

Eichenauer et al. (2021) employ an instrumental variable model to separately demonstrate the impact of Chinese aid, exports, and foreign direct investment on public opinion about China in 18 Latin American countries from 2002 to 2013. Their control group is represented by non-Latin American countries that also received FDI and aid from China during that period. The large dataset of more than 100,000 observations allows the authors to use the country-fixed effects to address endogeneity of Chinese economic presence with regards to public opinion, which can be shaped not only by loans and investments, but also by Chinese cultural diplomacy or historically friendly bilateral ties. The authors’ main finding is that Chinese economic activity does not affect Latin American public opinion either positively or negatively, as the results of the 2SLS model before and after robustness checks are not statistically significant. Nevertheless, authors found empirically that China’s growing economic activity provokes polarization among Latin American societies. The more China invests or provides aid, the more individuals form either a very positive or a very negative opinion of China.

In turn, Feng and Zeng (2021) found that Chinese FDI, which the authors do not distinguish from loans, has a negative effect on public opinion in 17 Latin American countries about China. Covering a larger period from 2005 to 2016, the authors used random effects, fixed effects, and linear regression models. They also added more variables to their model than Eichenauer et al. (2021), such as the presence of the Confucius Institute, diplomatic relations, GDP per capita, trade surplus with China, presidential ideology, and Human Development Index (HDI). The statistical results demonstrate that Latin American countries with leftist governments, lower HDI, and a positive trade balance with China have a positive public opinion of Beijing. All these results are statistically significant, while the presence of Confucius institutes, diplomatic relations and executed contracts of Chinese companies across Latin America have no influence on public opinion, being not statistically significant.

The results on the impact of China’s economic activity on public opinion in selected Latin American countries are also heterogeneous. Although their study is descriptive, Armony and Velásquez (2016) draw on 2012 LAPOP data and trade and investment statistics to
demonstrate that Brazilians had a favorable public opinion of China, which was consistent with the same trend across the region in 2012. The authors argue that Sino-Brazilian relations were experiencing a “honeymoon” period in terms of public opinion in the early 2010s, although this may have changed over time.

In turn, using logistic regression models to examine the causal relationship between Chinese investment and public opinion about China in Peru from 2012 to 2019, Ratigan (2021) found no strong effect of Chinese FDI on the country’s public opinion, which varied from rural to urban areas. It is worth mentioning that the author tests two ordinary least squares (OLS) models for each wave of the LAPOP study with two different dependent variables. Those are based on questions about China as a model for Peru and confidence in the Chinese government. The author introduces regional fixed effects, separating rural areas that do and do not receive Chinese investment. In a model with trust in the Chinese government as the dependent variable, Ratigan found that in rural areas with Chinese mining activities, the Peruvian public opinion was negative but statistically significant only in 2019, while in rural areas without a Chinese financial presence, the Peruvian public had a favorable opinion of China. However, only the 2012 survey result was statistically significant. Following the news about China had a positive effect on China’s image in Peru in the 2017 model with “China as a model for Peru” question as the dependent variable, while having no significant effect in any of the logistic regression models that took trust in the Chinese government as the dependent variable.

To our knowledge, the existing literature on the impact of China’s economic activity on public opinion in Latin America is still inconclusive and could benefit from more empirical evidence. Authors have addressed the endogeneity of public opinion in different ways, aggregating various variables of interest. Clearly, more case studies are needed, as China has varying degrees and types of relationships with Latin American countries.

### 2.4 Hypotheses

Given the aforementioned debate between realists and liberals regarding the importance of public opinion in foreign policy decisions, as well as the approach based on the strategic actorliness of the media in shaping public opinion, in our study we propose to test the following three hypotheses regarding public opinion of Chinese investment and credit in Ecuador considering both theoretical assumptions. We suppose that the rejection of one hypothesis
would lead us to assume that in the case of Ecuador, the opposite theory holds. The first hypothesis is as follows:

**H1. Hypothesis regarding public opinion-economic foreign policy nexus:** Ecuadorian public opinion about Chinese financial activity is volatile and has a limited influence on Ecuador’s foreign policy decisions.

It is likely that the question regarding the volatility and stability of public opinion about Chinese economic presence can be answered based only on descriptive statistics analysis. However, in order to understand the impact of public opinion about Chinese investment and credit on foreign policy, we need to delve deeper into whether it is negative or positive, and whether it coincides with the foreign policy rhetoric of Ecuadorian presidents. Thus, our next hypothesis is as follows:

**H2. Hypothesis on Chinese economic activity and characteristics of local public opinion:** Chinese financial activity in Ecuador contributes to China’s positive image in the country.

In addition, given the important role of the media in shaping foreign policy preferences of the population, we are interested in verifying the extent to which Ecuadorian media can influence local public opinion about Chinese credit and investment. Hence, our next hypothesis is the following:

**H3. Hypothesis regarding the media and its role in shaping foreign policy preferences toward China:** The media shapes a positive/negative image of Chinese investment and credit, and the public is receptive to it.
3. Methodology

We used an empirical approach consisting of several steps. After an intensive literature review about the historical evolution of China and Ecuador relations (presented in Chapter 4), we designed our exploratory field research using snowball sampling (Bryman, 2016). The snowball sampling technique led us to the identification of five experts (or key-informants) on Sino-Ecuadorian relations, with whom we performed in-depth interviews in Quito from February to April 2022 (Annex 1). Interviews allowed us to define our research hypothesis and to add fresh perspectives to our work. We then used methodological triangulation to combine our key informants’ perceptions, the results of the public opinion surveys and our newspaper content analysis. Mixed-methods analysis are considered useful for validating results obtained through quantitative and qualitative research methods, as well as for obtaining comprehensive data, and better understanding of a complex phenomenon under study (Bekhet & Zauszniewski, 2012; Morse, 1991; Bryman, 2016). In the first section, we start by detailing the chosen regression model and the relevant variables selected from the LAPOP survey waves from 2012 to 2021. In the second part, we outline a strategy for a content analysis of news on China’s economic presence in Ecuador. In the third part, we discuss some methodological limitations.

3.1 Regression model and variables of interest

To empirically test how attitudes toward Chinese investments change in response to the country’s growing economic engagement in Ecuador, we employ data taken from 5 waves of the representative Latin American Public Opinion Poll (LAPOP) and run logistic time series regressions with region and year fixed effects, using the statistical software for data analysis Stata, version 16.1. We follow Euchenauer et al. (2021) and Feng and Zeng (2021), who ran time series regressions to find a causal relationship between Chinese economic presence and public opinion about China in Latin America. The difference in our model is that we draw on a smaller dataset for a single country. Compared to Ratigan’s (2021) model with a small dataset for Peru, which is based on 4 separate OLS regressions for each year, we believe that the year-fixed-effects model will give us more reliable results due to the larger number of observations. It will also allow us to control for unobserved characteristics occurring every two years in Ecuador. Although panel time-series data are generally thought to contain multiple observations across many countries, a small, balanced set of single-country data can also have great
explanatory power (Torres-Reyna, 2007). In addition, we add regional fixed effects to control for possible differences between Ecuadorian provinces, following Ratigan (2021), who included these effects in his model for Peru, and Feng and Zeng (2021), who added country-specific fixed effects.

LAPOP is considered the leading academic initiative conducting public opinion research in the Americas, with more than thirty years of experience (Vanderbilt University, 2022). Interviewers conducted face-to-face interviews every two years in 18 Latin American countries, including Ecuador, which is our country of interest. The data cover the years 2012-2019 and 2021. We are not including 2010 dataset in our model because China only launched 3 projects that year and local population probably had not yet formed its opinion about Chinese investment. Data from the recent 2021 survey will be presented only as descriptive statistics. It is not included in the regression model because of possible bias, as the COVID-19 pandemic outbreak had a strong negative impact on China’s public image abroad (Ameyaw-Brobbey, 2021). Thus, it seems impossible to disaggregate the impact of Chinese investments and credits on public opinion for this year. Moreover, the survey design in 2021 differs from previous years, and some of the key questions we use for our regression model were not asked or were asked differently.

The sample size at the year level varies between 385 and 1149 respondents over the time period analyzed. Our dependent variable is based on the following question: “In your opinion, is the Chinese government highly trustworthy, somewhat trustworthy, not very trustworthy, not trustworthy at all, or do you have no opinion?” We decided to take the trust question as the dependent variable rather than the one that directly asks about respondents’ opinions about Chinese influence, since the latter was only asked in 2012 and 2014 in Ecuador. Moreover, because China uses state-owned enterprises and banks to deliver investments and loans around the world, we believe that it is very likely that people associate Chinese foreign direct investment and credit with the Chinese government. We follow Ratigan (2021), who uses the question on confidence in the Chinese government as a proxy to measure public opinion about China in Peru. Following him and other colleagues (Eichenauer et.al., 2021; Feng & Zeng, 2021), we coded our dependent variable as 1 if the respondent chose “very” or “somewhat trustworthy” and 0 for “not very trustworthy” or “not trustworthy at all”. In addition, similar to Eichenauer et al. (2021), we also excluded from our main analysis all respondents who answered “Do not know” and “No answer” when asked about their opinion of the Chinese government.
When it comes to independent variables, we mainly follow Ratigan (2021) and look at different categories, such as direct contact with Chinese investments and projects backed by Chinese loans, knowledge of Chinese investments and political ideology. To test our H1 on the influence of local public opinion on foreign policy decisions, and H2 on the Ecuadorian perceptions of Chinese companies, we measure direct contact through the presence of Chinese investments and loan-financed projects in Ecuadorian provinces. Ecuadorians who live in these provinces have experienced direct contact with Chinese investments. It is worth mentioning that Ratigan (2021) only considers Chinese investments in Peru and does not take into account loans, which may not give a complete picture of the local experience with China. Thus, we create a dummy variable “Chinese economic presence”, which controls for provinces with Chinese investment projects, coded as 1 and the rest as 0. As Ratigan (2021), we consider only investment and credit-backed projects initiated at least two years before each wave of the LAPOP survey, since the effect of FDI or loan-backed projects on the local community is not immediate. For instance, we do not code province 1 in the 2012 dataset if it received investment in the same year.

Moreover, if a Chinese investment or loan-financed project started in 2010, we include it in all datasets, as investments normally have a long-run impact on local residents. It is worth mentioning that we consider loans and investments that were tied to infrastructure, mining, and oil projects, excluding loans aimed at covering budget deficits and developing annual investment plans (AIPs). To track China-built projects over $30 million and their locations, we take data from Castro (2019), AidData (2021), China’s Overseas Development Finance dataset of Boston University’s Global Development Center (2022), China Global Investment Tracker (American Enterprise Institute, 2022), and various media. We expect that Chinese loans, investments, and grants, most of which were less than $30 million, would have little impact on this analysis, therefore we do not include them. Table 1 details the investment projects included in the analysis and their locations.

