

**HORIZONTAL ACCOUNTABILITY AND THE INSTITUTIONAL NETWORK OF
CORRUPTION CONTROL**

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CORRUPÇÃO***

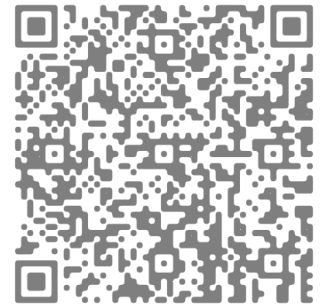
***ACCOUNTABILITY HORIZONTAL Y LA RED INSTITUCIONAL DE CONTROL DE
LA CORRUPCIÓN***



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ABSTRACT: Control institutions play a crucial role in contemporary democracies as they aim to hold public agents accountable and mitigate the effects of corruption. They are part of a complex network of horizontal accountability, in which the involved bodies have the legal duty to examine the decisions of public managers and subject them to institutional and social control. This study sought to understand the performance of these agencies in combating corruption in the Latin American context, examining the influence of factors that contribute to high corruption levels in some countries. The role and predictive capacity of institutions responsible for preventing the misuse of public resources were analyzed. Among the variables used in the model, proxies for the criminal investigation system, regulatory quality, and the autonomy of external auditing stood out. These institutions significantly correlated with the perception of corruption in Latin America.

KEYWORDS: Institutions of control. Horizontal accountability. Corruption.

RESUMO: *As instituições de controle desempenham um papel fundamental nas democracias contemporâneas, pois visam atribuir responsabilidade aos agentes públicos e, assim, mitigar os efeitos da corrupção. Elas fazem parte de uma rede complexa de accountability horizontal, na qual os órgãos envolvidos têm o dever legal de examinar as decisões dos gestores públicos e sujeitá-las a controle institucional e social. Neste estudo, buscou-se compreender a atuação dessas agências no combate à corrupção no contexto latino-americano, verificando a influência de fatores que levam alguns países a apresentar altos índices de corrupção. Para isso, foram analisados o papel e a capacidade preditiva das instituições responsáveis por coibir a má utilização dos recursos públicos. Dentre as variáveis utilizadas no modelo, destacaram-se os proxies do sistema de investigação criminal, da qualidade regulatória e da autonomia das auditorias de controle externo. Essas instituições mostraram uma correlação significativa com a percepção de corrupção na América Latina.*

PALAVRAS-CHAVE: *Instituições de controle. Accountability horizontal. Corrupção.*

RESUMEN: *Las instituciones de control pueden considerarse como el corolario de las democracias contemporáneas, ya que una de sus principales finalidades es asignar responsabilidad a los agentes públicos y, por consiguiente, mitigar los efectos de la corrupción. Además, forman parte de una red compleja de responsabilidad horizontal, cuyos organismos tienen el deber legal de examinar las decisiones de los administradores públicos y someterlas a control tanto institucional como social. Para comprender la actuación de estas agencias en el control de la corrupción en el contexto latinoamericano, este estudio examinó la influencia de factores que llevan a algunos países a presentar altos niveles de corrupción, comenzando por entender el papel y la capacidad predictiva de las instituciones encargadas legalmente de prevenir el mal uso de los recursos públicos. Se destacan en el modelo variables proxy como el sistema de investigación criminal, la calidad regulatoria y la autonomía de las auditorías de control externo. Estas instituciones mostraron una correlación significativa con la corrupción percibida en el contexto latinoamericano.*

PALABRAS CLAVE: *Instituciones de control. Responsabilidad horizontal. Corrupción.*

1. Introduction

Corruption is a phenomenon of broad contours, and, most of the time; it is difficult to measure due to its not always explicit nature. However, currently, several organizations strive to numerically express their presence in society, such as Transparency International, *Control Risks*, and the World Bank, among others. The perception of experts through *surveys* is the most commonly used method for this measurement. However, it is not enough to indicate that the problem exists; it is necessary to discuss how the damages caused to public administration and, consequently, to society can be mitigated or combated.

Horizontal *accountability* occupies a central place in this debate and is based on the premise that control institutions, especially those with legally institutionalized functions, are indispensable for promoting integrity in politics and public bodies. From a historical perspective, many countries in Latin America have become political democracies or new polyarchies in the last decade. However, despite the majority ensuring free and periodic elections, as required by vertical *accountability*, it has been found that horizontal *accountability* is weak and can create a favorable environment for corrupt practices (O'DONNELL, 1998).

According to O'Donnell (1998), institutions responsible for corruption control, including Supreme Audit Institutions, incentives generated by both the Legislative and the Judiciary, and other regulatory institutions, play a fundamental role in producing horizontal *accountability*. This theoretical approach is the one that most closely aligns with the proposal of this article, which served as a starting point for investigating the presented phenomena.

