An Interdisciplinary View of Cuba*

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1   INTRODUCTION

Despite the seemingly immutable landscape of Cuba since Fidel Castro ascended to power in 1959, the largest island of the Caribbean has experienced spectacular changes over the course of the last five hundred years. The connection with Europe and Africa through the Atlantic ocean, and the close proximity to the United States, have marked a complicated history involving superpower nations, battles for independence, extraction of natural resources, forced labor, and ideological disputes. The developments of the island have also been intertwined with critical periods of human history such as European colonialism in the 16th century and the Cold War in the 20th century. Moreover, Cuba is constantly mentioned throughout the Americas in heated debates about capitalism, socialism, democracy, and authoritarianism. Yet there is perhaps a well-grounded feeling among economists and economic historians that we know less than what we should about Cuba. Although scholars in the social sciences have long been studying the island, the relative scarcity of (public) data together with the difficulties of carrying field work to collect it, raise the question if what we know about the country is tilted towards fields which rely less on quantitative work. This chapter provides an empirical analysis of academic work about Cuba in comparative perspective.

The first part of this chapter provides a brief history of Cuba, from the Spanish conquest in the 16th century towards recent decades. Our aim is certainly not to be exhaustive on the nuances of Cuban history, but rather to identify broad groups of topics that have marked the island and that might be of potential interest to a general social science audience. Overall, we have identified five general themes and four superpower nations as crucial in shaping Cuba's development over the past five centuries. During the colonial period, the Spanish Empire predominantly dominated Cuba, with a brief period of British rule. Towards the end of the 18th century, the US emerged as a major player in the region after gaining independence. In the second half of the 20th century, it was the Soviet Union that exerted the greatest influence. In addition to these countries, we also identified five issues of critical importance. The slave trade and slavery, the sugar industry, the long battle for independence, the revolution led by Fidel Castro and his comrades in 1959, and racial tensions have all permeated social relations within the island.

The second part of this chapter describes our methodology to construct a dataset of academic articles studying 24 countries in the Americas. The process delivers more than 225,000 articles published in social sciences and related disciplines and allows us to provide a meta-analysis of Cuba in comparative perspective. We follow a recent literature in economics (e.g. Iaria et al. 2022; Hager et al. 2024) and derive this academic corpus from the Web of Science (WoS). The dataset we constructed provides information about academic articles in Anthropology, Business, Economics, History, Law, Management, Political Science, and Sociology. We use these data to provide a description of the number of articles about Cuba in comparison to other countries. We then use simple word counts in the abstracts of these articles to characterize the topics studied by the almost 2,000 articles about the island.

The third part of this chapter presents the empirical results. We find that the number of articles per one million inhabitants in Cuba is similar to the average in other countries in the Americas. That is, social scientists have been equally interested in studying Cuba as other nations in the continent. However, the average number of articles masks important differences across fields. Economics, Management, and Business are the fields which have studied Cuba the least. History and Political Science are the fields with the highest share of articles about Cuba. We then show that the Cuban revolution of 1959 is the topic most studied by the almost 2,000 articles about

the island, followed by independence and racial studies. The inherent differences across topics studied by the fields in our dataset can explain these patterns, i.e. racial studies are more common in Anthropology and older centuries are more studied in History. Finally, the US is by far the country most mentioned in Cuban studies, followed by Latin American countries and only then by the colonial superpowers.

The few studies in Economics and Economic History on Cuba share some similarities. On the one hand, existing work in Economics uses the island as a testing ground, applying quantitative tools to critical historical episodes to measure how major economic and political shocks may affect macroeconomic volatility and impact employment, investment, and productivity (Bloom, 2009; Dube et al., 2011; Caldara and Iacoviello, 2022). A leading example is the Cuban Missile Crisis, which almost triggered a nuclear war in the early 1960s. Similarly, labor economists have extensively studied the Mariel Boatlift of 1980 (Card, 1990; Peri and Yasenov, 2019), a mass emigration of Cubans which has been used to understand how sharp increases in the labor force affect equilibrium outcomes such as wages and the unemployment rate. On the other hand, work in Economic History has focused mostly on issues that have influenced the long-term development of Cuba: the sugar industry (Dye, 1994a,b, 1998; Dye and Sicotte, 2006), the slave trade and slavery (Dye and Sicotte, 2004; Eltis et al., 2005; Sanjuan-Marroquin and Rodrigo-Alharilla, 2024), the revolution of 1959 (Ward and Devereux, 2012; Geloso and Pavlik, 2021), and the relationship with the US (Maseland and Spruk, 2022). Surprisingly, work studying the relationship between Cuba and Latin America outside of History is scarce.