<table>
<thead>
<tr>
<th>Year</th>
<th>Project name</th>
<th>Province</th>
<th>Included in (dataset)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>Project Description</td>
<td>Location</td>
<td>Years</td>
</tr>
<tr>
<td>------</td>
<td>---------------------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>2013</td>
<td>Minas San Francisco and la Unión hydroelectric plant</td>
<td>El Oro</td>
<td>2016, 2018, 2021</td>
</tr>
<tr>
<td>2013</td>
<td>Cañar and Naranjal Flood Control Project</td>
<td>Cañar</td>
<td>2016, 2018, 2021</td>
</tr>
<tr>
<td>2014</td>
<td>Construction of a high voltage 500KV transmission network system</td>
<td>Napo, Pichincha, Tungurahua</td>
<td>2016, 2018, 2021</td>
</tr>
<tr>
<td>2015</td>
<td>Restoration and improvement of 3 highways</td>
<td>El Oro</td>
<td>2018, 2021</td>
</tr>
<tr>
<td>2015</td>
<td>Yachay city of knowledge</td>
<td>Imabura</td>
<td>2018, 2021</td>
</tr>
<tr>
<td>2016</td>
<td>Earthquake relief funds</td>
<td>Manabí</td>
<td>2018, 2021</td>
</tr>
<tr>
<td>2016</td>
<td>Santa Elena Aqueduct Hydraulic Plan</td>
<td>Santa Elena</td>
<td>2018, 2021</td>
</tr>
</tbody>
</table>
Table 1. Location of Chinese FDI- and loan-backed projects by province (AidData, 2021; American Enterprise Institute, 2022; Boston University, 2022; Castro, 2019).

Drawing on the literature mentioned in the previous chapter on the role of the media in shaping public opinion, we measure knowledge about Chinese investments through the frequency of media consumption among Ecuadorians. In the LAPOP surveys, respondents were asked how often they watch news on television, radio, newspapers, or the Internet. Response options were daily, several times a week, several times a month, several times a year, and never. Since binary variables have strong explanatory power, we decided to convert this variable of interest and coded “daily and several times per week” responses as 1 and the other responses as 0. By including this variable in the model, our aim is to test our H3 regarding the role of the media in shaping public opinion preferences. However, this variable cannot fully explain knowledge about Chinese investments among Ecuadorians because of the heterogeneity of media coverage of Chinese financial projects in the country. Moreover, it is very likely that when answering LAPOP’s question about frequency of news viewing, Ecuadorians may think more about following news regarding domestic affairs rather than financial cooperation with Beijing. Lippmann’s (1922, p. 175) assumption that “life outside the national boundaries is more distinctly alien than any life within” may be valid in this regard, although Chinese investment projects affect life inside national boundaries. Therefore, we complemented our regression analysis with a content analysis of the coverage of Chinese economic projects in the Ecuadorian media, which will be described below.

The third category of independent variables covers personal political preferences, i.e., political ideology. According to the literature, people inclined toward leftist ideology are more likely to express support for China, because the latter is ruled by the Communist party (Ratigan, 2021). To control for political ideology in our model, we use variables that reflect ideology preferences, such as ideology, support for democracy, and trust in the U.S. government as an alternative to Chinese model of governance. We believe that all these variables will help us understand consistency and stability of public opinion with regards to foreign policy preferences, which will make our H1 easier to test. This is related to the assumption that people with certain ideological preferences are likely to have stable foreign policy views, such as leftists who are likely to sympathize with China due to its model of governance, or Democrats, who prefer their country to have closer ties with other democracies (Holsti, 1992; Holsti, 2004).
In the LAPOP surveys, political ideology is measured on a scale of 1 to 10, where 10 is most right-wing and 1 is most left-wing. Commitment to democratic values is measured by responses to the following question: “Do you agree or disagree with the following statement: ‘Democracy may have its problems, but it is better than any other form of government.’” Answers range from 1, which is strong disagreement, to 7, which is strong agreement. Trust in the U.S. government is measured by asking, “In your opinion, is the United States government highly trustworthy, somewhat trustworthy, not very trustworthy, not trustworthy at all, or do you have no opinion?” Following the same strategy as for our dependent variable, we excluded responses with no opinion and coded “highly trustworthy” and “somewhat trustworthy” as 1 and 0 otherwise.

We also added several control variables to our model. As suggested by Holsti (2004) and Baumgartner et al. (2008), gender, education, religion, income, and age can influence opinions on foreign policy issues. Hence, control variables will also help us test our H1. For our gender variable, we code women as 1 and men as 0. Age is calculated based on the respondent’s year of birth. Education is measured based on the number of years of schooling completed by the interviewee. Religiosity is measured by asking, “How important is religion in your life?” We identify religious people who answered “very important” and code them as 1 and the rest as 0. To measure respondents’ income, we follow Ratigan (2021) and use the income range question to measure the income size of Ecuadorians. It is worth noting that the income quintiles of this variable were different in almost every wave of the survey, which is probably due to changes in the minimum wage rate, therefore we adjusted the variable by converting 16 quintiles to 4. In addition, we included the urban-rural population ratio in the model. Rural population responses were coded as 0 and 1 otherwise. To control for unobserved regional differences, we also added regional fixed effects in the model. Following Ratigan (2021), we used a geographical variable from LAPOP which distinguishes 6 geographic regions of Ecuador that are larger than provinces – Costa Urbana (urban coast), Costa Rural (rural coast), Sierra Urbana (mountainous urban area), Sierra Rural (mountainous rural area), Oriente Norte (northern East), Oriente Sur (south east).

### 3.2 Content analysis of news about China

As mentioned above, the news consumption variable in our regression model cannot fully explain whether reading news about the Chinese economic presence affects Ecuadorians’ perceptions of Chinese investments. The obstacle is the sheer number of topics about China
covered in the Ecuadorian media, from sports, health, and culture to politics, governance, and economics. As a result, news articles focusing only on China’s investment and loan-backed projects in the country need to be analyzed separately. Moreover, a separate analysis of news coverage regarding the financial relationship between Quito and Beijing is necessary to test our H3 on the importance of the local media in shaping public opinion about foreign economic policy. Thus, the combined results of our logistic regression models and content analysis of news about Chinese investment and credit published in the local daily newspapers El Comercio, El Universo, and El Telégrafo from 2011 to 2021 will give us a more complete picture.

The selection of newspapers is based on various objective criteria. First, all three media outlets publish news daily and have online versions. Since the scope of our study is limited to online articles only, this is the main condition. Consequently, all letters to the editor and opinion articles were excluded from the dataset. Moreover, most of the LAPOP survey respondents, whom we coded as 1, read the news daily, therefore it is important that our content analysis be consistent with the regression analysis. Second, all of the selected newspapers specialize in national, not just provincial or local coverage, and their content is general and does not cover only crime reports, as in the case of Súper and Extra newspapers. Table 2 provides more details on Ecuador’s online media with daily press. Local newspapers refer to the media covering a specific city, provincial newspapers to a specific province, regional newspapers to one of the regions of Ecuador, that is, Costa (Coast), Sierra (mountainous region), Galápagos, and Oriente (East), and national newspapers – to the entire country.

<table>
<thead>
<tr>
<th>Geographic news coverage</th>
<th>Newspapers</th>
<th>Content type</th>
<th>Web pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local</td>
<td>La Tarde (Cuenca), Metro (Guayaquil, Quito), Últimas Noticias (Quito), El Clarín (Los Ríos)</td>
<td>General</td>
<td><a href="http://www.latarde.com.ec">www.latarde.com.ec</a>; <a href="http://www.metroquil.ec">www.metroquil.ec</a>; <a href="http://www.ultimasnoticias.ec">www.ultimasnoticias.ec</a>; <a href="http://www.elclarin-ec.com">www.elclarin-ec.com</a></td>
</tr>
<tr>
<td></td>
<td>La Marea (Manta), La Verdad (Milagro)</td>
<td>Crime reports</td>
<td><a href="http://www.eldiario.ec/lamarea">www.eldiario.ec/lamarea</a>; <a href="http://www.prensalaverdad.com">www.prensalaverdad.com</a></td>
</tr>
<tr>
<td></td>
<td>Centro (Santo Domingo)</td>
<td>Crime reports</td>
<td>Regional</td>
</tr>
<tr>
<td>----------------</td>
<td>-----------------------</td>
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<td>-----------</td>
</tr>
</tbody>
</table>

*Note: Newspaper headquarters’ cities in parentheses*

**Table 2.** Ecuador’s online media outlets with daily press (Salaverría-Aliaga, 2016).

Third, our choice is based on the importance of the media. According to the Technical Association of Latin American Daily Newspapers (ATDL in Spanish), the newspapers with the highest circulation in Ecuador are El Comercio, El Diario, El Telégrafo, El Universo, and Expreso (ATDL, 2017). Hence, all three newspapers we selected are among the most important media in Ecuador.

Fourth, we justify the number of newspapers chosen, by maintaining objectivity and eschewing a possible negativity bias against Chinese investments. El Comercio and El Universo are considered the largest and most read newspapers in the country, thus we must include them in our analysis (Salaverría-Aliaga, 2016). Even though, these two media, along with La Hora, Expreso, and Hoy, positioned themselves in favor of opposition politicians and against the actions of ex-president Correa during his mandate (Borja Cornejo, 2012). Since Correa advocated strengthening the country’s economic relationship with China, it is likely that these newspapers covered investment projects financed by Beijing negatively. China may have been perceived by these media as an ally of Correa. Hence, to balance the perspective regarding Chinese investments and to obtain as objective an analysis of news coverage as possible, we decided to add El Telégrafo newspaper to our content analysis, since this state-owned media had close ties to the Correa government (Punín & Rencoret, 2014).

Due to the large amount of Chinese loans and investments destined for Ecuador, we reduce our focus and concentrate on the two most important developments in the two countries’ financial relations, namely the construction by the Chinese company Sinohydro of Coca Codo
Sinclair, Ecuador’s largest hydroelectric plant, and Chinese investments in the country’s largest mine project, the Mirador mine. These two investment projects have been in the media spotlight because of their scale and importance to the country’s economy, as well as social and environmental impact they have caused.

Through content analysis, we aim to determine the tone of news coverage of Chinese credit and investment-backed projects. Our type of qualitative content analysis is summative, as we strive to reduce the material to core content to make it more manageable (Kaefer et al., 2015). Hence, we use Nvivo software to encode news texts extracted from El Comercio, El Telégrafo, and El Universo newspapers. We follow a strategy similar to that of Kaefer et al. (2015) and Hassan and Omar (2017), who used Nvivo to analyze media perceptions of New Zealand’s environmental policies on carbon reduction and climate change mitigation, and prejudice against Islam and Muslims in Malaysia and Indonesia, respectively. The authors imported articles into the program using the Ncapture data import plug-in in Nvivo, and we did the same. It is worth mentioning that unlike Kaefer et al. (2015), who imported news data from the Factiva database, we found all articles related to the Coca Codo Sinclair and the Mirador mining project topics by going directly to the websites of the newspapers of interest and searching for topics using the following keywords or tags: “Coca Codo Sinclair”, “proyecto Mirador (Mirador project)” and “minería (mining)” as assigned by the website editors.

