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The influence of life cycle stages on the corporate governance and earnings management relationship among Latin American publicly held companies

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Abstract

Objective: To analyze the influence of life cycle stages (LCS) on the relationship between corporate governance (CG) and earnings management (EM) of publicly listed companies in Latin America.

Method: Data from 278 Latin American companies were collected from 2011 to 2021 from Refinitiv Eikon® and analyzed using Heckman correction for self-selection model (1979) and multiple linear regression, with robust error correction and fixed effects for country, year, and sector, resulting in 1,792 observations. Dickinson's (2011) model was used to classify LCS, and Pae's (2005) model was adopted for EM. CG was measured according to the Refinitiv Eikon® governance standard.

Results: CG contributed to reducing EM, and a lower level of EM was found in the initial (introductory and growth) and maturity stages compared to the final stages (shake-out and decline). The analysis of the influence of LCS on the CG and EM relationship showed that CG is more effective in reducing EM in a company's initial stages than in its final stages. In contrast, there is a decrease in CG's ability to mitigate EM in the maturity stage compared to the final stages.

Contributions: These results enable a better understanding of how the effectiveness of CG mechanisms in reducing EM practices can be enhanced or minimized throughout LCS. Thus, organizations should pay attention to their LCS when attempting to improve their control mechanisms.

Keywords: Earnings management; Corporate governance; Life cycle stages.

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1. Introduction

The quality of the accounting information a company provides is vital because it decreases information asymmetry between internal and external investors, reducing conflicts of interest (Correia, Amaral & Louvet, 2017). Quality information is relevant for decision-making and reliably represents an organization's situation (Dechow, Ge & Schrand, 2010; Ma, Wang, Xu & Zhang, 2023). The literature infers the quality of information through the quality of reported profits. Therefore, empirical research usually adopts proxies such as earnings management (EM), earnings persistence, earnings smoothing, and conservatism to verify the quality of information (Paulo, 2007; Dechow *et al.*, 2010).

Although accounting information reports are regulated by agencies responsible for the functioning of markets, preparing these reports involves choosing what to recognize, measure, and disclose about economic events, enabling managers to make accounting-related decisions to achieve specific objectives, and possibly affecting the quality of accounting information (Xu, 2007; Lima, Carvalho, Paulo & Girão, 2015; Santos, Guerra, Marques & Maria Júnior, 2020).

The literature presents a set of individual incentives for managers to act in their interest when making accounting decisions, such as avoiding the disclosure of losses or declines in accounting results, increasing their remuneration, and achieving a particular goal related to results or market expectations (Martinez, 2001; Paulo, 2007). Therefore, a search for specific objectives may lead managers to resort to EM strategies that have the potential to negatively affect the quality of accounting information (Soschinski, Haussmann, Peyerl & Klann, 2021).

Because aligning the interests of administrators and capital holders remains a challenge and may encourage EM practices, organizations must implement control mechanisms to safeguard the interests of shareholders and ensure that more transparent and quality information is provided to stakeholders (Rahman & Ali, 2006). Such mechanisms include corporate governance (CG) practices, whose purpose is to decrease agency conflicts (Correia et al., 2017; Nazir & Afza, 2018) and, consequently, discourage EM practices (Peasnell, Pope & Young, 2005; Morás & Klann, 2020). Thus, empirical evidence indicates that CG contributes to mitigating such practices (Bao & Lewellyn, 2017; Correia *et al.*, 2017; Soschinski *et al.*, 2021).

Nonetheless, despite the high levels of CG standards held by *Companhia Americanas S.A.*, listed in the B[3]'s "*Novo Mercado*," a listing segment on transparency and corporate governance, revealed that higher CG levels do not necessarily mitigate risks associated with EM or accounting frauds. In January 2023, this company reported accounting inconsistencies that decreased supplier account values in previous years, which resulted in approximately R$20 billion in omitted liabilities up to the base date of September 2022. The immediate consequences were a request for judicial recovery in January 2023 and the postponement of the release of the 2022 financial statements (Americanas, 2023). Even though Americanas' formal governance structure followed the standards recommended, this case highlights that CG is not always efficient in protecting the shareholders' interests.

Furthermore, there is no consensus in the literature that CG can reduce EM. Some studies found a negative relationship (Bao & Lewellyn, 2017; Correia et al., 2017; Soschinski et al., 2021), while others found a positive relationship or no relationship at all (Erfurth & Bezerra, 2013; Konraht, Soutes & Alencar, 2016; Morás & Klann, 2020; Rahman & Ali, 2006; Waweru & Prot, 2018). Perhaps these controversial results are partially explained by the fact that previous studies have not considered the companies' other characteristics that might affect this relationship. Not only governance but also a company's life cycle stage (LCS) might affect whether EM practices are adopted.

Considering that the managers' interests in adopting earning management strategies may differ across a company's different LCS (Lima et al., 2015; Souza & Moraes, 2019), LCS might significantly influence commercial aspects, investment and financing strategies, competitiveness, as well as the quality and relevance of the information it provides according to its LCS (Dickinson, 2011; Lima et al., 2015; Habib & Hasan, 2019).

Thus, a company's LCS affects organizational characteristics, managers' priorities, and the adoption of CG mechanisms (Dickinson, 2011; Habib & Hasan, 2019). Governance mechanisms may change throughout a company's LCS, as the governance's role, such as wealth creation and preservation, are necessary in different LCS (Filatotchev, Toms & Wright, 2006; Habib & Hasan, 2019). The association between LCS and the CG structure has been empirically verified (O'Connor & Byrne, 2015; Li & Zhang, 2018). Therefore, this study is based on the premise that the effectiveness of CG in mitigating EM practices may be enhanced or attenuated depending on a company's LCS. However, the literature has not yet considered this relationship, indicating a research gap to be explored.

Given the previous discussion, this study aims to analyze the influence of life cycle stages on the relationship between corporate governance and earnings management in publicly held companies in Latin America. Bao and Lewellyn (2017) note that studies on EM have seldom addressed the companies' national institutional environment, especially in emerging markets, highlighting the relevance of investigating such markets, considering the growing importance of these in the global economy.