The employed methodology combines theoretical elements and categories that can represent this network of control and explain the variability of perceived corruption at different degrees. The adopted geographical scope prioritized Latin American countries, considered as new polyarchies by the reference literature of this study, which present distinct perceptions of corruption despite economic and institutional similarities.

The analysis was conducted using panel data, allowing for the estimation of models on a longitudinal scale. Proxy indicators from global reference sources were used, such as the Corruption Perceptions Index (CPI) from the non-governmental organization *Transparency International*, which measures the level of corruption in the public sector based on expert opinions and data from the *World Justice Project* and *V-Dem*. A descriptive overview of perceived corruption will also be presented.

Through this theoretical and methodological approach, the role played by control institutions in preserving public integrity was observed.

2. Corruption, Concepts, and Explanatory Syntheses

The literature addressing the topic of corruption presents various conceptual perspectives, indicating a need for more consensus on its determinants. However, all approaches agree that corruption is a multi-causal phenomenon. For example, according to Melo (2003), corruption can be closely linked to a lack of *accountability* and strongly related to deficiencies in control actions. This perspective sees institutions as potential enlighteners of this phenomenon.

Understanding corruption, among other causal explanations, involves the voluntary interaction between two actors acting predatory, seeking to appropriate public resources from the institutions affected by these actions. The incentives that drive corruption are diverse, hindering its complete explanation through statistical estimation.

There needs to be more statistical exploration of this topic in the literature, especially in the social sciences. Despite increasingly arousing interest in the academic community and being widely debated publicly, there is still little effort in producing systematic studies on the subject (MARANI *et al.*, 2018). One of the early approaches to corruption, or attempts to understand it, was anchored in a meaning where its implications were evaluated from a moral perspective (personalistic perspective). The corrupt conduct of a public official was considered a violation of ethical norms rather than a deviation from the role assigned to them.

In the second stage, corruption came to be treated as a social phenomenon (functionalist perspective), moving away from the personalistic perspective, which focused on the individual action of the corrupt. This approach considers corruption as a result of cultural and social processes, assuming that there are gaps between formal and informal social norms in developing countries, which can result in incongruities in governance (BIASON, 2018). According to BIASON (2018), a third approach is a legalistic perspective, which reflects on the legal framework, which varies from country to country. This conception primarily analyzes corruption as a violation of rules and laws, placing economic, social, and cultural aspects in the background.

Considered one of the pioneers in the field, Huntington (1975) describes corruption as a form of violence that occurs when the lack of mobility opportunities outside of politics combines with weak institutions, resulting in deviant political behavior. Furthermore, corruption involves the exchange of political action for economic benefits.

Some empirical studies have analyzed the relationship between corruption and economic development (LA PORTA *et al.*, 1999; ADES; DI TELLA, 1999; TREISMAN,

2000). According to these studies, wealthier societies would be less prone to the phenomenon. In another perspective, but still related to this relationship, other researchers argue that the political and economic bias is linked through *rent-seeking*, which often involves resources and power, meaning that public agents seek to maximize their income through public resources (AVRITZER; FILGUEIRAS, 2011; KRUEGER, 1974; TULLOCK, 1967).

Krueger (1974), *Ackerman* (1978), and *Mbaku* (1996), consider excessive state intervention in the economy as one of the leading causes of *corruption*. *Rose-Ackerman* (1999) suggests that the problem of corruption can be divided into two hierarchical levels: political corruption (high level), which occurs when *policymakers* develop specific policies and laws for the benefit of particular groups, and bureaucratic corruption (low level), which occurs when public officials have opportunities to obtain illegal compensations within public administration.

According to *Tsebelis* (1988, p. 33), both ordinary individuals and public agents act considering the cost-benefit matrix of hidden games². The corrupt agent or corruptor is a rational actor seeking to maximize their opportunities, especially when there are no efficient control mechanisms that subject them to social rules, such as the existence of good accountability.

From the new institutional economics perspective, *accountability* adopts a "strong" sense, advocated mainly by (*MORENO; CRISP; SHUGART, 2003*). They argue that the relationship between voters and their representatives forms a principal-agent relationship. As principals, it is up to citizens to punish or reward the rulers, who are their agents. According to this approach, there is only *accountability* if the principal can remove or renew the agent's power. In other words, this definition is mainly based on the delegation chain, which can take various forms, whether in presidential or parliamentary systems (*MELO, 2008*).

This delegation is weak in presidential systems because sanctions between powers are minimal, especially between the Executive and the Legislature, except in rare cases of legislative impeachment against the Executive (*MELO, 2007*). This is because the balance and relationship between the two powers are among equals in this type of system. Consequently, there is no *horizontal exchange* but rather a political exchange.

Therefore, the institutional and administrative design can impact corruption levels. By reducing discretion, the probability of illegal action tends to be restricted, especially in environments with low control. According to *Klitgaard* (1998), corruption results from a combination of monopoly,

² See *Tsebelis* (1998)

discretionary power, and low *accountability* (MELO, 2010, p. 38, our translation).