After importing the data, Kaefer et al. (2015) and Hassan and Omar (2017) distributed the articles on a source classification sheet, that is, a table containing certain attributes (columns) and corresponding values for each article (rows). We basically follow Kaefer et al. (2015), who chose the following attributes to analyze news articles: country, year, newspaper, article title, author, author’s position, and tone, that is, whether a particular issue is reflected and whether it is mentioned in a favorable or unfavorable way. In addition to positive and negative tone, Hassan and Omar (2017) added neutral and balanced tones to the tone attribute, called bias in their classification sheet, to analyze news bias toward Islam in Western media. Neutral tone refers to news bias that is neither negative nor positive, while balanced tone contains both positive and negative connotations. It is worth noting, however, that we could not avoid subjectivity in categorizing news. Behind the categorization process there is always the coder, a person with his or her biases, so the results are always biased, and we are aware of that. Qualitative analysis software can only facilitate the process of extracting data and coding, but it cannot code for a person, as the process is not automatic (Crowley et al., 2002).
It is worth mentioning that Kaefer et al. (2015) focused not only on local media coverage in New Zealand, but also in the United States and Australia. We limit ourselves to the three most important media outlets in Ecuador, thus we exclude the country attribution variable. In addition, we will not use the attributes “author” and “author’s position” as this information is largely unavailable in the selected Ecuadorian media. Regarding the “tone” attribute, we study whether media perceptions of Chinese loan and investment projects are positive, neutral, balanced, or negative. To identify the tone, we looked not only at the news titles, but also at the content in general. Moreover, we added the month attribute to our classification table. After categorizing the news, we run a word frequency query to find if there are any words that have a direct negative connotation to the two Chinese credit and investment projects. We believe that the query will serve as a certain robustness check of our tone coding, since this process is mostly subjective and requires double checking. Before running the query, we eliminated all prepositions, linking words, and common verbs such as said, told, and others to obtain a more accurate picture of the most frequently used words and their connotations. Moreover, we grouped words with synonyms to avoid repetition.

3.3 Limitations

The main caveat of the analyzed LAPOP data is the large number of non-respondents to the question on trust in the Chinese government. This limitation provides a possible hint that Ecuadorians are more concerned with life within the national borders rather than outside them, suggested by Lippmann (1922). However, the Chinese economic presence directly affects the local population because of employment opportunities, environmental impact, and social dynamics. Excluding the responses of Ecuadorians, who decided to abstain and not express their opinions about the Chinese government, greatly reduced the datasets we chose, leaving no choice but to append them and thus increase the number of observations. Had we run regressions for each wave of the LAPOP survey separately, the results would have been less trustworthy. Moreover, the selection of the question on confidence in the Chinese government cannot guarantee a complete answer to the research question of this study, as it serves as a proxy. We only assume that people associate Chinese foreign direct investment and credit with the Chinese government because China uses state-owned enterprises and banks to deliver investments and loans. Our independent variables are also proxies and were added to measure the consistency and stability of public opinion in Ecuador, thus a full test of H1 cannot be guaranteed. Despite this, the question on trust in the Chinese government is the only one that was asked in all LAPOP surveys from 2012 to 2018. Therefore, there was a unique option to
choose the dependent variable, given that LAPOP is the only public opinion project in Latin America in general and in Ecuador in particular, which conducts surveys with questions related to foreign policy preferences on an ongoing basis.

Regarding the content analysis of news about Chinese investments, we limited our analysis to news from three local newspapers, although we are aware of the important role of television programs and social media in shaping public opinion about foreign policy. Another caveat is that we disregard Beijing’s public diplomacy efforts to create a positive image in Latin America through the country’s state-owned media with a global reach, such as CCTV and Xinhua, which also broadcast in Spanish and Portuguese. Morales (2022), however, argues that CCTV’s visibility in Latin America has been extremely limited. Instead, he claims that China’s communications strategy in the region has evolved and currently is based on three pillars: media summits between Chinese and Latin American media representatives, training of journalists from Latin America in China, and signing cooperation agreements to exchange news and content and co-produce audiovisual materials. Hence, all these Chinese efforts, which were not included in our analysis, are likely to contribute to a positive image of Chinese investments in Ecuador.

Moreover, an important caveat of the news content analysis is its subjectivity. The results will always be biased because we decide which categories, i.e., positive, negative, balanced, and neutral, should be assigned to the news published in El Comercio, El Telégrafo, and El Universo. We also limit ourselves by analyzing only the headlines and the text of the news, ignoring the images that the editors used to accompany news about Chinese investment projects in Ecuador. However, we could not include images in our analysis because the news outlet El Telégrafo does not usually publish images with the news (see Annexes 2, 5, and 8). Despite this, visual images play a significant role in shaping public opinion because viewers are likely to mistake visual images for reality, unaware of the influence of visual imagery (Messaris & Abraham, 2001).

In addition, our content analysis of news coverage may suffer from bias due to the disproportionate views on Chinese investment projects. El Comercio and El Universo are two media outlets that probably take an anti-Chinese stance because of their complicated relations with ex-president Correa, and the state-owned El Telégrafo probably sympathizes with Beijing. Unfortunately, we could not include the other state-owned newspaper in the analysis, since El Telégrafo is the only national public media that is popular among Ecuadorians.


4. Historical overview

This chapter presents the history of the financial relationship between China and Ecuador. It sheds light on important details that help understand the context of economic cooperation between the two states, especially during Rafael Correa’s rule. It also details the terms of Chinese loans and investments, and some issues they have put on the agenda of Ecuadorian politicians, that is, the social and environmental impact of Chinese finance in the country.

4.1 Historical context of Sino-Ecuadorian financial relations

Official diplomatic relations between Quito and Beijing were established in 1980. However, both countries began trading earlier, in 1971, when China officially became a member of the United Nations, and Ecuador broke diplomatic relations with Taiwan (Garzón & Castro, 2018). Nevertheless, the financial relationship was weak until 2007 (Herrera & Lee, 2017). The period from 1980 to 2007 in bilateral financial relations was marked by the entry of the Chinese state-owned Petroleum and Gas company of China (CNPC) and Sinopec in Ecuador’s oil sector and a $40 million loan from the People’s Bank of China for bridge construction in 2002 (Castro, 2019).

The situation changed radically when Rafael Correa came to power in 2007. Correa favored Chinese financing over Western creditors as Ecuador severed relations with the World Bank in 2007 and defaulted on $3,2 billion in Global 2012 and 2015 sovereign bonds, claiming that the debt accumulated by previous governments was “illegal” (Castro, 2019; Garzón & Castro, 2018; Herrera-Vinelli & Bonilla, 2019). In addition, bilateral relations with the United States deteriorated, leading to the expulsion of the U.S. ambassador from Ecuador in 2011 (Beittel, 2013). However, it is worth noting that a year before Correa took the office, in 2006, the Ecuadorian Ministry of Foreign Affairs published a national foreign policy plan for the period 2006-2020, which identified PRC as one of Ecuador’s main partners (MRE, 2006). According to the plan, which was designed to pursue a stable foreign policy regardless of which government is in power, Ecuador aimed to attract Chinese FDI and increase trade with China.

All these conditions led to a rapprochement in political, economic, and financial relations with China. Today, China is Ecuador’s main bilateral creditor (Castro, 2019; Garzón & Castro, 2018). China began investing and lending abroad en masse due to capital
accumulation as a result of rapid economic development accompanied by high demand for raw materials and overcapacity in industrial production (Garzón & Castro, 2018). According to official data, from 2010 to 2018, China disbursed $13.6 billion in loans to Ecuador, although the total amount of credit commitments was $18.4 billion (Castro, 2019). Table 3 shows the amount of Chinese loans disbursed by year, loan conditions and purpose of lending.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of loans</th>
<th>Amount (thousands of US$)</th>
<th>Purpose</th>
<th>Interest rate (%), range</th>
<th>Types of loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2</td>
<td>2 682 745</td>
<td>Construction of Coca Codo Sinclair; Multisector Investment Program</td>
<td>6-6,9%</td>
<td>Infrastructure (1); 80% discretionary, 20% oil (1)</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>2 571 363</td>
<td>Projects for AIP; Sopladora dam</td>
<td>6,25%-7,16%</td>
<td>Infrastructure (1); oil-backed loan (1), discretionary (1)</td>
</tr>
<tr>
<td>2012</td>
<td>3</td>
<td>2 000 000</td>
<td>Investment Programs for economic infrastructure</td>
<td>6,87%-7,19%</td>
<td>Discretionary (2); oil-backed (1)</td>
</tr>
<tr>
<td>2013</td>
<td>3</td>
<td>691 362</td>
<td>Road to Quito airport; Minas San Francisco dam; Cañar and Naranjal Flood Control Projects</td>
<td>2%-6 months LIBOR + 4%</td>
<td>Infrastructure (3)</td>
</tr>
<tr>
<td>2014</td>
<td>2</td>
<td>821 197</td>
<td>Project 500KW Transmission System; contract for execution of 10 roads</td>
<td>6 months LIBOR + 4% - 6%</td>
<td>Infrastructure (2)</td>
</tr>
<tr>
<td>2015</td>
<td>1</td>
<td>85 071</td>
<td>Contract for execution of 3 roads</td>
<td>3 months LIBOR + 6,20%</td>
<td>Infrastructure</td>
</tr>
<tr>
<td>2016</td>
<td>6</td>
<td>3 438 183</td>
<td>Projects for AIP; Yachay Knowledge city program; First stage of Santa Elena Hydraulic-Aqueduct Project; Construction of 200 Millennium Schools (prefabricated)</td>
<td>3%-7,25%</td>
<td>Infrastructure (3); Discretionary (2); Oil-backed loan (1)</td>
</tr>
<tr>
<td>2017</td>
<td>3</td>
<td>350 000</td>
<td>Multi-sector investment projects; Contract modifying the financial conditions of the Credit Agreement signed on January 22, 2016</td>
<td>3 months LIBOR + 6,20%-6,5%</td>
<td>Discretionary (3)</td>
</tr>
<tr>
<td>2018</td>
<td>3</td>
<td>967 640</td>
<td>Infrastructure reconstruction project; funds for eligible projects</td>
<td>2%-6.6%</td>
<td>Infrastructure (1); Discretionary (2)</td>
</tr>
<tr>
<td>------</td>
<td>---</td>
<td>---------</td>
<td>---------------------------------------------------------------</td>
<td>---------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>13 608 200</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. All Chinese loans given to Ecuador, 2010-2018 (Castro, 2019; The Inter-American Dialogue, 2022)

Almost half of all Chinese loans received by Ecuador (12 out of 26 loans) were for infrastructure projects related to hydroelectric power plants, roads, and social infrastructure (schools and universities in the knowledge city of Yachai). It is worth noting that during his presidency, Correa set the ambitious goal of a clean energy transition from fossil fuel-based energy mix to a hydropower-based model (Castro, 2019). Thus, the implementation of the strategic shift outlined in the electrification master plans for 2009-2020 and 2013-2022 was tied to Chinese financing. Chinese policy banks helped finance and build six of Ecuador's eight hydroelectric plants, which aim to diversify the country’s energy matrix through a more sustainable energy source. Those hydroelectric plants are Coca Codo Sinclair, Sopladora, Minas San Francisco, Delsitanisagua, Quijos and Mazar Dudas (Vallejo et al., 2018).