Such a lack of emphasis encouraged the analysis of Latin American countries (specifically, Argentina, Brazil, Chile, Colombia, Mexico, and Peru). Additionally, data from the latest report published by the International Monetary Fund (IMF) in April 2022 (Bloomberg Línea, 2022) indicate that Latin American and Caribbean economies represent approximately 5.26% of the world's Gross Domestic Product (GDP). This information provided additional motivation to study this region and its economic aspects, considering the companies' EM practices and LCS, besides corporate governance, an aspect differentiating this study from previous research.

The importance of studying the capital markets of Latin American countries lies in the specificities of these markets when compared to developed countries, as the former are smaller, present lower liquidity levels, are less developed, impose more significant restrictions on companies, present greater volatility and risks, and have lower levels of regulation and investor protection, among other particularities. Thus, analyzing these markets might provide significant findings for the literature and practice and be useful for future studies making comparisons with developed markets.

Thus, this study contributes with evidence that the influence of CG mechanisms on EM differs depending on a company's LCS, providing a broader view of the contribution of CG practices to reducing EM. EM. Soschinski et al. (2021) draw attention to the fact that the studies analyzing the influence of CG on EM typically considered CG mechanisms in isolation, such as the characteristics of companies' audit committees and boards of directors, and highlight the importance of considering more comprehensive CG metrics. Thus, following Soschinski et al. (2021), this study's contributions include the use of aggregated CG metrics (provided by Refinitiv Eikon®), which shows the effectiveness of mechanisms concerning shareholder protection and integration and management strategies; hence, a more robust CG proxy.

2. Theoretical Framework

2.1 Earnings Management

Accountants have discussed the adoption of EM for many years based on the assumption of principal-agent problem (Jensen & Meckling, 1976). EM concerns the manipulation of profits towards an objective. It may be materialized by a manager or a market analyst's forecast, converging with the agent's interest (Lima et al., 2015). Hence, managers may manipulate earnings to maximize their interests (Wang, Chi & Wang, 2023) or signal their private information, impacting the informativeness of profits (Ching, Firth & Rui, 2006).

Asymmetric information implies the risk that disclosed results do not reflect the actual context of a company's performance, being loaded with biases from opportunistic managers (Martinez, 2001). In the business world, investors and managers deal with asymmetric data and act in situations where information is incomplete and inaccurate; information asymmetry and opportunism result in conflicts between the agent and the principal. Plenty of literature analyzes this relationship, which is explained by agency theory (Lopes & Martins, 2005).

Due to accounting and tax legislation gaps, managers may choose different approaches, even towards an economic occurrence (Cabello & Pereira, 2015). Usually, EM is triggered by alternative accounting measurement methods that enable managers' discretion when preparing and disclosing financial statements (Morás & Klann, 2020; Santos *et al.*, 2020).

The different measurement methods, gaps, and the specificities of the accrual basis lead to differences between net profit and net operating cash flow, known as accruals (accumulation), which are the income accounts that enter the profit composition but do not necessarily imply a movement in availability (Martinez, 2008; Morás & Klann, 2020). There are no problems or errors in recording accruals, as the intention is to improve the quality of information when measuring profit in its economic form. The problem lies in the fact that managers have the discretion to increase these accruals (or not) to influence profit opportunistically (Martinez, 2008).

In turn, accruals may be divided into discretionary, which refers to the manager's choices, and non-discretionary, which occurs due to the conditions of the business itself and accounting standards (Oliveira & Soares, 2018). However, Hendriksen and Van Breda (2009) warn that, because of managers' discretion, profit is a dangerous measure for external users, as managers encouraged to change accounting practices may distort it. On the other hand, Francis, Olsson, and Schipper (2008) state that profit is better quality information when closer to cash flow.

Therefore, even within the alternatives allowed by accounting legislation (Lima et al., 2015), EM results from intentionally misrepresenting a company's economic performance to obtain an advantage or particular gain. Hence, it entails the preparation and disclosure of accounting reports with some bias, which indicates the low quality of the information disclosed (Xue & Hong, 2016; Wang, Chi & Wang, 2023).

Furthermore, EM is also used as a prediction variable in corporate bankruptcy models. The identification of substantial manipulated profits enables predicting a company's bankruptcy. Accruals have better supported the forecast of bankrupt companies, but the actual activities variable improves the forecasts of non-bankrupt companies. These findings highlight the importance of indicators of the EM magnitude and the tools used to improve the performance of corporate bankruptcy models (Veganzones, Séverin & Chlibi, 2023); such a relationship between earnings management and company bankruptcy is apparent in the case of Americanas S.A. in Brazil.

2.2 Corporate Governance

The literature has no consensual definition of governance/good governance practices. However, according to Silveira (2006), it is a set of controls and incentive mechanisms aimed at minimizing the costs caused by agency conflicts. Thus, CG comprises bodies responsible for guiding, supporting, and monitoring management, providing a set of rules intended to align the interests of investors and managers and maximize business performance (IBCG, 2015).

CG mechanisms help align the interests of the principal and the agent to increase the reliability of financial information and financial reports (Nazir & Afza, 2018). The literature points to a series of CG mechanisms, such as the board of directors (e.g., addressing issues related to the board's size and independence, CEO duality, etc.) and audit committee (e.g., concerning issues related to the committee's size, auditors rotation, etc.), among other indicators (Muda et al., 2018; Morás & Klann, 2020).

A solid CG system based on good practices, a well-structured board of directors, and good communication with stakeholders is vital for aligning interests and reducing EM practices (Gonzales & Garcia-Meca, 2014).

Regarding the association of CG with EM, some studies note that companies with a certain level of governance tend to present lower EM levels (Gonzalez & Garcia-Meca, 2014; Riwayati et al., 2016; Bajra & Cadez, 2018). However, no studies addressing such behavior, considering the companies' different LCS, were found, precisely the aspect we address in this study.

Although CG plays an essential role in ensuring the presence of control mechanisms in the absence of competition (Campbell, Hollingsworth & Lindberg, 1991), it sometimes fails to prevent illicit financial practices in concentrated markets (Diri, Lambrinoudakis & Alhadab, 2020). For example, Google manipulated its accounting records to avoid high tax payments and transferred its earnings to low-tax jurisdictions around the world; Coca-Cola overstated its assets, reporting a value of nine million dollars (Diri et al., 2020); and there is a more recent case in Brazil concerning Americanas S.A's omission of liabilities.