2   A BRIEF HISTORY OF CUBA

Soon after the arrival of Christopher Columbus to the Caribbean islands in 1492, Cuba became an important place for the Spanish Empire.[1] Spain conquered Cuba in the early 16th century, appointed governors to rule the island, and organized labor for the extraction of resources such as sugar and tobacco. Spain initially used the Taíno natives to extract resources, but many died due

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[1]To systematize the topics of study about Cuba across the social sciences, we draw heavily from the monumental works by Thomas (2010) and Ferrer (2021), who provide a rigorous and comprehensive history of Cuba. Keegan and Hofman (2017) provide an overview of the Caribbean islands, including Cuba, before the 16th century.

to diseases and forced labor, incentivizing the arrival of slaves. The ideal geographic location of the island (Figure 1) made it replace the nearby Hispaniola island as the main Spanish base in the Caribbean. Cuba became one of the main Spanish administrative centers. Resources extracted from the Americas regularly stopped in Havana, making it a target for repeated raids. As a response, Cuba invested in infrastructure as protection but it remained heavily exposed to attacks throughout the 17th century. In the 18th century, the British Empire captured critical parts of the Cuban territory, first during a war in the 1740s, and then during the Seven Year's War in 1756-1763. As a consequence, the Spanish Empire lost Havana but managed to recover it after ceding control of the state of Florida to Britain in what is known as the Treaty of Paris (1763).

The relation with Spain (and Britain) determined the fate of the island in the 16-18th centuries. But it was the United States that would shape Cuban history in the following centuries. After gaining independence in the late 18th century, the US constantly debated about the possibility of incorporating Cuba as another state throughout the 19th century. However, the fear that annexation would free slaves and cause economic losses prevented broad political consensus to emerge.

Slavery transformed Cuba, with slaves constituting a large share of the population and causing a boom in sugar production at the turn of the 19th century. Although there were attempts to eliminate the transatlantic slave trade, the illegal trade continued until slavery was finally abolished towards the end of the 19th century. The Haitian Revolution in 1791-1804 undoubtedly also affected the development of the island during this period. The only successful slave rebellion took place right next to Cuba, producing constant fear about a rebellion if slavery was abolished in Cuba (Ferrer, 2014). In the eyes of the Spanish elite, and also the US economic elite who participated in the sugar industry, having the support of the powerful Spanish Empire diminished the probability of a rebellion. The US was also concerned about abolition, rebellions, and how these would affect the economic interests of their people. Those concerns did not stop insurgencies to spread, and rebellions were common in Cuba throughout the 19th century (Ferrer, 1999).

Cuban independence was finally achieved in 1898. Led by Antonio Maceo, José Martí, Máximo Gomez, and the Liberation Army, decades of battles and hundreds of thousands of deaths preceded independence. Relative to other countries in the continent, independence came late (Figure 2). And the process of independence ended with one of the most controversial events in Cuban history. In

1898, amidst growing tensions between the US and Spain, an explosion sank a US battleship near Havana, which triggered a short-lived war between the US and Spain. The US emerged victorious and granted Cuba independence from Spain, while replacing it as the de facto foreign ruler. Indeed, the Cuban republic was established with the condition that the US could intervene if Cuba's independence was threatened by foreign nations. Approved by the constitutional convention to achieve the creation of the Cuban Republic, the "Platt Amendment" gave the US right to intervene in Cuban affairs, and shaped the relationship between both countries.

In the following decades, Cuba had leaders approved and supported by the US. Cuba flooded US markets with sugar and US investment in the island grew. When domestic tensions emerged, the US intervened to preserve the status quo. And whenever organized discontent appeared in the population, state repression was in charge of quieting dissent. New political parties attempted to spur change through elections, but none succeeded. After World War I, a sugar boom fuelled the Cuban economy and, with the help from the US Prohibition, the 1920s were also marked by the beginning of tourism in the island. A national awakening to drop the Platt Amendment was followed by a large economic crisis in 1929, which caused political chaos that ended in a revolution in 1933. Fulgencio Batista emerged as a key figure and led the country as Chief of the Army. All of the following Cuban presidents worked at the shadow of Batista and were supported by the US, but now without the Platt Amendment which was abolished in 1934. In the early 1940s, a more progressive constitution was written for Cuba and Batista became president. This "pinnacle of Cuban democracy" was followed by corruption and a coup promoted by Batista in 1952.

Cuba went through profound transformations marked by socialisms and the Cold War. Under the rule of Batista, Cuba experienced corruption, repression, and growing inequality, leading to discontent among the population. In 1959, Fidel Castro led a successful revolution against the Batista regime. The revolutionary government that followed embarked on ambitious redistributive reforms. These policies led to tensions with the US that culminated in conflicts that almost triggered a nuclear war. Cuba then aligned itself closely with the Soviet Union, receiving economic and military support. A one-party state was then established. The 1980s brought economic challenges, exacerbated by the collapse of the Soviet Union, Cuba's main benefactor. This period, known as the "Special Period," saw widespread shortages and economic hardship, which led to re-

forms that allowed foreign investment and private enterprise. Billions of US dollars were invested to develop the tourist industry, which surpassed the sugar industry as the main source of revenues for the island towards the late 1990s. Despite the difficulties, Castro remained in power and Cuba kept the socialist system. After Castro's death in 2011, the Communist Party appointed his brother Raul, later followed by Miguel Díaz-Canel who remains in power.