Interest rates on four loans for infrastructure projects range from 6% to 7.25%. In turn, five loans were granted with special conditions, that is, the first 3 or 6 months are paid at the London Inter-Bank Offered Rate (LIBOR), and then a fixed interest rate is set, which varies from 3.5% to 6.20%. Only three loans have similar characteristics to IMF loans, which have low interest rates of 2-3% with a maximum maturity of 20 years and the first five years as a grace period. Castro (2019) argues that loans for infrastructure projects are conditional in the sense that Chinese firms usually have to be contracted to carry out the projects.

Chinese state-owned banks made 10 loans made to Ecuador that are discretionary. However, six of them were for infrastructure projects prioritized in annual investment plans (AIPs). Interest rates on these loans are high, ranging from 6.2% to 7.19%. According to the Inter-American Dialogue (2022), at least one discretionary loan made to Ecuador in December 2012 was for budget deficits. The remaining three loans fall into the third category of oil-backed loans. The main condition for this loan is the direct sale of crude oil to China (Castro, 2019). All of the oil-backed loans were for annual investment programs. Two of them had interest rates of about 6.5%, and the other loan had an interest rate of 3%. One of the first loans the country received in 2010 was a mixed loan (80% discretionary and 20% oil). The interest rate on this loan was 6%.
Despite significant progress in cleaning up the energy matrix and generating additional revenue from the export of surplus electricity, some Ecuadorian and Western authors claim that the hydroelectric power plants built by China have had a number of negative environmental and social impacts (Gandarillas et al., 2022; Castro, 2019; Garzón & Castro, 2018; Vallejo, Espinosa, Venes, & López, 2018). For instance, The Coca Codo Sinclair (CCS), the largest hydropower project financed by China, was built on the Coca River that is believed to be threatened by regressive erosion. This is because the water flow capacity required for full power generation is lower than determined by preliminary hydrological studies (Garzón & Castro, 2018). It is worth noting that each type of environmental damage is contrary to the Ecuadorian Constitution, which was the first in the world to enshrine the rights of nature (Ray & Chimienti, 2017).

According to Vallejo et al. (2018), despite the existing labor safeguards in Ecuador, during the construction of Chinese projects Ecuadorian workers’ rights to decent working conditions were systematically violated, leading to strikes by workers in 2011 and 2012. In December 2014, 14 workers died and 12 were injured when the heatwaters at the dam collapsed (Gandarillas et al., 2022). Despite this, the population living near the CCS hydroelectric plant seems to have a positive perception of the Chinese company Synohydro involved in the construction (Garzón & Castro, 2018). This can be attributed to increased employment and business opportunities as well as the company’s $25 million investment in social projects in the area.

The surge in Chinese foreign direct investment in Ecuador was also linked to Correa’s policy of diversifying foreign investors. In 2007, the government issued a new tax law that prescribed new income and withdrawal taxes for foreign firms (Camacho & Bajaña, 2020). The U.S. multinational oil companies such as Burlington and Oxy, as well as the Anglo-French oil company Perenco, protested the move and appealed to the International Centre for Settlement of Investment Disputes (ICSID). These companies had signed bilateral investment agreements with Ecuador that stipulated different tax terms (CEPAL N., 2021). In response, Ecuador withdrew from the ICSID in 2009 and renegotiated contracts with other oil companies in 2010, leading to the departure of Petrobas (Brazil), EDC (United States) and Canada Grande (Korea) from the country (Camacho & Bajaña, 2020).

All these steps led Rafael Correa’s government to look in parallel for alternatives to Western capital and to invite China to become one of the main investors in the Ecuadorean
economy. This shift was reflected in the sharp rise of Chinese FDI in Ecuador from nearly zero in 2003 to $1.04 billion in 2015 (Herrera & Lee, 2017). According to official statistics, Chinese FDI has remained stable since the end of Correa’s presidency in 2017, with the country receiving $61 million from Beijing in 2018 and 2020 (BCE, 2022). However, China has ceased to be one of Ecuador’s top five investors. In 2021, Quito rejoined the ICSID to regain the lost confidence of Western investors. This move was highlighted by ECLAC (2021) as a key feature of Ecuador’s investment landscape.

According to the China Global Investment Tracker, between 2005 and 2016, the majority of Chinese direct investment, i.e., $979 million, went mainly to the mining and oil industries (Herrera & Lee, 2017). This trend was broadly in line with Beijing’s Go Out foreign investment strategy. It was adopted to encourage Chinese firms to invest abroad with two main objectives: securing natural resources and narrowing the technological gap by acquiring foreign assets of advanced technologies (CEPAL N., 2021). In the case of Ecuador and other Latin American states that do not have a high share of cutting-edge technology, Chinese investment also plays a role in facilitating Chinese exports in trade (Herrera & Lee, 2017). From 2007 to 2017, Ecuador’s average trade deficit with China was $1.97 billion, despite a significant increase in Ecuadorian exports to China (Herrera-Vinelli & Bonilla, 2019).

According to Ray and Chimienti (2017), Chinese investors tend to have difficult relations with the local communities due to the social and environmental issues associated with oil production. For instance, there have been a series of labor scandals involving China’s largest oil companies, CNPC and Sinopec, known in the country as Andes and Petro Oriental, respectively. In 2007 and 2008, members of various communities in the areas where these two companies operate organized a series of strikes, road closures, and protests, demanding more jobs and wage equality with foreign workers (Ray & Chimienti, 2017).

According to a recent report presented by the Collective on Chinese Finance and Investment, Human Rights, and Environment (CICDHA), comprised of 13 Latin American environmental NGOs, Chinese oil giants Sinopec and CNPC have systematically violated the rights of local people to clean water, territory, and a healthy environment in the Taparoa oil block and Block 14 (Gandarillas et al., 2022). It is worth noting that the Taparoa oil block is a place where the largest private oil production takes place, and Block 14 is located in one of the most biodiverse places in the world, Yasuní National Park in the Amazon. Moreover, indigenous peoples living in blocks 79 and 83 of the Yasuní park have claimed that their right
to prior consultation, enshrined in Ecuador’s constitution, was violated because the government granted permission to CNPC and Sinopec to explore for oil in the area without asking the locals. Nevertheless, Chinese oil companies are believed to have had a more positive relationship with the government and civil society than the Canadian company Encana or the U.S. giant Texaco in Ecuador (Ray & Chimienti, 2017).

When it comes to Chinese investments in the mining sector, CICDHA emphasizes that Chinese mining companies have been also responsible for human and natural rights violations in mining zones (Gandarillas et al., 2022). In particular, indigenous communities living near the Mirador, Río Blanco, and San Carlos-Panantza mines have suffered violations of their rights to prior consultation, a healthy environment and clean water, physical safety, housing, and decent work (Gandarillas et al., 2022). All three mines are considered strategic major mining projects by the Ecuadorian government. In 2013, Ecuadorian human and environmental rights activist José Tendetza, who was defending the rights of indigenous people living in the Parroquia Tundayme area, where the Mirador mining project is located, was murdered. The Attorney General’s Office suspected two workers from the Chinese company Ecuacorriente, responsible for the exploration of the mine, although the trial resulted in impunity for the suspects.

According to the CICDHA report, the Chinese company Ecuagoldmining, which received the exploration concession for the Río Blanco mine project, refused to open a sindicate of workers (Gandarillas et al., 2022). CICDHA also reports that another Chinese company, Explorcobres, which worked in the area of the San Carlos-Panantza mine project, sued for ownership of the land where its camp was located, and after receiving favorable court decisions, 35 families from Nankints, Tsuntsuimi, San Pedro and Kutkus were forcibly evicted between August and December 2016. It is worth noting, however, that the Río Blanco and San Carlos-Panantza projects were suspended. In the case of Río Blanco, the reason for the suspension was two court decisions in 2018 that found violations of the rights of indigenous communities to prior consultation. According to Ecuador’s central bank, the second was suspended by decision of the then Ministry of Industry in 2018 for reasons of force majeure or accidental event, pending the resolution of inconvenience. Due to the Covid-19 pandemic and the subsequent declaration of a public health emergency, the company’s operations were suspended and postponed (BCE, 2021).
As one can see, the Ecuadorean government, especially the Correa government, sought to strengthen economic and financial relations with China, although, according to some authors and reports, oil and mining projects developed by China have provoked some environmental and social issues. It is worth noting, however, that we disregard the reports and publications by Chinese authors on Chinese investment projects in Ecuador and their impact on social dynamics and the environment. It is likely that a Chinese perspective on social and environmental impacts would have enriched the analysis. However, due to the language barriers, we could not access articles in Chinese and relied only scholarly articles and reports by Western and Latin American scholars. This is one of the main caveats of the descriptive analysis presented in this chapter.
5. Main findings

This chapter presents the main empirical results of the study. We start by analyzing the information arising from the descriptive statistics of our selected variables from the LAPOP surveys from 2012 to 2021. We then present the regression results of our three models, followed by robustness checks based on two models with robust standard errors. We exclude the 2021 data from the model because of the different survey design used in 2021. In addition, the possible negative impact of COVID-19 on China’s image in Ecuador prevents us from separating the impact of Chinese investment and credit in 2021. Next, we explore the results of a content analysis of the news published in the local media regarding two Chinese investment projects in Ecuador from 2011 to 2021.

5.1 Descriptive statistics: A volatile public opinion

To find a suitable regression model and answer the question of the theoretical debate between realists and liberals whether public opinion about China in Ecuador has been consistent over the years, we examine the descriptive statistics below. Tables 4, 5 and 6 below present the number of observations, mean values, and standard deviation coefficients of our variables of interest in the LAPOP survey waves in 2012 and 2014, 2016-2017 and 2018-2019, 2021 and the combined 2012-2018 panel dataset, respectively.