Companies operating in concentrated markets more frequently perform EM than companies in non-concentrated markets (Diri et al., 2020). Furthermore, there is evidence that CG, in the form of the board's quality characteristics, is more effective in mitigating EM in non-concentrated markets (Diri et al., 2020). In contrast, CG in concentrated markets causes managers to replace EM for accruals with EM for actual activities, as the latter is less easily detectable, and its long-term negative consequences on firm value are likely to be mitigated by greater competitiveness power of companies in concentrated markets (Diri et al., 2020). Companies with better CG levels were found to experience lower EM levels in emerging economies, such as Vietnam (Nguyen, Kim & Ali, 2023).

2.3 Life Cycle Stages and Hypotheses Formulation

A wave of empirical studies emerged in recent decades, showing that a company's life cycle considerably affects its financial reports, corporate financial policies, and governance mechanisms (Habib & Hasan, 2019). Companies experience various distinct phases throughout their development as they are established and grow, phases defined as LCS (Ribeiro, Viana & Martins, 2021). Considering that each stage is associated with different environmental, strategic, structural, and decision-making standards, organizations experience new situations according to their life cycle stages.

The organizational life cycle (OLC) theory analyzes how organizations develop over time and their ability to adapt to the environment. Thus, some scholars metaphorically compare the organizations' development to the life cycle of living beings, in which companies are born, grow, and die (Assunção, De Luca, Vasconcelos & Cardoso, 2014).

The objective of studying LCS focuses on analyzing how changes in incentives, restrictions, and strategies throughout life cycle stages relate to managers' decisions and organizations' performance (Hasan et al., 2015; Oliveira & Monte; Mor, 2022). Note that a company's life cycle, although compared to the biological life cycle, does not follow a linear timeline; hence, a company may jump from one phase to another or even go back from a more advanced phase to a more initial one. Theoretically, when it comes to decline, companies may enter this stage from any other stage; however, this is where they can reach bankruptcy (Dickinson, 2011).

Thus, based on the classification proposed by Miller and Friesen (1984) and economic theory, Dickinson (2011) classified the five phases of a company's life cycle based on cash flows: introductory, growth, maturity, shake-out, and decline. The first two (introductory and growth stages) concern the initial stages, and the last two (shake-out and decline stages) are the final ones (Oliveira & Monte-Mor, 2022).

Thus, different studies highlight whether and how the organizations' characteristics in different LCS are reflected, for example, in their financial reports and policies (Habib & Hasan, 2019; Krishnan, Myllymäki & Nagar, 2021), in the smoothing of results (Ribeiro *et al.*, 2018), EM strategies (Lima *et al.*, 2015; Souza & Moraes, 2019; Roma *et al.*, 2021), and CG practices (Esqueda & O'Connor, 2020; Filatotchev *et al.*, 2006; Habib & Hasan, 2019; O'Connor & Byrne, 2015; Shaheen *et al.*, 2020).

At a company's inception, its focus is on its viability; hence, its strategy is to identify and capture as many customers as possible (Lima *et al.*, 2015). This stage is characterized by rapid growth and high investments in production, though companies cannot achieve profitability at this stage (Ribeiro *et al.*, 2018). Young companies are controlled by managers and have basic informational structures. Usually, they are not experienced in the production process, tend to have fewer employees, and profits are distributed less frequently, as there is a need for reinvestment (Miller & Friesen, 1984; Lester, Parnell & Carraher, 2003).

At this stage, companies make considerable investments to consolidate in the market. Financing and debt issuance are generally obtained for the firm to finance this investment (Lima et al., 2015). Such operations increase expenses that generate accruals, such as depreciation, amortization, and financial expenses, enabling the adoption of EM strategies (Souza & Moraes, 2019). Likewise, other factors associated with the initial life cycle phases, e.g., low profitability, high cost of debt, and risk of bankruptcy, can provide incentives for managers to engage in EM practices to convince creditors that their company is in a superior condition (Hussain et al., 2020; Krishnan et al., 2021; Roma et al., 2021). Furthermore, companies at this stage are likely to adopt CG mechanisms less frequently (Machado et al., 2020).

The growth phase follows after the company has successfully overcome its introductory phase. At this point, the company is expected to have established its distinct competencies and enjoyed initial success in the market. Companies in the growth phase are less conservative, focusing on increasing sales and obtaining new investors through the expectation of high returns. At this point, companies may enjoy profits, but growth slows down compared to the introductory phase (Alves & Marques, 2007; Ribeiro *et al.*, 2018).

Anthony and Ramesh (1992) argue that profits are greatly expected in the introductory and growth stages because investors seek to verify a company's performance. However, increased pressure is imposed on companies in the growth phase to show performance, considering that firms are better structured and have more established procedures (Miller & Friesen, 1984), characteristics that may impact the adoption of EM. However, companies have the opportunity to adopt governance mechanisms at this stage, even if not firmly consolidated (Machado et al., 2020). Hence, we conjecture that CG mechanisms are more effective in reducing EM in the growth stage than in the previous stage, considering improvements in the decision-making processes in the growth phase (Miller & Friesen, 1984).

Furthermore, considering the companies' need for external financing in the introductory and growth stages, they tend to improve the quality of CG to access financing to support their growth (Esqueda & O'Connor, 2020; Filatotchev et al., 2006; O'Connor & Byrne, 2015). On the other hand, while companies in the growth stage focus on increasing sales, in the maturity stage, firms seek increased profitability through cost optimization (Lima et al., 2015). Mature companies enjoy a more comfortable position than those in other LCS, as they tend to show more persistent profits and less volatile cash flows (Dickinson, 2011). Due to less uncertainty and risks concerning future earnings, Roma et al. (2021) suggest that these companies are less motivated to manage results.

Additionally, companies in the maturity stage tend to have better CG mechanisms (Filatotchev et al., 2006; O'Connor & Byrne, 2015; Shaheen *et al.*, 2020) and more efficient controls (Miller & Friesen, 1984), which may result in greater governance effectiveness in reducing EM.

Companies in the shake-out stage are characterized by focusing on their recovery or survival (Oliveira & Monte-Mor, 2022). Hence, costs are reduced in this phase, and some assets are liquidated to generate cash and restructure operations (Dickinson, 2011; Ribeiro *et al.*, 2018).