3   DATA

3.1   *Academic corpus from WoS*

We constructed a dataset with information about academic articles studying 24 countries in the Americas using the Web of Science (WoS).[2] We focused on journal articles and classified them as studying one of the countries of interest if either the abstract or title contained the country name (e.g. Cuba) or its demonym (e.g. Cuban).[3] Restricting attention to abstracts and titles is important because these parts of the article reveal the most critical pieces of information. We study journal articles published in the social sciences and related disciplines. We used the WoS definitions and selected articles in the fields of Anthropology, Business, Economics, History, Law, Management, Political Science, and Sociology. Overall, the final dataset presents information about 225,465 articles published in journals in the fields of interest and studying countries in the Americas.

The dataset of academic articles we constructed from WoS provides a unique opportunity to understand our knowledge of Cuba in comparative perspective, both in terms of topics and fields that have studied the country the most. Although this type of data is commonly used in recent quantitative studies of the academic world (Iaria et al., 2022; Hager et al., 2024), and cover a wide range of topics from researchers around the world, there are at least three limitations that are worth mentioning. First, academic articles are skewed towards recent years when there is better coverage. Second, we focus on academic articles, leaving out books and conference proceedings.

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[2]Web of Science encompasses more than 12,000 high-impact journals and includes more than 90 million records when including articles and other academic production (e.g. conference proceedings).

[3]The countries we looked for in the website are: Argentina, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Trinidad and Tobago, United States, and Venezuela.

Given that the production of books is more prevalent in fields different from Economics, our dataset underestimates the production of academic work about Cuba in fields such as Sociology, Political Science, and History. And third, there is a small share of duplicated articles because they are classified in two fields. For example, articles published in leading economic history journals are classified by WoS in the fields of "History" and "Economics." All foreign-language publications are translated into English by WoS and thus our data captures articles in different languages.

3.2 Topics and keywords

After filtering the articles of interest, our dataset presents information for 1,829 articles on Cuba.[4] That is, is less than 1 percent of all academic articles about countries in the Americas study the island. By design, these articles were written across the eight fields previously mentioned. It is less clear what topics are being studied. To categorize articles, we chose topics that are particularly important in the history of Cuba. We then construct a set of keywords for each one of these topics and categorized an article as studying that topic if one of those keywords appeared in the abstract. We chose keywords to avoid overlap across topics and minimize false positives. However, categorization is not mutually exclusive and articles could be classified as studying multiple topics.

We categorized articles as potentially studying five topics. Let us describe these topics in rough chronological order. The first topic is *Slavery*, which we capture with the keywords "slave, abolish, abolit*, rebellion." Natives were enslaved, slaves arrived to the island since the 16th century, and slavery was crucial for the Cuban economy until late in the 19th century. The second topic is *Sugar* which we approximate with the keywords "sugar, cane, plantation, landowners." Sugar is the most important natural resource in the island, and it has been the backbone of the economy since the 16th century. The third topic is *Independence* and the keywords are "marti, spain, independen*, madrid, liberation, maceo, gomez" and the crucial years "1868, 1895, 1896, 1897, 1898." Independence lasted for almost three decades, hundreds of thousands of people died, and determined how the island fared in the 20th century. The fourth topic is *Revolution*, with the keywords "fidel, castro, revolution, guevara, marx*, 1959." The Cuban revolution of 1959 is one

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[4]The articles in our dataset were written by researchers with affiliations to academic or research institutions that were located outside (e.g. Harvard,) and inside of Cuba (e.g. Cuban Academy of Sciences, University of Havana).

of the most important events in Latin American history, and a focal point during the Cold War. The last topic we consider spans the entire history of Cuba and it is *Race*, with the keywords "racial, racist, afro, mulato, discrimination." The disappearance of natives, the slave trade, the racial concentration of economic resources, and the mixed race that emerged made race to be a constant topic of discussion in Cuba.

In addition to the previous five topics, we also categorized academic articles as studying Cuba in relation to other countries. Based on the history of Cuba since the 16th century, we considered five countries or groups of countries: Spain, Britain, Soviet Union, United States, and Latin American countries. More precisely, we searched for the following words in the abstract of academic articles: "united states. u.s.. confederacy, confederate" (United States), "spain, madrid, spanish" (Spain), "britain, british" (Britain), "ussr, u.s.s.r., soviet union" (Soviet Union), and the name of countries located in the Caribbean and Central or South America. The former four superpower nations either ruled Cuba or had strong influence on it at some point in the past five centuries. The latter category includes the names of all Latin American countries and thus captures studies focusing on, for example, Cuba and Haiti.