These studies began to highlight the relationship between political, institutional design and the ability to control the rulers. For example, in the Brazilian presidential, the current political arrangement allows the president to have significant legislative power through provisional measures and the ability to veto entire proposals sent by Congress. This means that the Executive possesses instruments and mechanisms that reduce its capacity to be effectively controlled by the Legislature, favoring exchange over subordination to democratic rules (PEREIRA; MUELLER, 2000, p. 47).

In a general and subjective sense, in the public sphere, corruption encompasses bribery, kickbacks, fraud, embezzlement, misappropriation of funds, influence peddling, and nepotism, among others. This article defines corruption as a strategic practice in which political actors seek to maximize their private gains. Therefore, corruption becomes a problem that requires a set of reforms to reduce corruption incentives (KLITGAARD, 1998).

Klitgaard (1998), uses a mathematical formula to represent corruption: " $C = M + P - R$ ", where corruption equals monopoly plus discretionary power minus accountability. According to the author, corruption is present wherever there is a monopoly of goods and services, especially when decisions are made discretionarily without being held accountable. Therefore, combating corruption should begin by creating better systems where these monopolies are reduced or regulated.

Regarding institutional arrangements and corruption control, it is of great relevance to strengthen the independence of control agencies. These agencies should be occupied primarily by public agents with distinct and opposing ambitions, especially the Court of Auditors and the Judiciary, to ensure adequate oversight and the enforcement of sanctions, always respecting the reasonableness of the law and the right to due process and fair defense. Otherwise, political actors may act according to their rules and interests without an impartial and technical body. The following table summarizes the predominant theoretical and empirical aspects of corruption.

Table 1 - Key Theoretical and Empirical Aspects of Corruption

First generation	I - Legalistic perspective; II - Focus on social actors; III - Measurement of perception	Nye (1967); Heidenheimer (1970); and Peters and Welch (1978); Atkinson and Mancuso (1985)	Inductive method and exploratory studies
Second generation	I - Risk analysis (Corruption as a risk for investments); II - Corruption Perceptions Index (CPI) (composed precisely by integrating various corruption indicators produced by consulting firms)	Kaufmann, Kraay and Zoido-Lobaton (1999); Leff (1964)	Comparative evaluations
Third generation	I - Search for tools for intervention and reform; II - View corruption as a problem; III - Search for practical solutions.	Leff, 1964; Scott, 1971; Speck, 2000; Kaufmann, 1998	Quantitative method

Source: Prepared by the author- Adapted from Speck (2000)

According to the table above, developed based on Speck's classification (2000), corruption can be theoretically understood in three generations, with considerable divergences in conceptualizing the phenomenon in different cultures and times. Although acknowledging that opinion surveys face various problems, the author highlights that recent surveys have shown that people are willing to report their experiences with corruption cases. As an example, he cites two surveys conducted to gather information about corruption-related incidents, where the information provided by respondents was not limited to perception alone but also included their involvement in acts of corruption. These cases are from Nicaragua and Bangladesh.

A significant number of citizens who used government services had to make some form of contribution, either to obtain a service provided for free by law or to circumvent regulations: in public schools, 75% of parents who enrolled their children paid for this service, which is officially free. When dealing with municipal administration, 19% of users paid a bribe; in the justice system, 22%; in property registration offices, 66% paid to expedite processes; when fined by traffic police, 40% of citizens bribed the officer. In the case of the survey in Bangladesh in 1997, the results are equally alarming (TI BANGLADESH, 1997): in 50% of cases where citizens had contact with the police, money was expended. Of this portion, 55% paid to prevent the issue from being referred to the judiciary, and 38% paid for the opposite. In the judicial sphere, 63% of citizens paid something; in education, 74% (SPECK, 2000, p. 28, our translation).

The literature review on corruption, institutional controls, and especially horizontal accountability does not end here. There is a common perception in the literature that corruption is primarily characterized by the deviation from functions or duties assigned to public officials

who act contrary to the law, seeking to maximize their income at the expense of shared and collective interests.

The World Bank attributes "institutional dysfunctions" as one of the leading causes of the corruption phenomenon (WORLD BANK, 2000, p. 4, our translation). This means that public oversight instruments must be independent, including a judicial system and financial controls. Other factors are also indispensable for corruption control, such as political actors, including Congress, civil society, and the media, which must be vigilant (SCPECK, 2000). Based on these different motivations, there is room in the national and international agenda for creating and strengthening more efficient regulatory mechanisms.

3. Principal-agent Relationship and the Role of control institutions

Within this discussion, which dates back to Montesquieu and the Federalists, the issue of government officials' controls and responsiveness is vital for representative democracies. In this political system, voters expect elected representatives to act according to their interests, but the electorate does not have sufficient information to assess performance and control their representatives (PRZEWORSKI; STOKES; MANIN, 1999). This low capacity for oversight is weakened due to information asymmetries or false information, leading to delegation and *principal-agent* communication dilemmas.