The most recent wave could not be added to the regression model due to the lack of significant data, including the “ideological preference” variable, which is our independent variable, as well as “religiosity”. Moreover, due to changes in the survey design, the 2021 survey wave contains some control variables, namely gender, education, and urban-rural population ratio, with more categories. For example, for the first time, respondents of the 2021 survey were given three options to answer the gender question: male, female, and other. When respondents were asked about their level of education, they were offered only four aggregated categories (no education, basic, high school, and college, i.e., a university degree or higher) rather than mentioning years of formal education, as in previous waves. Moreover, in 2021, LAPOP went beyond simply exploring the number of people living in urban and rural areas, and enquired whether people lived in urban suburbs or villages near Ecuadorian cities. Thus, not only the heterogeneous effect of the COVID-19 pandemic, but also differences in the survey design could have skewed our results if we had added 2021 to our model.
<table>
<thead>
<tr>
<th>Variables</th>
<th>(1) year 2012</th>
<th>(2)</th>
<th>(3)</th>
<th>(6) year 2014</th>
<th>(7)</th>
<th>(8)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>mean</td>
<td>sd</td>
<td>N</td>
<td>mean</td>
<td>sd</td>
</tr>
<tr>
<td>Urban/rural (0-1)</td>
<td>1,500</td>
<td>0.655</td>
<td>0.475</td>
<td>1,489</td>
<td>0.652</td>
<td>0.476</td>
</tr>
<tr>
<td>Gender (0-1)</td>
<td>1,500</td>
<td>0.501</td>
<td>0.500</td>
<td>1,489</td>
<td>0.504</td>
<td>0.500</td>
</tr>
<tr>
<td>Age (18-89)</td>
<td>1,494</td>
<td>39.00</td>
<td>14.61</td>
<td>1,487</td>
<td>39.41</td>
<td>14.85</td>
</tr>
<tr>
<td>Ideology (1-10)</td>
<td>1,178</td>
<td>5.329</td>
<td>2.425</td>
<td>1,169</td>
<td>4.956</td>
<td>2.539</td>
</tr>
<tr>
<td>Democracy (1-7)</td>
<td>1,394</td>
<td>4.849</td>
<td>1.827</td>
<td>1,426</td>
<td>5.285</td>
<td>1.593</td>
</tr>
<tr>
<td>Education (0-18)</td>
<td>1,481</td>
<td>10.49</td>
<td>4.267</td>
<td>1,477</td>
<td>10.67</td>
<td>3.837</td>
</tr>
<tr>
<td>Chinese economic activity (0-1)</td>
<td>1,500</td>
<td>0.0467</td>
<td>0.211</td>
<td>1,489</td>
<td>0.156</td>
<td>0.363</td>
</tr>
<tr>
<td>Trust in China (0-1)</td>
<td>551</td>
<td>0.523</td>
<td>0.500</td>
<td>1,149</td>
<td>0.570</td>
<td>0.495</td>
</tr>
<tr>
<td>News consumption (0-1)</td>
<td>1,474</td>
<td>0.826</td>
<td>0.380</td>
<td>1,488</td>
<td>0.851</td>
<td>0.356</td>
</tr>
<tr>
<td>Trust in US (0-1)</td>
<td>642</td>
<td>0.544</td>
<td>0.498</td>
<td>1,281</td>
<td>0.407</td>
<td>0.492</td>
</tr>
<tr>
<td>Religion (0-1)</td>
<td>1,500</td>
<td>0.570</td>
<td>0.495</td>
<td>1,489</td>
<td>0.580</td>
<td>0.494</td>
</tr>
<tr>
<td>Income (1-4)</td>
<td>1,409</td>
<td>2.470</td>
<td>0.864</td>
<td>1,357</td>
<td>2.422</td>
<td>1.019</td>
</tr>
</tbody>
</table>

Note: variable scales specified in parentheses

Table 4. Descriptive statistics, 2012 and 2014 datasets. Source: Author’s elaboration.
Descriptive statistics demonstrate an unstable level of opinion of Ecuadorians about the Chinese government from 2012 to 2021, with a clear downward trend. Thus, it is difficult to argue that public opinion has been consistent over time. It is worth mentioning that after a surge in Chinese investment and loan-backed projects in 2014, public opinion on China improved slightly to 57%, up from 52% in 2012. However, there has been a steady decline
afterwards. In 2021, confidence in the Chinese government fell sharply to 38%, down from 46% in 2018. We speculate that this probably indicates that Ameyaw-Brobbey’s (2021) findings regarding the damage to China’s reputation in developed countries caused by the coronavirus outbreak are also valid for developing countries, namely Ecuador.

In turn, trust in the U.S. government showed a stable decrease from 54% in 2012 to 38% in 2018. Despite this, the trend reversed in 2021, and trust rose dramatically to 60%. Overall, however, public opinion of China from 2012 to 2018 was better than that of the U.S., according to descriptive statistics from the pooled dataset. Figure 3 graphically shows the change in China and U.S. confidence levels from 2012 to 2021.

![Figure 3. Percentage of Ecuadorian respondents expressing trust in the governments of China and the United States (Vanderbilt University, 2022). Author’s elaboration.](image)

Given the realist-liberal theoretical debate, we can interpret our results as follows: Ecuador’s public opinion on the country’s foreign relations with the two superpowers has generally been inconsistent and dependent on the international conjuncture and the local government’s rhetoric toward China and the United States. We speculate that public opinion toward the United States deteriorated significantly in 2014 due to ex-President Rafael Correa’s anti-imperialist rhetoric. Moreover, we suggest that public opinion about China worsened in 2018 because of the sparked conflict between incumbent Lenin Moreno and former President Correa, who has been labelled as a pro-China president, and so the anti-China rhetoric helped people with anti-Correa positions indirectly attack him.\(^2\) We can assume that the realists’

\(^2\) This information is taken from the in-depth interview with W. Vásquez in Quito, February 24, 2020.
assumption, that is, our H1 regarding inconsistent public opinion on foreign policy, holds true for Ecuador. However, only the regression results can be more intricate allowing us to draw some conclusions and thus understand the impact Chinese investment and credit have on public opinion.

In terms of the news consumption variable, the descriptive statistics demonstrate that at least 82% of respondents followed the news daily or several times a week during all survey waves. In the case of our combined dataset, this number was 90,2%. It is highly likely that this variable will have a poor explanatory power in the regression because almost the entire population follows the news. Therefore, an additional method is needed to explain how the media contributes to shape Ecuadorian public opinion about China. Our content analysis seems suitable to complement the regression analysis in this regard.

Descriptive statistics for the other variables in our combined 2012-2018 dataset show that 69% of Ecuadorian respondents lived in cities, 41% were women, 31% lived in areas with the Chinese credit and investment projects, and 61% considered the role of religion in their lives very important. Moreover, the average median age of respondents was 38 years. The average ideological preference score was 5.2, reflecting the centrist views of the majority, and the average opinion score on the democratic regime was 4.9, indicating the pro-democracy views of most Ecuadorians. On average, an Ecuadorian respondents had 11.5 years of education and were from the working and middle classes.

Table 7 below demonstrates the correlations between the independent and control variables. The correlation coefficients between our independent variables remain within acceptable limits (Allison, 1999). This allows us to discard possible multicollinearity in our model, which could distort the results. It is worth noting that there are positive and statistically significant correlations between news consumption and ideology, news consumption and democracy, and ideology and trust in the U.S. government, while there are negative and statistically significant correlations between ideology and democracy.

<table>
<thead>
<tr>
<th></th>
<th>Chinese economic activity</th>
<th>News consumption</th>
<th>Ideology</th>
<th>Democracy</th>
<th>Trust in US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese economic activity</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News consumption</td>
<td>-0.00614</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideology</td>
<td>0.00994</td>
<td>0.0520*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democracy</td>
<td>-0.0199</td>
<td>0.0676**</td>
<td>-0.0507*</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Table 7. Descriptive associations among key independent variables and control variables. Source: Author’s elaboration.

It is worth noting that during all waves of the survey, the number of non-responses to the questions about trust in the U.S. and Chinese governments was high, which prompted us to construct a pooled time series data instead of examining public opinion about China separately for each year, a model suggested by Ratigan (2021). Descriptive statistics for each year were presented before excluding all missing values to demonstrate this caveat. For instance, nearly 2/3 of all respondents in the 2012 and 2021 waves of the LAPOP survey did not express an opinion on trust in the Chinese government.

It is widely recognized that large datasets have more reliable results and accuracy of estimates compared to small pieces of data (Eilat & Einav, 2004). Thus, it seems appropriate to append all but the 2021 wave datasets. As shown in Table 6, after excluding the missing values, the total number of observations was 2111. Although the data is far from perfect and relatively small, given that the number of observations before excluding the missing values was 6067, the explanatory power of the combined time series data is stronger than that of the individual and extremely small datasets.

5.2 Regression analysis: Mixed results

Our analysis consists of three models employed to find the impact of Chinese investment and credit on public opinion in Ecuador. These are ordinary least squares (OLS) and generalized least squares (GLS) models with year fixed effects and regional fixed effects. Table 8 presents the regression results for the three models. Due to the high number of repeated time values within our panel data, Stata did not allow us to run regression with pooled regional and year fixed effects, therefore we present these two models separately.

<table>
<thead>
<tr>
<th></th>
<th>Model 1 OLS</th>
<th>Model 2 Year-fixed effects</th>
<th>Model 3 Regional fixed effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust in US</td>
<td>-0.0117</td>
<td>-0.0267</td>
<td>0.0610</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.0272</td>
<td>-0.00319</td>
<td>0.0154</td>
</tr>
<tr>
<td>Age</td>
<td>-0.0401</td>
<td>0.0544</td>
<td>0.00734</td>
</tr>
<tr>
<td>Education</td>
<td>0.113***</td>
<td>0.0223</td>
<td>-0.0356</td>
</tr>
<tr>
<td>Religion</td>
<td>0.0551*</td>
<td>0.0967***</td>
<td>0.0492*</td>
</tr>
<tr>
<td>Income</td>
<td>0.0570**</td>
<td>0.0539*</td>
<td>-0.0330</td>
</tr>
<tr>
<td>Urban/rural</td>
<td>-0.137***</td>
<td>-0.0132</td>
<td>0.0856***</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001
Table 8. Three models that measure public opinion about Chinese investments in Ecuador. Source: Author’s elaboration.

We begin by interpreting the results of our first independent variable on direct contact with China. As can be seen, the results of all models indicate that residents of provinces that received Chinese projects from 2012 to 2018 have a negative opinion of the Chinese government, and they are statistically significant in the OLS and regression model with regional fixed effects. On this basis, it can be assumed that due to the possible negative environmental and social effects that some Chinese credit and investment projects in Ecuador had, public opinion about Chinese investments in provinces with a Chinese economic presence was
negative. As the descriptive statistics of the combined dataset from 2012 to 2018 indicate, 31% of the total number of respondents lived in areas with Chinese-funded projects. This implies that this segment of population most likely disagrees with the government’s foreign policy of strengthening financial ties with Beijing but does not have enough influence to change foreign policy decisions toward China. In this regard, our hypothesis 1 on the limited impact of public opinion on foreign policy holds true.