4   RESULTS

We begin by showing how much academics have studied Cuba when compared to other countries in the Americas and also across fields within the social sciences and related disciplines. We then zoom into the articles focusing on Cuba to show what topics have been of more interest. Finally, we show how Cuba has been studied in relation to Spain, Britain, US, USSR, and Latin America.

4.1   *The study of Cuba in comparative perspective*

The data from the Web of Science reveals two clear patterns about the study of Cuba in comparative perspective. The first pattern is that academics in the social sciences have written as much about Cuba as for other countries in the Americas. To account for the size of countries, let us examine the number of articles per one million inhabitants in 2022. We use population data from the World Bank. Panel (a) in Figure 3 shows that there have been approximately 150 academic articles per

one million inhabitants in Cuba, which is close to the average number of studies across countries in the continent. Canada, the US, and Chile are by far the countries with the most number of articles. Venezuela and Peru are the countries which have been the least studied in the social sciences.

The second pattern is that Cuba has been studied disproportionally more in History and Political Science, and less by Economics, Management, and Business. Panel (b) in Figure 3 presents these comparisons visually as a share of articles in the country across fields. To facilitate the comparison, we plot share of articles across fields in Cuba and the average in all other countries in the Americas. Articles in Economics represent almost one-third of all articles in countries different from Cuba, but less than 10 percent when it comes to studies about the island. That is, there are three times more economic articles about other countries than about Cuba. This striking pattern is reversed in History and Political Science. Cuba has been studied three times more by political scientists and historians when compared to other countries. In a nutshell, the patterns in the data strongly suggest that Cuba has been understudied by economists when compared to other social sciences.

4.2   Topics of study in articles about Cuba

What have been the topics most studied when it comes to articles about Cuba? Panel (a) in Figure 4 presents the analysis. The Cuban Revolution of 1959 it is the most studied topic, with almost one quarter of all academic studies on Cuba, i.e. approximately four hundred articles. The second most studied topic is Cuban independence. These two topics align well with the fact that the two fields with more interest in Cuba are History and Political Science. The Cuban revolution is arguably one of the most important events in Latin American history, and it is traditionally associated with a rise in the demand for redistributive politics in the region (e.g. Wright 1991). The independence process that took place over decades towards the end of the 19th century was long and involved Spain, the US, and many battles, and put a strong mark in the US-Cuba relations that followed. Together, these two topics cover almost half of academic studies on Cuba. Half of the remaining studies focus on topics related to race, slavery, and the production of sugar.

Regarding the distribution of topics across fields, we observe two patterns. First, the Cuban revolution and the independence process have been the topics most studied across all fields in the social sciences. Panel (b) in Figure 4 presents the share of articles per topic across fields. Second,

in addition to the equal distribution of the most important topics, we also observe other regularities arguably related to field-specific preferences for certain topics. For example, racial studies are significantly more prevalent in Anthropology and Sociology. The few studies in Economics that we observe in the data have been relatively more focused on the sugar industry, which is aligned with the relatively high importance of the industry for the U.S. economy.

4.3 Geo-politics

Another characteristic of Cuba across the last five hundred years is the evolving relationship it has had with superpower nations like the US and the Soviet Union, and other countries in the Latin American region. From being under the rule of Spain and Britain and the troublesome relationship with the US, to the influence the island had on the Latin American left and the support Castro and fellow revolutionaries received from the Soviet Union, it is not an overstatement to say that Cuba's affairs have been intertwined with global affairs and the goals of foreign nations. The last part of this chapter explores how academic articles have studied Cuba in relation to other countries.

The data from the Web of Science reveals that the vast majority of articles have studied Cuba in relation to the US. Panel (a) in Figure 5 shows that more than two-thirds of academic articles mention the American superpower. In second place, we observe the group of Latin American countries, which have been mentioned in almost one-quarter of the articles about Cuba. Spain comes in third place with almost 15 percent, and then Britain and the Soviet Union with a combined 10 percent. Given that the articles in our dataset were predominantly written after the 1959 Revolution, it is not surprising that most study the island in relation to the country with the strongest influence.

The importance of the US spans all fields in the social sciences, as the country is the most mentioned one in studies about Cuba across disciplines in our dataset. Panel (b) in Figure 5 presents the share of studies mentioning other nations across fields. The most notable difference in this figure is History, which devotes significantly more attention to Spain and Britain than other fields. Economics is fairly representative of the fields in our data, with perhaps relatively more focus on the Soviet Union than the rest. Overall, Figures 4 and 5 combined show that the largest difference when it comes to the study of Cuba across fields is related to the topics covered by the articles.