The nature of this *principal-agent* dilemma is marked by conflicts of interest regarding cooperation between the parties involved in this process. In most cases, the agent, who is responsible for action, makes decisions based on their interests, diverging from the principal's expectations, who is responsible for delegating the action. This results in the phenomenon called agency loss. Generally, *agency loss* is related to the principal's control over the agent.

It is understood that control systems that exercise *accountability* increase costs for the agent, inducing them, through constraints or punishments, to follow the rules and meet the demands delegated by the principal. According to Melo (2010), this relationship is marked by sequential games that depend on the levels of information each party possesses. When the agent needs more knowledge, there is a stalemate in the relationship, creating obstacles to the proper accountability of elected officials.

According to Van Rijckeghem and Weder (1997), institutional controls are responsible for oversight, being determinants of corruption detection and punishment. However, such rules may be weak in countries undermined by collusion and systemic corruption. It is in this sense that society as a whole can play an essential role in reporting and pressuring for punishment.

Highlighting the importance of institutions in this process of accountability, the viewpoint of North (2018) on the transformations that institutions bring is noteworthy. He asserts that institutional change is the key to understanding historical change, as it can modify how societies evolve. Additionally, institutions bring a relevant aspect to structuring everyday life: reducing uncertainty. This reduction results from a complex and unique process of choices that affect the functioning of society. According to the author, the availability of complete information plays an indispensable role in reducing these uncertainties and making more efficient decisions³.

To Olivieri (2016), the literature also points out severe institutional weaknesses that reduce control effectiveness. For example, in the Brazilian case, the 1988 Constitution grants the National Congress the prerogative of holding public officials and public policies accountable, "including having a specific body for this, the TCU (Federal Court of Auditors)". However, reality shows the opposite, especially in the last three decades after democratization. Studies suggest that Congress plays a minimal role as a supervisory body. Its powers related to overseeing the actions of executive agents and implementing public policies have been weak, and its activities are often influenced by political-party interests, creating a favorable environment for corrupt practices and political instability.

Liñán (2007) cites the premises advocated by Guillermo O'Donnell (1994), who attributes the difficulty of establishing control over the elected president to the institutional design of "delegative democracies" - democracies with a low degree of institutionalization. This results in low *accountability* in Latin American democratic regimes, as the rulers are not subject to normal controls, given that Congress fails to politically hold them accountable for cases of corruption and abuse of power during their mandate. He says, "Strong presidents, rather than strong legislatures, constitute the main challenge for the survival of democracy in the contemporary era" (LIÑÁN, 2018).

In this regard, institutions' transparency becomes crucial as it is their legal duty to inform and justify their actions to society. Society, in turn, prioritizes the citizen's right to scrutinize possible practices harmful to public funds. It is recognized, therefore, that the proper verification of the use of public resources is not only the responsibility of oversight bodies but of all conscientious citizens.

³ North (2018) shows that institutions exist to generate order and reduce the uncertainties of human interactions. Made through informal and formal restrictions that structure transactions between people. A study that aims to understand the economic impact caused by institutional arrangements but is of great relevance to the institutionalist literature in general.

Simon and Aalbers (2019), say that corruption in Latin America paved the way for the election of *anti-establishment* leaders in 2018. These leaders used selective mechanisms to combat corruption to target their political opponents, resulting in increasingly politicized oversight agencies. In other countries, such as Peru and Guatemala, the political establishment fought to prevent changes, causing significant damage to anti-corruption efforts.

In the region, corruption or suspicions of irregularities involving heads of the executive branch have compromised not only the integrity of public accounts but also caused significant political instability. For example, in the past 30 years, 14 presidents had their terms interrupted, with 7 of them being removed by Congress through *impeachment* proceedings (LIÑÁN, 2018)

President Fernando Collor was the first in the region to undergo *impeachment* in 1992 due to his involvement in corruption scandals. Twenty-three years later, President Dilma Rousseff also faced *impeachment* in Brazil in 2016. In Peru, another impeachment process involved the misappropriation of public funds by former President Alberto Fujimori. Besides them, other presidents had their terms interrupted regardless of their ideological and party positions, as well as the institutional and legal differences of their countries, such as Carlos Andrés Pérez (Venezuela, 1993), Ernesto Samper (Colombia, 1996), Abdalá Bucaram (Ecuador, 1997), Raúl Cubas Grau (Paraguay, 1999) and Luis González Macchi (Paraguay, 2002) (LIÑÁN, 2018).

The mechanism of *impeaching* a mandate was unknown in Latin America until 1990, during the Cold War, when the removal from office occurred through military coups. Through a comparative study, the author observed that all these presidents, despite having distinct leadership characteristics, had in common the popular pressure resulting from their involvement in corruption scandals or administrative irregularities. Other institutions also play roles in the process, such as political parties. However, sectarian political interests can contaminate the decisions of legislators involved in the oversight process of the executive branch. In this sense, the role of other organs and control institutions becomes indispensable, as they possess technical and operational capacity, employ their tools and mechanisms, act autonomously, and have highly professionalized members to ensure proper accountability of governments.