In turn, the decline stage represents a critical phase for a company's survival, in which it tends to be more conservative than in other stages (Costa *et al.*, 2017). Furthermore, declining companies tend to sell their assets, report greater expenses and losses, and present accumulated losses in their operations (Miller & Friesen, 1984; Ribeiro *et al.*, 2018).

Comparatively, companies in the shake-out stage experience decreasing operating cash flows, while in the decline stage, they are negative (Roma et al., 2021). Additionally, there is more significant uncertainty about cash flows, performance, and future investments in these phases (Dickinson, 2011). Thus, Krishnan et al. (2021) suggest that companies in both stages are more motivated to adopt EM strategies when attempting to convince stakeholders about favorable prospects (Hussain et al., 2020; Roma et al., 2021).

In the shake-out and decline stages, companies tend to divest, make extremely conservative decisions, and have zero net inflows (Miller & Friesen, 1984). Thus, we conjecture that these characteristics might negatively impact the quality of CG and its monitoring relevance, such that the system is insufficient to prevent managerial opportunism (Machado et al., 2020).

Previous studies show that organizational LCS influences EM in different contexts. Costa Filho et al. (2018) analyzed a global population of companies headquartered in 63 countries and discovered that LCS' role in EM differs according to accruals. Addressing a sample of publicly traded companies in the USA and Brazil, Roma et al. (2021) found evidence that LCS influences EM. Souza & Moraes (2019) found similar evidence, and Ribeiro et al. (2018) found that companies in the shake-out stage are more likely to smooth profits. Choi, Choi, and Lee (2016) confirmed that growing companies are more likely to beat or exceed earnings benchmarks when compared to the maturity stage.

In Taiwan, an analysis of the impact of LCS on the decision to adopt alternative EM mechanisms found that declining companies are more likely to manage profit maximization with actual activities than mature companies. In turn, companies in the early stages of the life cycle prefer to manage their sales, especially with expense management, while declining companies more frequently adopt sales and production cost management (Xie, Chang & Shiue, 2022).

Evidence indicates that LCS affects the CG mechanisms used by organizations. Filatotchev et al. (2006) showed that CG mechanisms are related to the strategies adopted by organizations throughout the life cycle. The authors reject the notion of a universal governance structure applicable to all LCS, considering that governance parameters may be related to changes that occur from one stage to another.

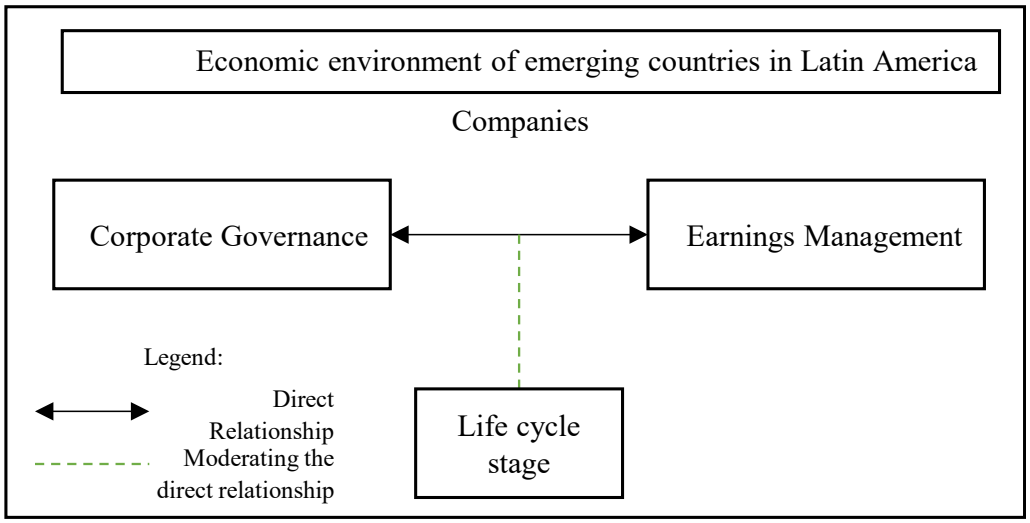
O'Connor and Byrne (2015) addressed 205 companies from 21 emerging countries and found that, in general, mature companies tend to present better CG levels. Their study findings indicate that governance mechanisms, such as monitoring and control, are relevant but depend on different LCS. Shaheen et al. (2020) found similar results, as did Habib and Hassan (2019), whose results show that LCS considerably influences CG.

The evidence presented in the literature indicates that a company's LCS affects both EM and CG practices. Therefore, considering that the CG's ability to minimize EM may depend on different f

actors (Soschinski et al., 2021), the following hypothesis is proposed:

H1: The ability of CG to mitigate EM practices is enhanced in the initial and maturity stages compared to the final life cycle stages.

Figure 1 presents this study's theoretical model and highlights the influence of LCS on the CG and EM relationship. Thus, considering that the direct relationship between CG and EM has been widely discussed in previous literature (Bao & Lewellyn, 2017; Morás & Klann, 2020; Rahman & Ali, 2006; Soschinski *et al.*, 2021; Waweru & Prot, 2018), this study focuses on exploring the potential effect, yet unexplored by previous studies, of LCS and its potential to moderate this direct relationship, which may even explain the conflicting results in the literature on CG and EM.



Source: developed by the authors.

Figure 1. Theoretical Framework

3. Method

3.1 Population and Sample

This study's population comprised listed companies in Latin American countries, considering the period between 2011 and 2021. This period was chosen because, in 2011, it became mandatory that all publicly traded companies in the countries analyzed here prepare their consolidated financial statements according to international accounting standards – IFRS, and 2021 was the last year with data available.

The sampling design considered the population of 1,098 non-financial companies in the Refinitiv Eikon® database (the companies in the financial sector were not considered because they have a different accounting structure). Of these, 820 companies were excluded for not disclosing any CG practices (the criterion that accounted for the most significant number of excluded companies) in none of the years addressed here or for providing insufficient data to calculate the variables.

Hence, an unbalanced panel of 278 companies remained: 48 from Argentina, 105 from Brazil, 36 from Chile, 15 from Colombia, 48 from Mexico, and 26 from Peru, which represent approximately 25% of the population and comprise 1,792 observations in the study period. Table 1 shows the number of observations by country and year.