The results concerning the independent variables that measure political preferences are mixed. First, it is worth noting that ideology, democracy, and trust in the U.S. government are statistically significant in all three models of our analysis. Given that the ideology variable has 10 quintiles where 1 represents the far left and 10 represent the far right, people who lean toward right-wing ideology in Ecuador perceive the Chinese government negatively. In this regard, the assumption that public opinion about foreign policy is volatile is not justified, since ideological colors help the population have a more stable opinion about foreign affairs (Holsti, 2004). However, Ecuadorians, who consider democracy the best form of government, perceive China positively, although the latter is not considered a democratic country, according to Dahl’s classical definition of a democratic system (Dahl, 2020).

Moreover, respondents who trust the U.S. government also express a positive opinion of China. It is worth mentioning that Ratigan (2021) obtained similar results in all four waves of the LAPOP surveys he used to examine public opinion about China in Peru. He suggests that Peruvians may trust foreign governments in general, regardless of the country in question. Thus, this could indicate a lack of firm opinion about foreign policy, which could be related to volatility and perhaps limited influence on decision-making.

When it comes to the relationship between news consumption and trust in the Chinese government, the regression results are statistically significant in all three models. The results indicate that people who read the news frequently have a positive perception of China. To test our hypothesis 3, we need to know the connotation, or tone, of news about the financial relationship between China and Ecuador. Therefore, the results of the content analysis of news about the two projects financed by China will help to answer this question.

Measuring the relationship between trust in the Chinese government and our control variables provides us with interesting results. It is worth noting that of all the control variables, only gender and education are statistically significant. From 2012 to 2018, female respondents had a negative opinion on China, while more educated people had more trust in the Chinese
government. We hypothesize that women are more susceptible to news regarding the negative environmental and social effects of projects funded by China, therefore their opinion is negative. Moreover, it is likely that people with higher levels of education perceive Chinese credit and investment as an economic opportunity for Ecuador, therefore their perception of Chinese finance is positive.

We consider that the regression results with respect to the other control variables do not have any explanatory power, although they do provide some interesting insights. For example, older people and respondents with high levels of religiosity seem to view Chinese investments more adversely as opposed to younger Ecuadorians and people that are religiously moderate. In addition, high-income Ecuadorians apparently perceive Chinese investments more positively than respondents from other income quintiles. Urban residents, on their turn, seem to hold a positive opinion about Chinese credit and investment, according to the OLS and year-fixed effects models. However, their opinion appeared as negative when running the regional fixed effects model.

### 5.3 Robustness checks

Postestimation standard robustness tests demonstrate that our models with year- and region-fixed effects do not suffer from multicollinearity, autocorrelation, and heteroskedasticity, which could distort the regression results. Despite this, we decided to run two more regressions with the same fixed effects but with robust standard errors, that is, smaller standard errors, to see if the results presented in Table 9 coincide with those of Models 2 and 3.

<table>
<thead>
<tr>
<th>Dependent variable: Trust in Chinese government = 1</th>
<th>Year-fixed effects</th>
<th>Regional fixed effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese economic activity (=1)</td>
<td>-0.0329</td>
<td>-0.0451*</td>
</tr>
<tr>
<td></td>
<td>(0.0850)</td>
<td>(0.0192)</td>
</tr>
<tr>
<td>News consumption (=1)</td>
<td>0.0950**</td>
<td>0.0894***</td>
</tr>
<tr>
<td></td>
<td>(0.0255)</td>
<td>(0.0182)</td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.0122**</td>
<td>-0.0133**</td>
</tr>
<tr>
<td></td>
<td>(0.00265)</td>
<td>(0.00378)</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.0319*</td>
<td>0.0346**</td>
</tr>
<tr>
<td></td>
<td>(0.0102)</td>
<td>(0.00996)</td>
</tr>
<tr>
<td>Trust in the US government (=1)</td>
<td>0.141**</td>
<td>0.141***</td>
</tr>
</tbody>
</table>

44
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (Model 1)</th>
<th>Coefficient (Model 2)</th>
<th>Standard Error (Model 1)</th>
<th>Standard Error (Model 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (1)</td>
<td>-0.0605**</td>
<td>-0.0574***</td>
<td>(0.0128)</td>
<td>(0.0111)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.000876</td>
<td>-0.000882**</td>
<td>(0.00108)</td>
<td>(0.000294)</td>
</tr>
<tr>
<td>Education</td>
<td>0.00896*</td>
<td>0.00848*</td>
<td>(0.00359)</td>
<td>(0.00397)</td>
</tr>
<tr>
<td>Religion (1)</td>
<td>-0.0297</td>
<td>-0.0327</td>
<td>(0.0201)</td>
<td>(0.0205)</td>
</tr>
<tr>
<td>Income</td>
<td>0.0118</td>
<td>0.0123</td>
<td>(0.0181)</td>
<td>(0.00630)</td>
</tr>
<tr>
<td>Urban/rural</td>
<td>0.0102</td>
<td>-0.0548</td>
<td>(0.0439)</td>
<td>(0.0291)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.250*</td>
<td>0.301***</td>
<td>(0.0830)</td>
<td>(0.0385)</td>
</tr>
</tbody>
</table>

Observations: 2,111

R-squared: 0.056

Note: Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9. Models measuring public opinion about Chinese investments in Ecuador with robust standard errors. Source: Author’s elaboration.

As we can see, after reducing the standard errors of the regressions, our main results remain the same. Ecuadorians living in provinces with a Chinese economic presence have a negative public opinion of China, and these results are statistically significant in the model with regional fixed effects. The main difference between Models 2 and 3 and the models used for robustness checks is that some results of the model with year-fixed effects and robust standard errors, mainly the relationship between trust in the Chinese government and the variables of news consumption, ideology, democracy, trust in the U.S. government, gender, and education, have a lower p value, but continue to be statistically significant. The same is true for the ideology, democracy, and education variables in the model with regional fixed effects and robust standard errors. Moreover, the age variable became statistically significant in the same model, explaining that the older a person is, the more negative their opinion of China will be. We speculate that it may be related to the Cold War narrative of the Communist threat coming from Beijing, as Maoist ideas were present in neighboring Bolivia, Mexico, and Peru in the second half of the 20th century (Rothwell, 2013). That is, Ecuadorian older Ecuadorians who witnessed the Cold War are more likely to be pro-American and anti-Chinese in relation this narrative.
5.4 News content analysis: Negative coverage about China

We start our content analysis of news coverage of the two most important Chinese investment projects in Ecuador by exploring the frequency of news about the Mirador mining project. Table 10 demonstrates that almost half of all 53 news stories from 2011 to 2020 related to the topic were published by El Telégrafo, followed by El Comercio (30.2%) and El Universo (26.4%). It is worth noting that in 2019 all three newspapers combined published 20 news articles, the highest number in all years of analysis. In addition, we took the news coverage on Mirador until 2020 because we did not find any news coverage about the mine project in 2021.

We suggest that the local media paid more attention to the project in 2019 because in February that year the country received its first expected royalties from the Chinese company Ecuacorriente (El Telégrafo, 2019). Later in the same year, in July, the official opening of the mine took place (El Universo, 2019). In turn, El Comercio, El Telégrafo and El Universo published together only 20 news stories about Mirador from 2011 to 2017. This indicates a general journalistic lack of interest in the mine project from the most widely read national media.

<table>
<thead>
<tr>
<th>Year</th>
<th>El Comercio</th>
<th>El Telégrafo</th>
<th>El Universo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2015</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2016</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2017</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2018</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2019</td>
<td>9</td>
<td>5</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>23</td>
<td>14</td>
<td>53</td>
</tr>
</tbody>
</table>

Note: Percentages in parentheses

Table 10. Frequency of news articles on the Mirador mine project, according to newspaper and year. Source: Author’s elaboration.

Regarding the tone of the articles about Mirador, more than half of them showed a positive bias. This is due to the high percentage of positive news published in El Telégrafo (78.3%), and the balanced coverage of the topic by El Comercio, where there were 37.5% negative and the same number of positive articles about Mirador. Most articles with a positive tone emphasized the benefits of job creation, infrastructure investments, and royalties to the...
Ecuadorian state. For instance, referring to former President Correa’s speech on socially and environmentally responsible mining, El Telégrafo noted the following in one of its March 2012 articles (see Annex 2):

“The benefit to Ecuador, he (ex-president Correa) pointed out, will be five thousand 417 million dollars at current value, with at least 52 percent of the income from mining for the state, and the province of Zamora Chinchipe receiving 12 percent of the royalties and profits. The main problem of the Amazon, Correa explained, "is the expansion of the agricultural and livestock frontier, which destroys the forests, and not the mining activities. Now, thanks to the Mirador project we will create 3,500 jobs", he added” (El Telégrafo, 2012).

As for negative articles about Mirador in the three newspapers, 26.4% or 14 news stories had this tone. Most of them focused on protests, accidents, negative environmental impacts, and the temporary suspension of work. For example, on May 14, 2018, El Comercio published a news story (see Annex 3) about El Pangui community members asking then-President Lenin Moreno to reactivate the mine project because more than 2,000 families who directly worked on or created micro-enterprises around the project, had lost their income (Belén Merizalde, 2018).

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Tone</th>
<th>Balanced</th>
<th>Negative</th>
<th>Neutral</th>
<th>Positive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Comercio</td>
<td>Balanced</td>
<td>2</td>
<td>6</td>
<td>2</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>(12.50)</td>
<td>(37.50)</td>
<td>(12.50)</td>
<td>(37.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Telégrafo</td>
<td>Neutral</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>(8.70)</td>
<td>(4.35)</td>
<td>(8.70)</td>
<td>(78.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Universo</td>
<td>Positive</td>
<td>2</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>(14.29)</td>
<td>(50.00)</td>
<td>(14.29)</td>
<td>(21.43)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6</td>
<td>14</td>
<td>6</td>
<td>27</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>(11.32)</td>
<td>(26.42)</td>
<td>(11.32)</td>
<td>(50.94)</td>
<td>(100.00)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Percentages in parentheses

Table 11. News bias about the Mirador mine project in the three Ecuadorian media from 2011 to 2021. Source: Author’s elaboration.

When it comes to neutral and balanced news, in the 10 years from 2011 to 2020, El Comercio, El Telégrafo, and El Universo had only 6 news pieces of both types. As for neutral news, they were mostly descriptive and did not report either positively nor negatively on the impact of Mirador on local communities. As an example, the news headlined “Copper cargo samples were taken prior to export” (see Annex 4) was published by El Universo on November 14, 2019 (El Universo, 2019). In turn, balanced news about Mirador covered both positive and negative aspects of the project. On March 7, 2012, the newspaper El Telégrafo published a news story (see Annex 5) about protests outside the Chinese Embassy in Quito over the signing...
of an agreement between the Chinese company Ecuacorriente and the Ecuadorian government to develop the Mirador mine project. Despite this, the news had positive connotations as well, citing a Chinese foreign ministry official, who noted that “the Chinese government requires its companies to comply with local laws and regulations in order to benefit society, including strict compliance with environmental standards to protect the environment and promote sustainable development of the local economy” (El Telégrafo, 2012).