4. Strategy for Data Measurement and Applied Methods

The methodological approach of this study aims to measure the predictive power of control institutions and their capacity to respond to variations in perceived corruption, which is used as a *proxy* variable to measure corruption in Latin America. In addition to inferential analysis, a descriptive study will provide a comprehensive overview of the variation in values related to corruption control.

The longitudinal research of the inferential test is conducted through a panel data model, considering 110 observed cases from 2015 to 2019. The sample excludes only those Latin American countries that are not simultaneously present in the databases used: CPI (Corruption Perceptions Index) - *Transparency International*, *World Justice Project*, *V-Dem*, *World Bank*, and *Open Budget Survey*. The table below lists the variables used to explain the phenomenon.

Table 2 - Variables used in the model

Variables	Type of Variable	Source	Expected Signal
Corruption	Dependent	IPC	
Autonomy of audits	Independent	World Justice Project	+
Effectiveness of criminal investigations	Independent Independent Independent	World Justice Project	+
Transparency of government data and laws	Independent	World Bank	+
Regulatory quality	Independent	World Bank	+
Horizontal accountability	Independent	V-dem	+
GDP/Per capita	Independent	World Bank	+

Source: Prepared by the author – data from Índice de Percepção de Corrupção (IPC) do Transparência Internacional; World Justice Project, World Bank; and V-dem (Varieties of Democracy)

These indicators, used in the model, cover 22 Latin American countries and are available from 2015 to 2019, as the respective databases provide. Except for GDP *per capita*, all indicators are perception-based and considered *proxies*, as they are challenging to measure with strictly objective criteria. Table 2 presents the definitions of the variables according to the methodology used by the secondary databases.

Table 3 - Definition of Variables

Variables	Definition	Score	Authors
Corruption*	The Index produced by Transparency International, the CPI, assesses 180 countries and utilizes 13 data sources that collect the perception of experts and business executives regarding various corrupt behaviors in the public sector.	0 (high) to 100 (low)	Santiso (2007); Melo (2007); Menezes (2016)
Autonomy of audits	Measures the autonomy of audits conducted by Supreme Audit Institutions and their ability to scrutinize irregularities.	0 (high) to 100 (low)	Menezes (2016); Santiso (2015);
Effectiveness of the criminal justice system	Examines whether perpetrators of crimes are effectively arrested and prosecuted. It also measures whether the police, investigators, and prosecutors have adequate resources, are free from corruption, and perform their duties competently.	0 (high) to 100 (low)	Marino et al (2016); Kaufman et al (2009)
Regulatory quality	Assesses the government's ability to formulate and implement robust regulatory policies and laws without improper influence.	2.5 (high) -2.5(low)	Marino et al (2016); Kaufman et al (2009)
Horizontal accountability	Checks the accountability of governments through state institutions such as the Legislature, Judiciary, and specific oversight agencies like ombudspersons, prosecutors, and auditors general.	1 (high) 0 (low)	Marino et al (2016); Kaufman et al (2009)
Transparency	Evaluates whether laws and information on rights are publicly available, presented in simple language, and accessible in all languages. It also measures the quality and accessibility of government-published information in print or online form and whether administrative regulations, draft legislation, and decisions of higher courts are timely made available to the public.	0 (low) 1 (high)	Filgueiras (2008); Moisés (2010)
GDP/Per capita**	Variation of GDP per capita in the selected time series.	in US dollars	

*Dependent variable

**Control variable

Source: Prepared by the author – data from Índice de Percepção de Corrupção (IPC) do Transparência Internacional; and World Justice Project

The literature widely acknowledges the difficulty of measuring corruption, primarily due to the inherent tendency of those involved in corrupt practices to conceal their actions, as noted by Geddes and Ribeiro Neto (2000). Nonetheless, specific *surveys* have proven helpful in quantifying corruption and aiding in its statistical representation in research studies. One

such example is the Corruption Perceptions Index (CPI) developed by Transparency International.

This indicator is constructed based on 13 data sources provided by globally recognized institutions such as the World Bank and the World Economic Forum, which assess a range of corrupt behaviors in the public sector. These behaviors include bribery, embezzlement of public funds, misuse of public office for personal gain, nepotism in public administration, and state capture.