Table 1
Number of observations according to country and year

Country	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
Argentina	-	-	-	-	-	-	24	32	42	45	47	190
Brazil	45	56	59	65	66	67	67	73	76	95	104	773
Chile	17	17	18	18	19	21	31	33	33	33	34	274
Colombia	-	-	-	-	-	12	13	13	15	15	17	85
Mexico	17	18	21	23	27	30	31	36	37	38	44	322
Peru	-	-	-	-	-	22	24	25	25	26	26	148
Total	**79**	**91**	**98**	**106**	**112**	**152**	**190**	**212**	**228**	**252**	**272**	**1792**

Source: study's data (2023).

Table 1 shows that Brazil is the most representative country in the number of observations, with 43% of the total observations, followed by Mexico, with 322 observations, and Chile, with 274 observations, respectively, representing 18% and 15% of the total observations in the period. On the other hand, Colombia and Peru present the lowest number of observations, 85 and 148, respectively; together, these two countries represent 13% of the total observations. Note that the low number of observations mainly concerns the variable measuring CG. Note that the companies in Argentina, Colombia, and Peru spent considerable time without disclosing CG practices. Soschinski (2021) found a similar result with companies from Argentina.

Considering that the sample was selected according to its accessibility, i.e., only companies with information available in the period were included, as the variable of interest was found only in a subset of the population, sample selection bias may arise (Bastos, 2018). Furthermore, adjusting econometric models in these circumstances only for the portion in which the variable of interest was found might lead to biased and inconsistent results (Heckman, 1979).

Heckman (1979) developed a two-equation model to solve the sample selection bias problem. First, the factors that determine inclusion in the sample are assessed, and then a second equation is estimated to analyze the variable of interest. These equations are described below.

3.2 Study Variables

The methodology in which Dickinson (2011) classifies the companies into five stages, introductory, growth, maturity, shake-out, and decline, was adopted to identify the companies' LCS. This model considers the behavior (positive or negative signs) of the Cash Flow Statement (CFS) components (i.e., cash flow from operating activities [CFO], cash flow from investing activities [CFI], and cash flow from financing activities [CFF]) to classify organizations into distinct phases (Table 2).

Table 2
Lifecycle Stage Classification

Cash Flow	Introductory	Growth	Maturity	Shake-out	Decline
Operational	-	+	+	+ - +	- -
Investment	-	-	-	+ - +	+ +
Financing	+	+	-	+ - -	+ -

Source: Dickinson (2011, p. 9).

The companies in the introductory stage are taken as an example to illustrate this classification. According to Dickinson's (2011) methodology, an organization is in its introductory stage when it has a negative CFO, a negative CFI, and a positive CFF. She explains that organizations in the introductory phase do not have established clientele and lack business experience. Hence, these organizations are not yet in a position to generate cash from their operational activities (negative sign). For these companies to ensure their permanence and gain market share, they need cash flow to invest (negative sign) in projects, which is why they need financing (positive sign) (Oliveira & Girão, 2018).

Table 2 shows that the shake-out stage admits three distinct combinations of cash flow signs. Dickinson (2011) explains that no theoretical support was found in the economics literature to make concrete propositions regarding this phase. Hence, this stage was classified according to the following exclusion criterion: cash flows not fitting into previous stages indicate that a company is in the shake-out stage (Costa *et al.*, 2017).

Note that due to the low number of observations found in the initial LCS (introductory and decline; 5% and 3%, respectively), the classification performed by Oliveira and Monte-Mor (2022) was adopted. They grouped LCS into three categories: i) initial stages (introductory and growth), ii) maturity, and iii) final stages (shake-out and decline). Additionally, the final stages (shake-out and decline) were used to make comparisons, as the literature suggests that there is a greater incentive to implement EM in these stages (Krishnan et al., 2021), as well as a tendency to decrease CG quality (Filatotchev *et al.*, 2006; Loderer *et al.*, 2012).

The model proposed by Pae (2005) was adopted to estimate the EM levels through discretionary accruals, considering that it is an improved model that made advancements regarding some of the weaknesses presented by the model proposed by Jones (1991) (Paulo, 2007); a model that was widely used up to that time. Pae's model (2005) is evidenced in Equation 1. As for total accruals, these were estimated based on the cash flow approach, according to Equation 2. Additionally, as suggested by previous research (Costa & Soares, 2022), the estimation of Pae's EM model (2005) was operationalized through a cross-section by sector and year, with companies presenting at least ten observations to reduce potential biases.

$$TA_{it}/A_{it-1} = \alpha_0 + \alpha_1 1/A_{it-1} + \alpha_2 \Delta R_{it}/A_{it-1} + \alpha_3 PPE_{it}/A_{it-1} + \alpha_4 CFO_{it}/A_{it-1} + \alpha_5 CFO_{it-1}/A_{it-2} + \alpha_6 TA_{it-1}/A_{it-2} + \varepsilon_{it} \quad \text{(Equation 1)}$$

$$TA_{it} = (PROFIT_{it} - CFO_{it}) / A_{it-1} \quad \text{(Equation 2)}$$

Where:

TA_{it} corresponds to the total accruals of company *i* in period *t*;

A_{it} corresponds to the total assets of company *i* in period *t*;

ΔR_{it} corresponds to the variation in net revenues of company *i* in the period between *t* and *t-1*;

PPE_{it} corresponds to the fixed assets of company *i* in period *t*;

CFO_{it} corresponds to the operating cash flow of company *i* in period *t*;

$PROFIT_{it}$ corresponds to the result before extraordinary items and discontinued operations in company *i* in period *t*;

ε_{it} corresponds to the model residuals used as a proxy for EM for discretionary accruals.

Similar to Soschinski *et al*. (2021), CG information was collected in this study from the Refinitiv Eikon® database, which takes into account the number of CG mechanisms a company presents, such as those focused on management, shareholders, and integration strategies between economic, social, and environmental practices.

Soschinski *et al*. (2021) explain that these mechanisms are CG dimensions, in which the dimension related to management reflects a company's commitment and effectiveness in following what the database establishes as the best CG practices. For example, it assesses whether a company has a policy determining the functions of its audit board and committee, in addition to the independence level of its audit committee and board of directors.