Figure 4. Word cloud of the most frequently used words in news about Mirador mine project (in Spanish). Source: Author’s elaboration.

Overall, the tone of news reporting on the Mirador mine project in the Ecuadorian media was more positive or neutral than negative. Figure 4, which represents a cloud of the most used words in news about the project, confirms this assumption. It is worth mentioning that none of the words repeated more than 30 times in news stories about Mirador from 2011 to 2020 had, per se, negative connotations. However, it is important to remember that the wider context/ phrases, etc, in which words are placed is very important to conclude on the bias (negative or positive) of a term or expression. The most frequently used words are project (252 times), millions (228 times), Mirador (157 times), mining (127 times), Ecuador (123 times), company (121 times), and copper (120 times). The analysis shows that the news articles about Mirador had mostly a financial perspective. This raises speculation that some financial interest organizations were behind the news agenda. They probably benefited from Chinese investment in the country’s largest copper mine. The words “environmental” and “exploitation”, which, by exploring the context of their use, are seen as being frequently used in articles with negative tone, are repeated 67 and 61 times, respectively. This result is likely indicative of the lack of
involvement of environmental NGOs in shaping the news agenda. Even though, these words were also used in positive news articles that covered the topics of responsible mining and economic benefits (El Teléfono, 2012). Overall, the results suggest that Ecuadorians who frequently read news articles about Mirador during this period were more likely to have a positive or neutral opinion of the Chinese investment project. This finding is consistent with the results of the regression analysis on the positive perception of Chinese investments among the Ecuadorians who view the news daily or several times a week.

In terms of the news coverage about Coca Codo Sinclair, there were four times as many news about the hydroelectric plant as there were articles about Mirador. From 2011 to 2021, El Comercio, El Teléfono, and El Universo published 210 news articles combined. According to Table 12, more than half of the news were written by El Comercio, followed by El Universo (23.3%) and the state-owned newspaper El Teléfono. In terms of activity per year, in 2012 the Ecuadorian newspapers published 1/5 of the total news about Coca Codo Sinclair in 10 years, despite the zero activity of El Universo that year. The most covered topics in 2012 were the first signs of progress in the construction of the plant and the mass protests against inadequate labor conditions (El Universo, 2012; El Comercio, 2012). After 2012, the other years with more published news were 2014 and 2021. There were 36 news stories each in both years.

<table>
<thead>
<tr>
<th>Year</th>
<th>El Comercio</th>
<th>El Teléfono</th>
<th>El Universo</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>28</td>
<td>15</td>
<td>0</td>
<td>43</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2014</td>
<td>20</td>
<td>8</td>
<td>8</td>
<td>36</td>
</tr>
<tr>
<td>2015</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>2016</td>
<td>12</td>
<td>8</td>
<td>3</td>
<td>23</td>
</tr>
<tr>
<td>2017</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2018</td>
<td>18</td>
<td>0</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>2019</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>2020</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>2021</td>
<td>19</td>
<td>0</td>
<td>17</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>42</strong></td>
<td><strong>49</strong></td>
<td><strong>210</strong></td>
</tr>
<tr>
<td></td>
<td>(56.7)</td>
<td>(20)</td>
<td>(23.3)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

*Note: Percentages in parentheses*

Table 12. Frequency of news articles about the Coca Codo Sinclair hydroelectric powerplant according to newspaper and year. Author’s elaboration.
Regarding news bias, Table 13 demonstrates that most articles about the hydroelectric plant built by the Chinese company Sinohydro had a negative connotation. El Comercio published 79 negative news about Coca Codo, the highest number among the three newspapers, followed by El Universo (32 news) and El Telégrafo (7 news stories). It is worth noting that the latter newspaper was the least active in covering events regarding the hydroelectric plant. This is in contrast to El Telégrafo’s activity in publishing about the Mirador mine project during the same period. Most of the negative news was related to the pressure well collapse that occurred on December 13, 2014 (see Annex 6). The accident left 10 Ecuadorians and 3 Chinese workers dead and 12 injured (El Universo, 2014). Other negative news included cracks discovered, corruption scandals, unstable plant operations, and the risk of destruction due to regressive erosion.

From 2011 to 2021, the studied three Ecuadorian newspapers published more than half as many positive as negative news articles about Coca Codo Sinclair. Over half of all articles with a positive tone were published by El Telégrafo (26 news pieces), followed by El Comercio (12), and El Universo published only 6 positive news stories about the hydroelectric plant. Most of the “positive” articles emphasized Coca Codo Sinclair’s capacity to generate the energy needed to “meet the needs of all households” (El Telégrafo, 2016). Another important theme was the benefit from the hydroelectric plant in terms of budget savings (see Annex 7) due to the lack of the need to purchase energy from neighboring countries (El Telégrafo, 2016).

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Balanced</th>
<th>Negative</th>
<th>Neutral</th>
<th>Positive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Comercio</td>
<td>16</td>
<td>79</td>
<td>12</td>
<td>12</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>(13.45)</td>
<td>(66.39)</td>
<td>(10.08)</td>
<td>(10.08)</td>
<td></td>
</tr>
<tr>
<td>El Telégrafo</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>26</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>(9.52)</td>
<td>(16.67)</td>
<td>(11.90)</td>
<td>(61.90)</td>
<td></td>
</tr>
<tr>
<td>El Universo</td>
<td>6</td>
<td>32</td>
<td>5</td>
<td>6</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>(12.24)</td>
<td>(65.31)</td>
<td>(10.20)</td>
<td>(12.24)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>118</td>
<td>22</td>
<td>44</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td>(12.38)</td>
<td>(56.19)</td>
<td>(10.48)</td>
<td>(20.95)</td>
<td>(100)</td>
</tr>
</tbody>
</table>

*Note: Percentages in parentheses*

**Table 13.** News bias about Coca Codo Sinclair hydroelectric powerplant in three Ecuadorian media from 2011 to 2021. Author’s elaboration.

As with the Mirador mine project, the share of “neutral” and “balanced” news about Coca Codo Sinclair was also relatively small at 10.5% and 12.4%, respectively. News with a neutral tone focused on the technical operation of the plant and describing relations between
Sinohydro and the Ecuadorian state. For example, on April 13, 2016, El Comercio newspaper reported in a neutral tone (see Annex 8) that the Chinese company Sinohydro would remain for another year to oversee the operation of the plant (Araujo, 2016). In terms of “balanced” news articles, El Comercio published the most, concentrating on the shift towards the clean energy matrix. In the news story (see Annex 9) that emphasized that 2018 was the year of the highest hydroelectric generation in the country in a decade, El Comercio quoted Fernando Salinas, president of the Association of Electrical and Electronics Engineers of Pichincha, who believes that the energy production scheme does not really involve changing the country's energy matrix, which the Government promoted with the construction of new power plants (Pacheco, 2019).

**Figure 5.** Word cloud of the most frequently used words in news about Coca Codo Sinclair hydroelectric powerplant (in Spanish). Author’s elaboration.

As shown in Figure 5, the most frequently used words in 210 news articles regarding Coca Codo Sinclair from 2011 to 2021 were Coca (used 1048 times), Codo (834 times), Sinclair (725 times), work (606 times), plant (579 times), hydroelectric (552 times), and project (476 times). Despite the neutral nature of these words, among the words used more than 100 times, there were four with explicitly negative connotations. These are erosion (counted 185 times), problem (151 times), cracks (145 times), and accident (117 times).

This suggests that the word frequency query supports our finding about the predominantly negative tone of news about Coca Codo, as compared to news coverage about Mirador, there were no explicitly negative connotations among the words encountered more than 30 times. Overall, given that there were four times as many news stories about the hydroelectric plant as about the Mirador mine project, it seems that the three most important newspapers in the country reported negatively than positively about the Chinese investment
projects. This does not coincide with the regression results regarding positive opinion of Chinese investment projects among Ecuadorians who read the news frequently. Thus, based on this, we suggest that the coverage in the mainstream Ecuadorian media has not had a significant impact on local public opinion about Chinese economic presence. In this respect, our H3 holds valid and possibly points to the media marginality with respect to shaping foreign policy preferences.

6. Conclusions

6.1 Discussion of the results

This study intended to explore the way Chinese investment and credit shaped public opinion of Beijing in Ecuador from 2012 to 2018 by applying the mixed methods analysis, as well as to test the explanatory potential of both the realist and liberal schools of thought regarding the importance of public opinion in shaping (or not) economic foreign policy decisions. This dissertation initially aimed to help address the striking lack of empirical research on public opinion about the Chinese economic presence in Ecuador, one of the four Latin American states that has received the largest number of Chinese loans since the beginning of the 21st century, despite the relatively small size of its economy. This dissertation has intended to contribute filling this research gap through a mix of methodological tools allowing to explore a complex and multifaceted area, without falling into the obvious risks of oversimplifications or analytic reductionisms.

We thus ran logistic time series regressions with region and year fixed effects, controlling for different categories of variables that may affect public opinion about Chinese investments. These included direct contact with Chinese investments and loan-backed projects, measured by introducing a binary variable where provinces that have received Chinese funding are coded as 1 and the rest as 0. It also includes the knowledge about China, measured by news viewership among Ecuadorians, and political ideology, that is, political preferences, democratic values, and trust in the U.S. government.

As the literature suggests that these variables may influence public opinion about foreign policy (Baumgartner et al., 2008; Holsti, 2004), we also included some control variables in our model, such as gender, education, age, income, religiosity, and the urban-rural divide. Our dependent variable was “trust in the Chinese government”, which was used due to the state-owned nature of the Chinese companies operating in Ecuador and the policy banks lending to
the country, which was likely to lead the Ecuadorian public to associate these companies with the Chinese government.

In addition, to obtain a fuller picture of the Ecuadorian media’s potential role in ever-changing public opinion on Chinese investments, we conducted a content analysis of news coverage of the two most economically important projects in Ecuador-China financial relations, namely the Coca Codo Sinclair hydroelectric powerplant, and the Mirador mine project.

In parallel, we selected the three most important media outlets in Ecuador that hold different ideological views: El Comercio, El Telégrafo, and El Universo. Thus, the results of the content analysis allowed us to test the hypothesis about the importance of the media in public opinion-foreign policy nexus. Overall, it is worth noting that the use of mixed-methods approach allowed us to look more deeply into the issue of public opinion and foreign policy by including the media analysis, compared to previous attempts by different authors (Eichenauer et al., 2021; Feng & Zeng, 2021; Ratigan, 2021; Armony & Velásquez, 2016; Armony & Velásquez, 2015).