The hypotheses tested in this study were estimated through multiple regression using the Ordinary Least Squares (OLS) method. The variables used are anchored in the dimensions mentioned earlier by O'Donnell (1998), Santiso (2007) and Melo (2008) who discuss the elements examined in this study and provide theoretical support for considering them as explanatory variables in the model. The main hypotheses of this study are as follows:

H0: Institutions of control do not account for the variability of perceived corruption in Latin America;

H1: The effectiveness of control institutions, such as regulatory agencies, horizontal *accountability* institutions, and an effective criminal justice system, positively impacts the level of integrity in Latin American countries;

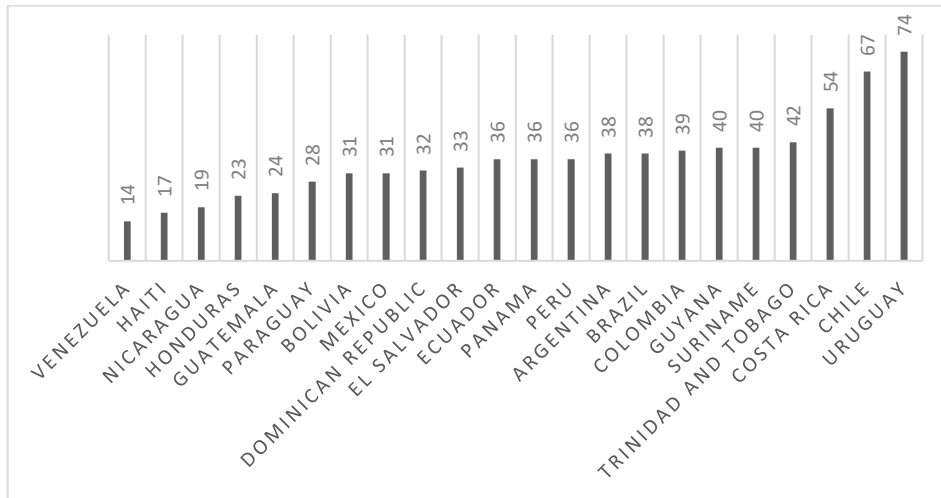
H2: Regulatory quality and transparency, as governance mechanisms, explain the variability of perceived corruption;

H3: High autonomy of audits is related to decreased perceived corruption in Latin America.

4.1. Descriptive Results

The graph below presents the indices of perceived corruption in Latin America based on data provided by Transparency International. The most recent results for the year 2022 show the position of each country relative to others, revealing significant statistical discrepancies among them.

Graph 1 - Perceived Corruption 2022

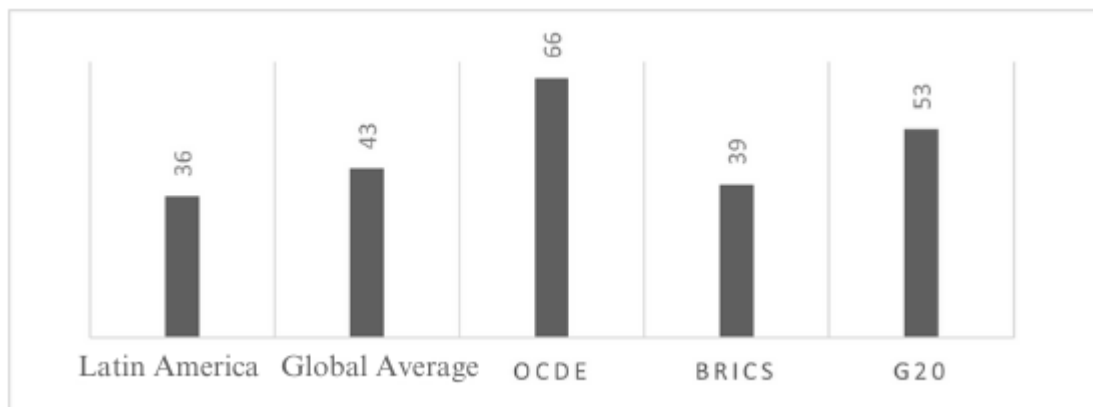


Source: Prepared by the author - Transparency International Brazil (2022)

Uruguay (74) appears as the least corrupt country among the 22 countries in the graph. Chile (67) is second, followed by Costa Rica (54). Brazil ranks 15th in the region among the selected countries above and is in 94th place out of the 180 countries analyzed by the organization. Despite maintaining a stagnant perception since 2020, with a score of 38, the country is close to the average of the listed Latin American countries, which is 36.

Some countries have improved the perception of corruption over time, and many are considered global references, such as Uruguay. However, the region still faces significant challenges in controlling corruption. The following graph shows the average position of Latin America compared to other areas and geopolitical blocs, demonstrating more unfavorable results in comparative terms.