5 CONCLUSION

A systematic quantitative study of academic articles published by social scientists in the last century reveals that economists have studied Cuba relatively little when compared to other fields and countries in the Americas. The rich history of the island is reflected by academic articles in Political Science, History, and other fields, which have studied Cuba and its relation with other nations significantly more. In terms of methods, our empirical analysis shows that academic articles can be used as data to compare our knowledge across countries and fields, a novel methodology with the potential to reveal important gaps in our understanding of certain contexts. This type of dataset opens the door to new analyses exploiting algorithms to more precisely study the text in academic articles and the dynamic formation of research networks, among others.

Finally, our meta-analysis leads to at least three questions. First, how much is our knowledge of Cuba constrained by the lack of studies in economics? To the extent that the field of Economics is a complement to other fields, we might be missing important insights, particularly due to the notoriously different economic organization of the island. Second, how is the scarcity of data affecting our accumulation of knowledge? Economics has become a notoriously data-driven field, which can bias studies towards certain countries and topics. And third, despite the arguably crucial importance of Cuba for the rise of socialist movements in Latin America over the course of the twentieth century, there seem to be surprisingly few studies quantifying these issues. Many questions remain open regarding the role that Cuba has played in shaping political trends outside its borders.

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**Figure 1:** The important location of Cuba
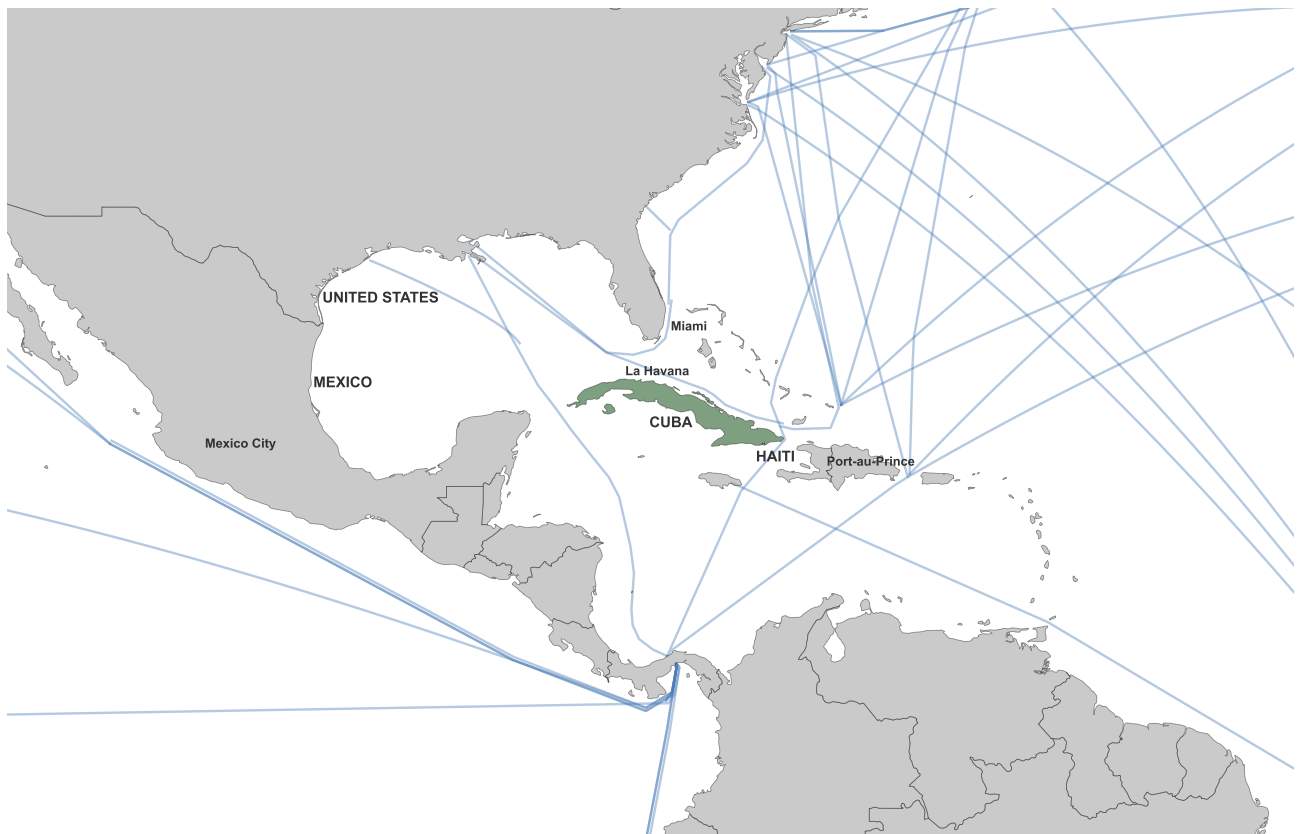
Notes. Cuba is located notoriously close to the only successful slave rebellion (Haiti), to the United States, and can easily connect with Europe and Africa through the Atlantic ocean. Maritime routes in blue for reference.