The second mechanism concerns shareholders and reflects an organization's effectiveness in equally treating minority and majority shareholders (e.g., through shareholder engagement, equal voting rights policy, etc.). Finally, the third dimension concerning the integration of economic, social, and environmental practices reflects the adoption of practices designed to incorporate these into day-to-day organizational strategies and decision-making processes. For example, including the committee and sustainability report, the Global Reporting Initiative [EMI] guidelines, etc.).

Therefore, the database generates a final score ranging from 0 to 100 based on the number of mechanisms each company presents, which is used as general CG metrics. Table 3 presents the study variables.

Table 3
Metrics for calculating the study variables

Variable	Description	Metrics	Authors
		Dependent Variable	
Earnings Management (EM)	Discretionary accruals operationalized in absolute values (According to Eq. 1 and 2)	Pae's (2005) Model	–
		Independent Variable	
Corporative Governance (CG)	Measures the companies' CG level.	Refinitiv Eikon's ® methodology including mechanisms aimed at management, shareholders, and strategies.	Soschinski *et al*. (2021)
		Moderating independent variable	
Lifecycle Stages (D_LCS)	Represents the LCS under study	Dummy that corresponds to the company's LCS (initial stages, maturity, and final stages): 1 concerns the companies in the stage analyzed by the model, and 0 otherwise.	Dickinson (2011)
$CG_{it} \cdot D\_ECV_{it}$	Moderating variable	Represents the interaction between the CG and LCS under study.	
		Control Variables	
Size (SIZE)	Income natural logarithm (LN)	LN of total revenue	Haga *et al*. (2018); Soschinski *et al*. (2021)
Return on Assets (ROA)	Company's profitability	Operating Profit divided by Total Assets	Schuster and Klan (2019)
Debt (DEBT)	Company's debt level	Total liabilities divided by Total Assets	Morás and Klann (2020); Ribeiro *et al*. (2018)
Sales Growth (SG)	Sales growth due to variation in revenue	Percentage of change in sales	Costa Filho *et al*., (2018); Soschinski *et al*. (2021)
Year	Period of analysis: 2011 to 2021	Dummies for year	Haga *et al*. (2018)
Country		Dummies for country	–
Sector		Dummies for sector	Haga *et al*. (2018)

Source: developed by the authors.

3.3 Econometric Models

Heckman's (1979) correction model was used to estimate data. First, a binary variable (D_sample) was created, where 1 was assigned for the companies in the sample and 0 otherwise. Next, the first stage of the Heckman model was performed (which uses a logit estimation to perform the selection equation), the model of which is shown in Equation 3.

$$EM_{it} = \gamma_0 + \gamma_1 SIZE_{it} + \gamma_2 ROA_{it} + \gamma_3 DEBT + \gamma_4 SG_{it} + \gamma_5 D\_sample + \varepsilon_{it} \quad \text{(Equation 3)}$$

Then, the model in Equation 4 was estimated to analyze how different LCS affect the companies' EM; this relationship was controlled by different factors that may affect EM (as shown in Table 3). Note that this model is the second stage of the Heckman correction model.

$$EM_{it} = \delta_0 + \delta_1 D\_ECV_{it} + \delta_2 SIZE_{it} + \delta_3 ROA_{it} + \delta_4 DEBT + \delta_5 SG_{it} + \gamma Year_t + \alpha Country_t + \beta Sector_t + lambda + \varepsilon_{it} \quad \text{(Equation 4)}$$

Furthermore, in addition to the LCS analyzed in Equation 4, the other variables of interest (CG and interaction variables) and the variables that may affect EM (control variables, Table 3) were included in the model to check Hypothesis 1. This model, which is the second stage of the Heckman correction model, is presented in Equation 5.

$$EM_{it} = \beta_0 + \beta_1 CG_{it} + \beta_2 D\_ECV_{it} + \beta_3 CG_{it} \cdot D\_ECV_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \beta_6 DEBT + \beta_7 SG_{it} + \gamma Year_t + \alpha Country_t + \delta Sector_t + lambda + \varepsilon_{it} \quad \text{(Equation 5)}$$

Additionally, as a measure of robustness, a third model was estimated using multiple linear regression (ordinary least squares – OLS), with robust error correction for potential problems of autocorrelation, multicollinearity, and heteroscedasticity, and fixed effects of country, year, and sector, according to Equation 6.

$$EM_{it} = \alpha_0 + \alpha_1 CG_{it} + \alpha_2 D\_ECV_{it} + \alpha_3 CG_{it} * D\_ECV_{it} + \alpha_4 SIZE_{it} + \alpha_5 ROA_{it} + \alpha_6 DEBT + \alpha_7 SG_{it} + \gamma Year_t + \beta Country_t + \delta Sector_t + \varepsilon_{it} \quad \text{(Equation 6)}$$

4. Analyses and Discussion of Results

Initially, descriptive analysis was performed to verify how data behaved (Table 4). Note that the ROA, SG, and DEBT variables are presented in their winsorized values at the 1% and 99% levels to limit the presence of outliers.

An analysis of the absolute values of discretionary accruals proxy showed a variation indicating that the companies manipulated their results throughout the study period. As for CG, the results show that, on average, the companies presented approximately 49% of the mechanisms assessed by the database. Furthermore, the data presents a high standard deviation (22.75%), clearly discriminating the companies adopting few CG practices (according to the minimum value) from those adopting many practices (approximately 97%, based on the maximum value).

Data also shows a positive mean ROA, indicating that the companies were able to generate profits from their assets. Additionally, on average, the companies presented growing sales from one year to the next. There are both companies experienced a decrease in sales (minimum value) and those experiencing high growth (maximum value). Finally, it appears that companies have a relatively high level of debt.

Furthermore, an analysis of companies' LCS indicates that most (60%) were in the maturity phase, followed by those in the growth (22%), shake-out (10%), introductory (5%), and decline (3%) phases. Hence, most organizations are characterized by stability (Dickinson, 2011).