Graph 2 - Global Average 2022



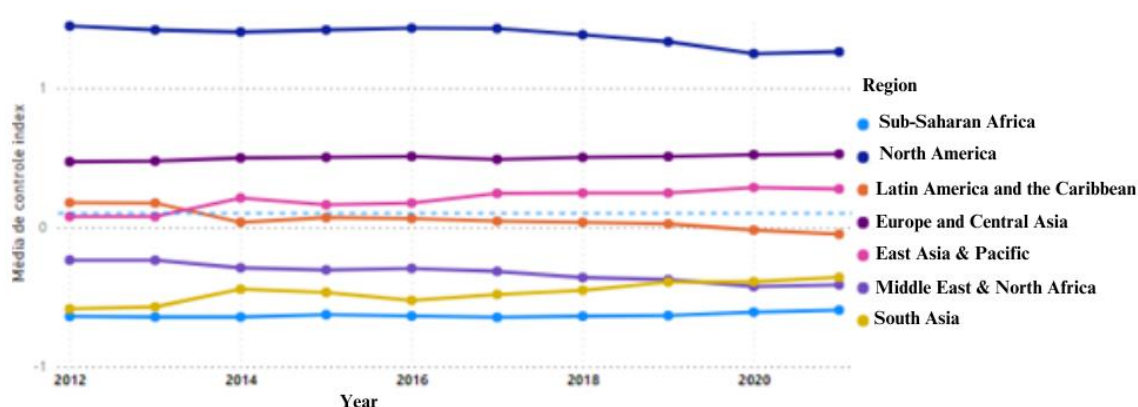
Source: Prepared by the author - Adapted from Transparency International Brazil (2022)

When analyzing the average of the "control of corruption" indicator created by the World Bank, which is also based on expert perception and ranges from -2.5 to 2.5, we can assess the situation of Latin America as a whole, including Caribbean countries, from 2012 to 2021. Despite expanding the analysis to a larger unit, the region continued to show unsatisfactory results, ranking higher only than the Middle East and Sub-Saharan Africa, areas with a long history of democratic rule of law violation.

North America presents the highest averages throughout the time series, although it experienced a decline between 2019 and 2020. In 2021, the region reached an average of 1.25. Europe and Central Asia have the second-best temporal average, getting a value of 0.53 in 2021, with a linear trend over the years.

On the other hand, East Asia and the Pacific show fluctuations in some years of the historical series. In 2002, their average was 0.08, but there was a significant change in 2014 when the region surpassed that value, reaching an average of 0.23. However, Latin America and the Caribbean follow the opposite path, with a decline in their standard in 2014, dropping from 0.18 in 2013 to 0.04 in 2014 and reaching -0.05 in 2021. The regions with the lowest averages for control of corruption are the Middle East, North Africa, and Sub-Saharan Africa, with standards of -0.41 and -0.36, respectively.

Graph 3 - Control of Corruption - World Bank, from 2012 to 2021



Source: Prepared by the author

In Latin America, Uruguay stands out compared to other countries due to its indices. Despite being a smaller and more homogeneous country, with a significant portion of its population living in Montevideo (40%), a city comparable in size to the 13th largest city in Brazil, Guarulhos, or even Tijuana, Mexico, the size of the country alone cannot explain its low

perception of corruption. Some smaller Latin American countries, such as Suriname, have much lower capabilities to combat corruption than Uruguay (AMERICAS QUARTERLY, 2020).

In general, from 2008 to 2019, the control of corruption in Brazil, Chile, Uruguay, and Costa Rica - economically and politically more significant countries - showed distinct patterns, with Brazil displaying the lowest performance in the corruption measurement indicator.

Table 4 - Descriptive Statistics of Independent Variables 2012-2019

Variable	N	Minimum	Maximum	Average	Standard Deviation
Autonomy of audits	100	10,00	84,00	45,5400	16,22221
Horizontal accountability	110	-1,66	2,02	,4308	,91825
Regulatory quality	110	-1,40	1,40	,0264	,64391
Transparency	93	0,25	0,74	,4544	,15167
Criminal investigation effectiveness	93	0,13	0,48	,2926	,09322
GDP per capita	108	1096	18289	7895,11	4813,408

Source: Prepared by the author – data from Índice de Percepção de Corrupção (IPC) do Transparência Internacional; World Justice Project, World Bank; and V-dem (Varieties of Democracy)

Beginning with the descriptive analysis, we can observe that the autonomy of audits ranges from 10 (attributed to Venezuela) to 84 (belonging to Chile). For Brazil, the analyzed historical series shows a minimum score of 42 and a maximum score of 46, suggesting a possible weakness in the autonomy of audits performed by EFSs. It is worth noting that the standard deviation is low, at 16.2. There are *missing values* in some variables, particularly in the transparency and criminal investigation system indicators of Paraguay and Haiti, in the WJP data.

Horizontal *accountability* has an average score of 0.45. Chile records the highest score in the panel data, with 2.02, while Panama has a minimum score of -1.66. The deviation of this variable is 0.91. Regulatory quality averages 0.0264 and a standard deviation of 0.64, with Uruguay obtaining the highest average and Venezuela the lowest. The average transparency score is 0.45, with a standard deviation of 0.15. Once again, Chile has the highest score for this index, while Venezuela has the worst score, reflecting low levels of law and government data disclosure.