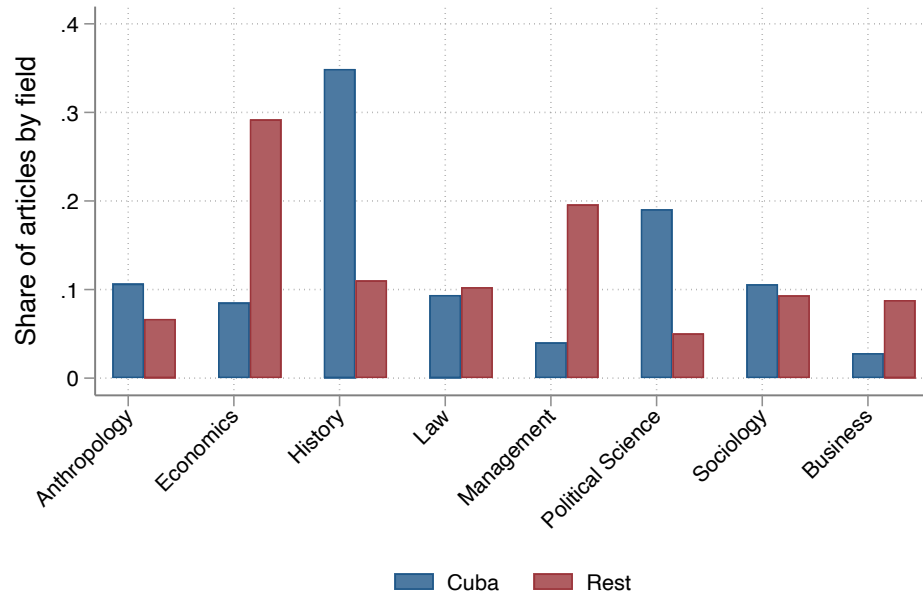**Figure 2:** Abolition of slavery and independence
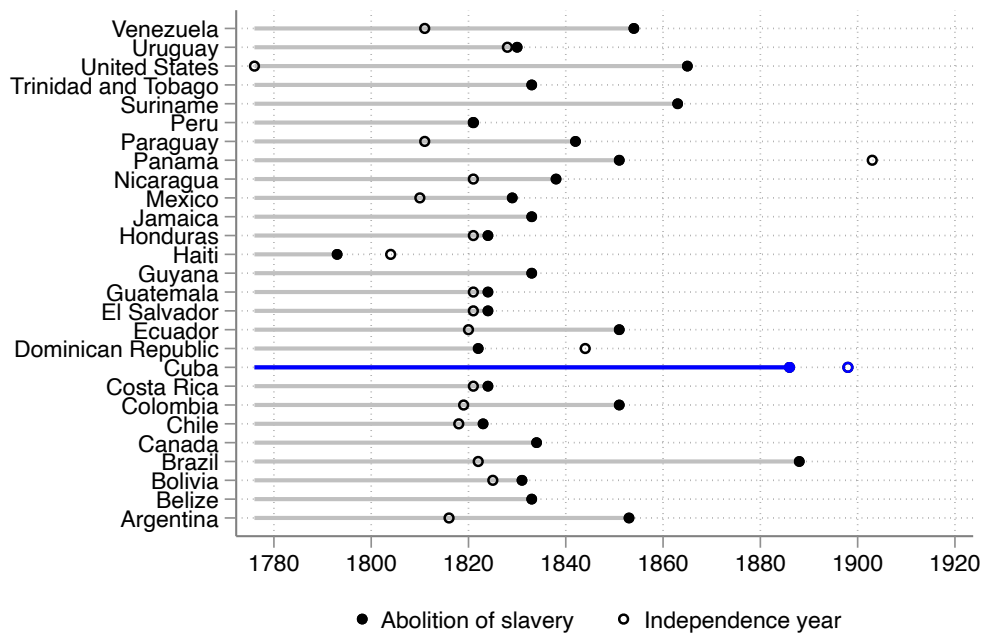
Notes. Year of abolition of slavery and year of independence across countries in the Americas. Cuba was one of the last countries to gain independence and to abolish slavery.