Table 4
Descriptive Statistics

Panel A – Descriptive statistics of the study variables						
	EM_{it}	**CG_{it}**	**ROA_{it}**	**SG_{it}**	**$SIZE_{it}$**	**$DEBT_{it}$**
Mean	0,04	49,18	0,07	0,03	21,28	0,61
Standard Deviation	0,05	22,75	0,08	0,32	1,65	0,21
Median	0,02	49,71	0,07	0,00	21,40	0,59
Minimum	0,00	0,25	-0,24	-0,67	16,10	0,13
Maximum	0,94	96,86	0,33	1,67	24,54	1,50
Observations			1.792			
Panel B – Distribution of observations according to life cycle stages						
	Frequency			**Relative Frequency**		
Introductory	83			5%		
Growth	401			22%		
Maturity	1.076			60%		
Shake-out	183			10%		
Decline	49			3%		
Observations	1.792			100,00%		

EM_{it} = discretionary accruals according to absolute values in the Pae's (2005) model; CG_{it} = Corporate Governance Score; ROA_{it} = return on assets; SG_{it} = sales growth; $SIZE_{it}$ = company's size; $DEBT_{it}$ = debt.

Source: study's data (2023).

Table 5 shows the results concerning the influence of LCS on the CG and EM relationship. The relationship between the LCS and the EM is shown in Heckman's model 1 to verify managers' opportunistic behavior throughout the LCS. Considering the final stages as a comparison category, the results show a negative and significant relationship between the initial and maturity stages and EM. This finding indicates that there is a lower level of EM in these stages than in the final stages of the life cycle, which is consistent with the notion that investors do not strongly pressure companies for a certain level of performance at the introductory stage. Likewise, growing companies are more at liberty to report losses without being severely penalized by the market. These aspects might minimize incentives for EM (Krishnan *et al.*, 2021; Roma *et al.* 2021), compared to the final stages of the life cycle.

Additionally, this result aligns with the literature in which mature companies experience considerably lower levels of uncertainty and risk regarding future profits and cash flows, which reduces the incentives for companies at this stage to manage results (Krishnan *et al.*, 2021).

Consequently, EM tends to be more pronounced in the final stages, considering there is a greater incentive to engage in EM practices due to financial difficulties (Souza & Moraes, 2019). Furthermore, there is increased uncertainty regarding a company's future performance and cash generation in the decline phase, giving incentives for opportunistic behavior and a search to hide potential financial difficulties (Hussain *et al*., 2020; Roma *et al*., 2021). Thus, the results of this study indicate that lower levels of EM are found in the initial and maturity stages compared to the final stages of the life cycle.

Note that the estimation using the Heckman model presented more robust results than those obtained by the OLS estimation, considering that the coefficient of the lambda variable proved to be statistically significant. In this sense, its inclusion in the model was relevant for correcting sample selectivity (Resende & Wyllie, 2006), decreasing potential biases in the estimated coefficients.

The other variables of interest were included in Heckman's model 2, i.e., the CG and the interactions between the LCS and the CG. The results show a significant negative relationship between CG and EM, indicating that CG represents an important tool for preventing managers' EM practices. It aligns with previous evidence and shows that CG contributes to decreasing opportunistic behavior, such as EM (Bao & Lewellyn, 2017; Correia *et al*., 2017; Bajra & Cadez, 2018; Soschinski *et al*., 2021).

These findings also enabled inferring that companies in the final stages (shake-out and decline) tend to engage more frequently in EM practices, corroborating the literature, which suggests that managers are more motivated to manage results in these life cycle phases to convince shareholders and other creditors of their companies' prospects (Hussain *et al*., 2020; Roma *et al*., 2021). Likewise, these confirm some of the results reported by Ribeiro et al. (2018) regarding the influence of the shake-out stage on earnings smoothing. Thus, the results align with those from previous research indicating the influence of LCS on EM (Choi *et al*., 2016; Costa Filho *et al*., 2018; Ribeiro *et al*., 2018; Souza & Moraes, 2019; Roma *et al*., 2021). Moreover, this and the previous estimation found a statistically significant coefficient of the lambda variable, suggesting that its inclusion in the model was necessary for correcting sample selectivity (Resende & Wyllie, 2006).

Table 5

Results regarding the life cycle influence on the relationship between corporate governance and earnings management

EM_{it}	Heckman 1	Heckman 2	OLS
CG_{it}		-0.000704***	-0.000692**
		(-2.85)	(-2.08)
$Intro\_Grow_{it}$	-0.009961***	-0.049553***	-0.049664**
	(-4.16)	(-3.23)	(-2.25)
$Maturity_{it}$	-0.013273***	-0.056898***	-0.056962**
	(-5.79)	(-4.09)	(-2.48)
$CG_{it} \cdot Intro\_Grow_{it}$		0.000630**	0.000623*
		(2.14)	(1.81)
$CG_{it} \cdot Maturity_{it}$		0.000743***	0.0007267**
		(2.78)	(2.17)
$SIZE_{it}$	-0.005778***	-0.008570***	-0.009314***
	(-12.52)	(-5.20)	(-3.13)
ROA_{it}	0.070969***	0.112017***	0.015906**
	(8.94)	(4.25)	(2.10)
SG_{it}	0.002433	0.007475	0.087010
	(1.14)	(1.18)	(1.25)
$DEBT_{it}$	0.058282***	0.066217***	0.063123***
	(25.12)	(8.33)	(3.07)
Lambda	0.047148***	0.088951***	
	(2.91)	(2.84)	
Constant	1.284505***	-14.0429***	0.219513***
	(32.59)	(-87.07)	(3.92)
Dummies for Country	Yes	Yes	Yes
Dummies for Year	Yes	Yes	Yes
Dummies for Sector	Yes	Yes	Yes
Observations		1,792	
Wald Chi^2 and F test (OLS)	1499.07***	243.20***	5.60***

EM_{it} = discretionary accruals in absolute values estimated by Pae's (2005) model; CG_{it} = Corporate Governance Score; $SIZE_{it}$ = log total income; ROA_{it} = return on assets; SG_{it} = sales growth; $DEBT_{it}$ = debt; Wald Chi^2 and F test (OLS) = model's significance. z (Heckman) and t (OLS) statistics between parentheses. ***, **, * = significant at 1%, 5%, and 10% levels, respectively.

Source: Study's data (2023).