Regarding the effectiveness of the criminal investigation system, which assesses whether perpetrators of crimes are effectively arrested and prosecuted, Chile also stands out with the highest indicator. Venezuela, on the other hand, has the lowest score of 0.13. The

average score of 0.29 suggests weak effectiveness of the criminal investigation system, indicating a lack of adequate punishment for those who commit crimes in the region, according to the WJP indicator measure. The standard deviation of this variable was 0.09. Lastly, we have the control variable *GDP per capita*, where Trindade and Tobago record the highest scores, indicating good performance in Latin America in 2015, while Haiti has the minimum score. The standard deviation of this variable, at 4813.4, shows the variability of values around the mean.

When describing the explanatory variables above, Chile obtained the maximum score of 65.5%: autonomy of audits, transparency, horizontal *accountability*, the criminal justice system, and regulatory quality. On the other hand, Venezuela stands out negatively, obtaining the minimum score in 65.5% of the explanatory variables and the dependent variable of perceived corruption from the IPC. Table 5 will show the correlation between the explanatory variables used in this study and how they connect.

Table 5 - Correlation Matrix of Explanatory Variables

	Cor_IPC	Self_Audits	Account_Horizontal	Quali_Regulatory	Transp.	Invest_criminal	GDP per capita
Cor_IPC	1						
Self_Audits	0,797**	1					
Account_Horizontal	0,549**	0,595**	1				
Quali_Regulatory	0,732**	0,638**	0,499**	1			
Transp.	0,567**	0,543**	0,340**	0,467**	1		
Invest_criminal	0,666**	0,490**	0,153**	0,524**	0,259***	1	
GDP per capita	0,697**	0,493**	0,287**	0,638**	0,548**	0,479**	1

* The correlation is significant at the 0.01 level (2 ends)

Source: Prepared by the author

The analysis of the Pearson correlation matrix estimates the degree of linear association between the dependent and independent variables. As shown in the table, all variables exhibit a positive relationship. This means that increased variables are associated with increased corruption indices. It is worth noting that higher corruption indices correspond to lower integrity of the countries. It is also important to emphasize that no explanatory variable is explicitly related to another, meaning there is no autocorrelation, further strengthening their presence in the model.

The correlation coefficient between all predictor and dependent variables is positive and significant at a 1% level (p-value < 0.01). Most of these correlations are most pronounced when

related to the corruption indicator from the IPC, namely: autonomy of audits (0.797), regulatory quality (0.732), transparency (0.567), criminal investigation (0.666), and GDP *per capita* (0.697). Regarding the causal association between the variables, the following regression analysis evaluates the potential impact of the independent variables through their respective models on corruption.

Table 6 - Panel Regression Results/2015-2019

Co-variables	IPC – TI		
	Coefficient	Erro	Sig
Autonomy of audits	0.260	0.067	0.003
Criminal investigation system	15.238	8.071	0.000
Horizontal accountability	2.275	0.770	0.000
Transparency	36.383	4.91	0.053
Regulatory Quality	3.056	1.58	0.003
GDP per capita	0.000	0.000	0.005
Constant	-6.364	3.382	0.202
Qui2	0.000		
R2	0,81		
N	93		

Source: Source: Prepared by the author – data from Índice de Percepção de Corrupção (IPC) do Transparência Internacional; World Justice Project, World Bank; and V-dem (Varieties of Democracy)

The p-value of the model was less than $2.2e-16$ (<0.01), leading us to reject the null hypothesis H_0 and consider the alternative hypotheses that support the conjecture proposed in this article that the mentioned control institutions influence the variability of corruption perception. In this case, the model exhibits a significant R^2 of 0.83, indicating that the selected predictors explain 83% of the observed dependent variable of corruption.

5. Conclusion

The proper functioning of control institutions is essential to sustain a democratic, republican, and liberal political regime. Their presence in society allows the state and its structures to be widely protected against any attempts of corruption. This study examined the causal dynamics of perceived corruption through the central control bodies responsible for upholding public integrity in Latin America.

Based on the literature used, these control institutions form the framework of horizontal *accountability*, meaning they are legally authorized agencies to balance the correlated powers of democracy. In addition to the classical institutions such as the judiciary and legislature, we

observed that regulatory institutions, government transparency, and Supreme Audit Institutions equally play indispensable roles in a genuinely effective accountability network.

Based on the obtained results, it is evident that Chile, Costa Rica, and Uruguay are the Latin American countries with the highest control of corruption. The correlation matrix examined the relationship between institutions and the perceived corruption index. In this context, a significant correlation was observed with a confidence level of 1%, specifically regarding the autonomy of the audit, used as a proxy to assess the performance of Supreme Audit Institutions (SAIs) and proving to be the variable with the highest predictive capacity for corruption variability in Latin America. Furthermore, the Pearson correlation matrix allowed the conclusion that there is no multicollinearity among the independent variables, as none exhibited a high correlation with another.

The causal test, conducted through a multiple linear regression analysis using panel data, revealed a p-value below 0.01, corroborating the hypothesis that control institutions have significant predictive capacity regarding corruption in Latin America. Both empirically and theoretically, the need to strengthen the control mechanisms of these agencies in the region becomes evident, especially in countries where data demonstrate weaknesses in their performance.

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