From our point of view, separate quantitative studies on the impact of Chinese investments on public opinion about China in Peru (Ratigan, 2021), and Latin American region (Eichenauer et al., 2021; Feng & Zeng, 2021) have a merit of their own, but ignoring the role of media risks missing a significant part of the whole picture. Separate research on the role of the media in public opinion-foreign policy nexus, however, also has limitations, especially in terms of the lack of conclusive evidence, provided by statistical analysis, about the causal links between activities of foreign actors in a specific country and public opinion about them. This is evident, for example, in the study by Armony and Velásquez (2015) on the sentiments of Latin American online platform users toward China. In our opinion, and in spite of its original approach, this descriptive analysis supported by econometrics, exploring the possible reasons of the negative opinion about China in the Latin American segment of the Internet, ended by including more inferences and assumptions than data-driven or substantiated results.

Our descriptive statistics, on the other hand, showed that Ecuadorians’ public opinion about China can be characterized as volatile or even erratic, showing a declining trend in positive opinion about Beijing over the years of analysis, while Chinese credits and investments were on the rise. The regression results demonstrated that in provinces with a Chinese economic presence, public opinion about the Chinese government was negative, which allows us to suggest that possible negative social and environmental impact from Chinese credit
and investment projects significantly affects public opinion. The Ecuadorian government, nonetheless, continued its policy of attracting more FDI and loans from Beijing during the period under study, which leads us to suggest that residents of provinces with projects built by the Chinese were unable to reverse the policy of economic rapprochement with China. According to Foyle’s (1997) matrix of the four types of decision makers, we suggest that Rafael Correa and Lenín Moreno, who were in power during the years of the study, can be considered pragmatists or guardians because of their unwillingness to input public opinion in foreign policy choices concerning Chinese investments.

Overall, our research findings suggest that a realist approach better contributes to explain the attitudes of Ecuador’s foreign policymakers regarding Chinese investments along time, especially given the inconsistency of the Ecuadorian public opinion about their country’s foreign policy. Significant proportions of Ecuadorian citizens who believe democracy is the best form of government, and who additionally trust the government of the United States, also view the Chinese government favorably. However, ideological preferences still seem to have an impact on public opinion, as our model shows that right-wing citizens appear to view the Chinese economic presence in Ecuador more negatively.

Regarding structural demographic variables such as gender, education, and age, we obtained some riveting insights. Our regression model showed that women had a negative opinion of China, while more educated people had a positive view of Chinese economic involvement in Ecuador. We hypothesize that women are more susceptible to news regarding the negative environmental and social effects of projects funded by China, therefore their opinion is negative. Moreover, it is likely that people with higher levels of education perceive Chinese credit and investment as an economic opportunity for Ecuador, therefore their perception of Chinese finance is positive. Regarding age, the model with regional fixed effects demonstrated that the older the respondents were, the more negative their opinion of Chinese investments was. We speculate that it may be related to the Cold War narrative of the Communist threat coming from Beijing, as Maoist ideas were present in neighboring Bolivia, Mexico, and Peru in the second half of the 20th century (Rothwell, 2013)

The variable of news consumption in our regression model and the content analysis of news coverage also allowed us to draw interesting conclusions. Despite predominantly negative news coverage of Coca Codo Sinclair, which accounted for more than half of all news from 2011 to 2021 about Ecuador’s largest hydroelectric plant, our regression results showed
that Ecuadorians, who read the news frequently have a positive opinion of China. It is worth noting, however, that news coverage of the Mirador mine project was mostly positive. Despite this, news coverage about CCS was more than four times that of Mirador, suggesting that the Ecuadorian media played a marginal role in shaping public opinion about Chinese investments.

Thus, in the case of Ecuador, Baum and Potter’s (2008) hypothesis of the strategic importance of the media in public opinion-foreign policy nexus seems to be refuted. Rather to the contrary, our results highlight an apparent media marginality in terms of shaping public opinion, while challenging some widely accepted hypothesis (at least, in the tradition of some media schools of thought from the United States of America) about the important role of the media in this regard (Lasswell, 1971). Through an extensive literature review, Baum and Potter (2008) conclude that elites use the media as a strategic tool to convey their messages to the public and thus to shape public opinion. In the case of Ecuador, local elites, or interest organizations, a term used by Burstein (2003) to describe economic elites and social movements, that own or have influence on the newspapers El Comercio and El Universo, have evidently failed to shape public opinion about Chinese investment projects. As mentioned in the previous sections, it is likely that these two newspapers have an anti-Chinese stance because of their strained relationship with the government of the ex-President Correa, whom many in Ecuador consider an ally of China. Even though, it is worth noting that a great limitation of our work is that we did not sufficiently explore the role of the Chinese public diplomacy in shaping public opinion, which probably partly explains why, despite the negativity about China in the Ecuadorian media, people who read the news daily have a positive opinion about the Chinese financial projects in Ecuador.

This study adds to the body of research on the realist-liberal debate on the importance of public opinion in foreign policy decisions, challenging Holsti’s (1992) conclusions on the obsolescence of realist views and emphasizing the importance of the ideas of Lippmann (1922) and Almond (1950), which remain relevant to the Global South. Even though, it is worth noting that this analysis is not exhaustive because it had important limitations which should be mentioned here. First of all, the large number of Ecuadorians who did not respond to the questions concerning trust in the foreign governments in the LAPOP survey waves significantly limited the scope of the analysis and pointed to the importance of Lippmann’s (1922) assumptions about strangeness of life outside national borders compared to life within them from the beginning of our empirical analysis.
Because LAPOP is a unique open-source survey database where researchers can find variables on public opinion about foreign governments, in our case the Chinese government, we had to combine datasets from 2012 to 2018 to get statistically reliable results. A year-by-year analysis, such as Ratigan’s (2021), would have provided more details on the changing impact of Chinese credits and investments on public opinion about China over the years. It is worth noting, however, that Ratigan’s (2021) regression analysis has important limitations. One of which is the extremely low number of observations in each dataset. This limitation may have skewed the statistical analysis and validity of the study.

Second, we presented our own design for measuring the stability of public opinion and its consistency with foreign policy choices to test the realist and liberal hypotheses, although this is not the only way to do it. For instance, independent and control variables that served as proxies for stability or volatility of public opinion about foreign policy, such as ideological preferences, democratic values, and trust in the U.S. government, as well as age, gender, and education, do not necessarily indicate that people with beliefs in a Western democratic system should have a negative opinion of China because of its political system.

Third, we consider that our news content analysis does not fully explain the marginality of the Ecuadorian media in terms of shaping public opinion on foreign policy. According to our regression, Ecuadorians, who read the news frequently have a positive public opinion about Chinese investments, while the results of our content analysis showed that coverage of two Chinese investment projects in Ecuador, particularly the Coca Codo Sinclair hydroelectric plant, was negative. Despite this, the scope of this research did not allow us to further explore the impact of Chinese public diplomacy efforts on the perceptions of Chinese financial projects among Ecuadorian citizens. Moreover, although we selected the three major newspapers in Ecuador as media content sample, we did not analyze other very relevant sources of information, such as radio (which reaches remote, rural areas with no stable internet connection and also targets unprivileged and/or illiterate populations), television programs, and other audio-visual content in the Ecuadorian segment of the Internet on Chinese investments and loans. We did not conduct social media analysis either. We did not explore either social network contents. In today’s fast-paced world with popular online audiovisual platforms, such as Facebook, Twitter, YouTube, TikTok, and Instagram, exploring social media content has an interesting explanatory potential, especially due to the strong interaction among “lay people” (with no necessarily any journalistic training and/or not belonging to any specific interest group). In addition, we propose that further analysis could be done regarding the visual images
(photographs, infographics, etc.) illustrating the news about Chinese projects published in El Comercio, El Telégrafo, and El Universo (Messaris & Abraham, 2001). However, El Telégrafo usually does not accompany news with images.

Fourth, no media content analysis can offer an exhaustive conclusion about the marginality of the Ecuadorian media in terms of shaping public opinion. Content analyses are focused on the source side of news, not on the end-user’s side (readers, audiences). This means our chosen methodology does not explore how Ecuadorians decipher those same contents, how they share meaning within their relational groups, and whether they interpret contents in the wider contexts of the national interest, corporative influences, etc. Even more, we do not know if their perceptions are translated into a change of attitude regarding China, and more significantly, whether an eventual change of attitude leads to an effective change of action (for instance, voting against a political party which shows affinity with China). Drawing from this, and based on Ecuador’s foreign policy national plan for 2006-2020 that lists bilateral relations with Beijing among the country’s foreign policy priorities due to attractive investment and trade opportunities (MRE, 2006), an additional question arises: “Do Ecuadorians know that one of the country’s national interests is to strengthen financial relations with China and public view of Chinese investments is therefore positive?”. As we will discuss below, further research on the interactions between national interest policies and the media is needed, especially departing from Brewer’s (2006) findings showcasing that national interest frames can resonate with public opinion.

### 6.2 Further research

Further research could examine the impact of Chinese credit and investment on public opinion in the recipient countries from the perspective of soft power theory and explore China’s successes and shortcomings in this field, in the wider context of Latin America. It would also be interesting to conduct an expanded comparative analysis of public opinion about Chinese investments between Ecuador and other countries of similar economic size in the Global South, since most studies have been conducted throughout the Latin American region. This comparative analysis could provide more insight into the relevance of the realist approach and contribute to the existing debate of the importance of public opinion in foreign policy decisions in Latin America in particular and in the Global South in general. This kind of research may be of particular interest to foreign policymakers in China and in Latin American
countries. Despite this, the most important challenge for public opinion researchers in this area remains the large number of non-respondents to the question about trust in the Chinese government. Perhaps relying on in-house surveys conducted during field research in Latin American countries could solve this problem, although the costs are high.

Moreover, further research could focus on more specific stakeholders and interest groups that are concerned about the impact of Chinese investments and loan-backed projects, such as mine workers, union members, social and environmental NGOs, local business owners, rival companies, and indigenous communities living in the investment area. This area of research seems unexplored and more academic debate is needed about the role of stakeholders in shaping public opinion about China and its economic presence. In general, we also call for more research on China-Latin America relations because of the scarcity of analysis on the topic in general and the lack of knowledge produced by scholars in the Global South about South-South cooperation.
Annexes


Annex 4. Screenshot of the news article of El Universo dated November 14, 2019 with the title: “Copper cargo samples were taken prior to export.” (El Universo, 2019).


Annex 7. Screenshot of the news article of El Telégrafo dated August 13, 2016 with the title: “Glas: "$100 million were saved with the Coca Codo and Sopladora hydroelectric plants"  (El Telégrafo, 2016).
Annex 8. Screenshot of the news article of El Comercio dated April 13, 2016 with the title: “Sinohydro will continue to monitor the Coca-Codo for another year” (Araujo, 2016).

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