Figure 3: WoS articles and fields
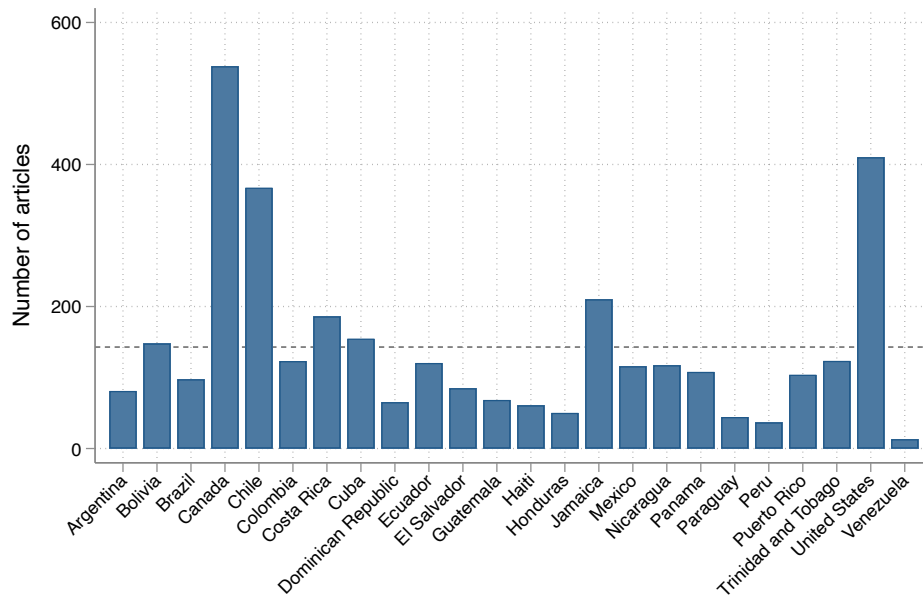

(a) Articles per 1 million inhab.

(b)

Notes. Panel (a) plots the number of academic articles published in the fields of Anthropology, Business, Economics, History, Law, Management, Political Science, and Sociology per 1 million inhabitants. The number of articles comes from the Web of Science and 2022 population from the World Bank. Panel (b) plots the share of articles per field, in Cuba and the rest of countries.

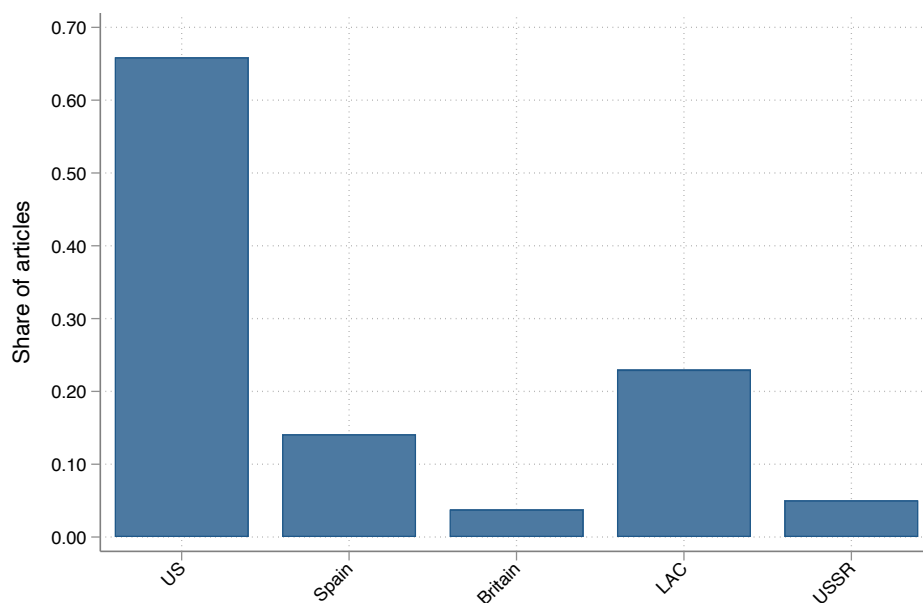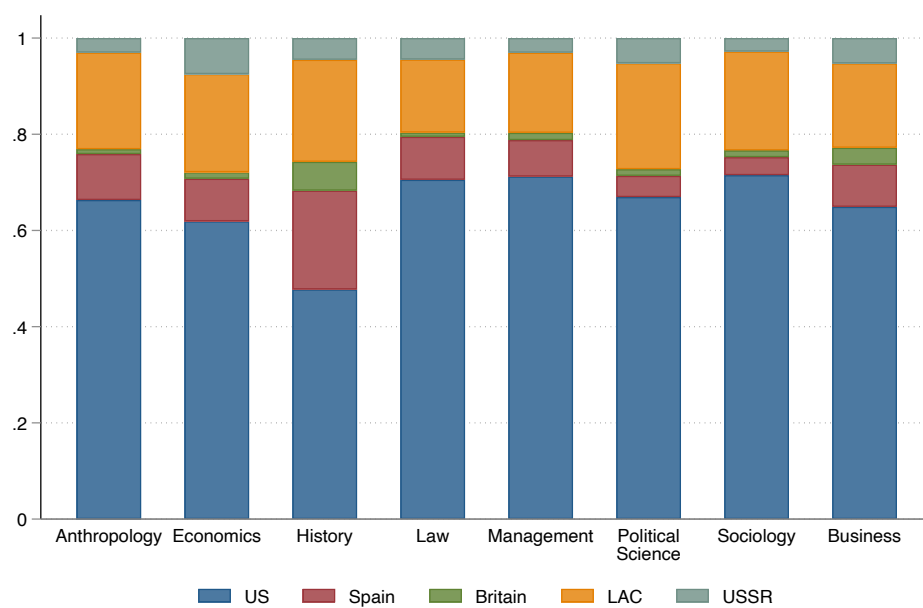**Figure 4:** Topics of study in Cuba
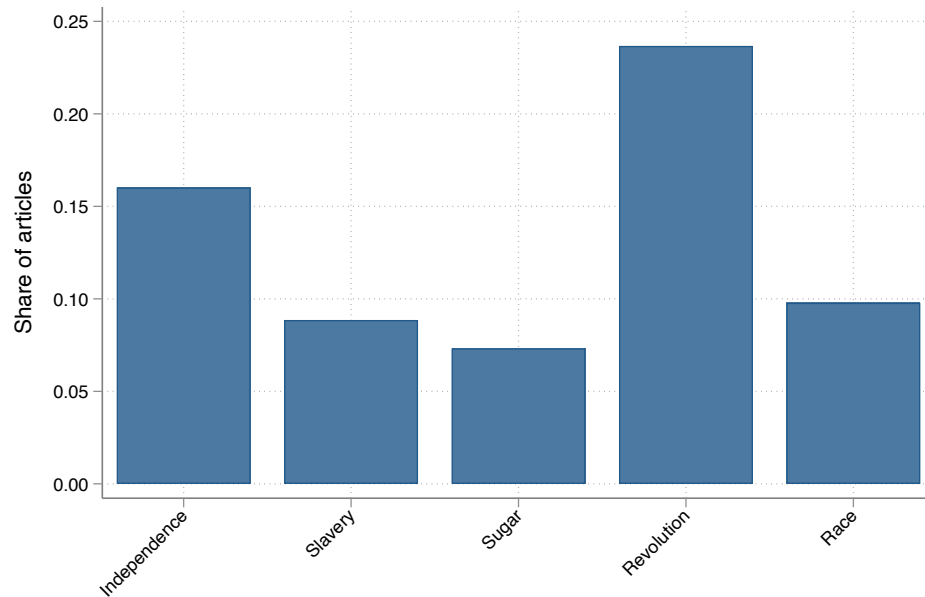
(a)
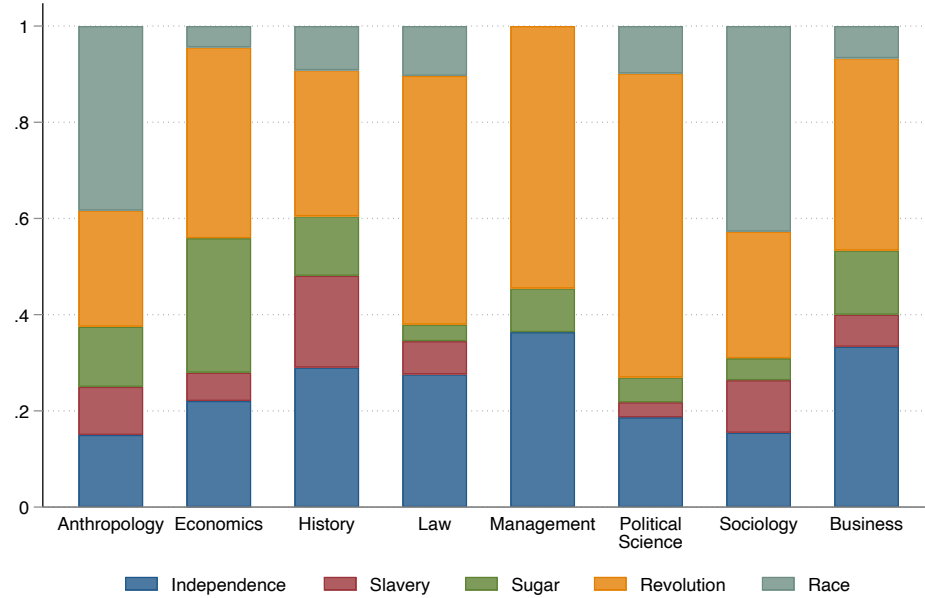
(b)

Notes. Both figures use the almost 2,000 articles about Cuba. Panel (a) plots the share of articles that study each of the five topics we consider as key in Cuban history. Panel (b) repeats the exercise but now examining each one of the eight fields in our data.

Figure 5: Cuba in relation to other countries

(a)

(b)

Notes. Both figures use the almost 2,000 articles about Cuba. Panel (a) plots the share of articles that study Cuba in relation to each one of the five other countries we consider key in Cuban history. Panel (b) repeats the exercise but now examining each one of the eight fields in our data.