An analysis of the moderating effect of LCS on the CG and EM relationship showed a positive and significant relationship at the 5% level for the initial stages and at the 1% level for the maturity stage. As for the initial stages, the sum of the interaction coefficient with the CG variable does not confirm this positive relationship (0.000630: -0.000704), indicating increased governance's ability in these stages to mitigate EM than in the final stages. These results align with theoretical arguments that the quality of governance increases in response to the need for external financing (Esqueda & O'Connor, 2020; Filatotchev *et al.*, 2006; O'Connor & Byrne, 2015). In this sense, as companies in the early stages have a greater need for external financing, a higher quality of CG is expected, which is a potential explanation for the ability of CG to reduce EM in these stages.

Likewise, a positive and significant influence was found on the CG and EM relationship for the maturity stage. The sum of the interaction coefficient with the CG variable ratifies this positive relationship (0.000743: -0.000704), suggesting that governance practices were not sufficiently compelling to prevent opportunistic behavior at this stage compared to the final stages. This result is likely explained by the fact that mature companies have fewer incentives for managers to engage in EM practices (Roma *et al*., 2021), meaning that governance mechanisms are not as required. Li and Zhang (2018) found that the size of the board of directors decreases as a company moves through the life cycle stages. Furthermore, mature companies generally require less external financing. Thus, according to the theoretical arguments previously discussed, the quality of CG may suffer (Esqueda & O'Connor, 2020; Filatotchev *et al*., 2006).

Hence, it appears that CG mechanisms are more effective in reducing EM in the final stages than in the maturity stage; hence, it fulfills its role of monitoring and mitigating behaviors not aligned with the principal's interests. It is so because, at these stages, managers are strongly motivated to get involved in EM (Krishnan *et al*., 2021) to convince stakeholders about the company's prospects (Hussain et al., 2020; Roma *et al*., 2021). Thus, as LCS appears to influence the relationship between CG and EM, H_1 fails to be rejected, at least in part, suggesting that the ability of CG to mitigate EM practices is enhanced in the initial and maturity stages compared to the final life cycle stages; such enhancement was found to occur only in the initial life cycle stages.

However, we must consider the magnitude of the coefficients found for the CG variable (-0.000704), for the moderating variable of the initial LCS (0.000630), and maturity (0.000743). As they presented values very close to zero, this may signal that LCS contributes little to enhancing or reducing a company's governance ability to mitigate EM practices, even if it presents a highly statistically significant relationship.

As for the control variables, size presented a negative and statistically significant relationship with EM, indicating that the larger a company, the lower the adoption of EM. Costa Filho *et al.* (2018), Roma *et al.* (2021), and Soschinski *et al.* (2021) found similar results. Likewise, the higher a company's profitability, the higher its EM tends to be, corroborating the findings by Morás and Klann (2020), Schuster & Klann (2019), and Souza & Moraes (2019). However, unlike previous evidence, no significant relationship was found between sales growth and EM (Costa Filho *et al*., 2018; Soschinski *et al*., 2021).

Debt was found to have a positive and statistically significant relationship with EM, suggesting that more indebted companies tend to engage in EM more frequently. This finding corroborates the literature, in which higher levels of leverage encourage managers to manage earnings to meet debt clauses (Gu & Rosett, 2005; Duarte, Galdi & Damasceno, 2020), generating a greater volume of financial expenses (discretionary) that allow manipulation (Souza & Moraes, 2019); corroborating evidence presented by Souza and Moraes (2019) and Morás and Klann (2020).

Finally, the results from the robustness analysis through OLS regression were similar to those found using Heckman's selection model; decreased statistical significance of the relationships was found only in one instance. Such a result is possibly explained by selection bias since the lambda variable in Heckman's model proved significant. Therefore, it appears that the influence of LCS on the relationship between CG and EM remains even when other econometric configurations are used in the analysis.

5. Final Considerations

This study aimed to analyze the influence of life cycle stages (LCS) on the relationship between corporate governance (CG) and earnings management (EM) among publicly held companies in Latin America. Thus, the hypothesis proposed was that the CG's ability to mitigate EM practices is enhanced in the initial and maturity stages compared to the final life cycle stages.

Data from 271 companies in Latin America from 2011 to 2021 show the CG's effectiveness in reducing EM. Moreover, evidence was found that in the initial (introductory and growth) and maturity stages, companies tend to manage their earnings less frequently than companies in the final stages (shake-out and decline), where a higher level of EM was found. Hence, this result suggests that the adoption of EM practices differs according to a company's LCS.

A positive and significant relationship was found in the analysis of the moderating effect of LCS on the CG and EM relationship for the initial and maturity stages. The sum of the interaction coefficient with the CG variable for the initial stages did not ratify a positive relationship, indicating an increase in the governance's ability to mitigate EM in the initial stages compared to the final ones. Thus, CG mechanisms proved to be more effective in the initial stages for aligning interests, monitoring, and, consequently, reducing opportunistic practices on the part of managers.

Likewise, a positive and significant influence of the maturity stage was found on the relationship between CG and EM. The sum of the interaction coefficient with the CG variable confirms this positive relationship. Therefore, governance's ability to mitigate EM is reduced at this stage compared to the final stages. Thus, LCS appears to influence the relationship between CG and EM, indicating that the objective of this study was achieved. Furthermore, the results suggest that governance effectiveness in reducing opportunistic practices may be enhanced or reduced at different stages of a company's development. Therefore, the hypothesis proposed here fails to be rejected, at least in part.

Nonetheless, it is important to consider the magnitude of the coefficients found for the CG variable (-0.000704) for the moderating variable of the initial (0.000630) and maturity (0.000743) stages, considering that both presented values close to zero. This fact suggests that LCS contributes little to enhancing or reducing governance's ability to mitigate EM practices, even if they present a statistically significant relationship.

Additionally, larger companies were found to manage results less frequently, and the companies' return on assets and debt are positively related to EM. Finally, no significant relationship was found between sales growth and EM.

Therefore, the evidence presented in this study contributes to the literature and supports a better understanding of how conflicts of interest and information asymmetry may be reduced in the contractual relationship throughout the OLC via CG practices, helping to explain the conflicting results of previous studies on the CG and EM relationship. Thus, organizations should pay attention to their LCS when refining control and risk management mechanisms, which might contribute to the effectiveness of these mechanisms in aligning interests within the company.

Furthermore, this study provides empirical and market-wise results using aggregated CG measures, given that previous studies analyzed these mechanisms in isolation, often making only dichotomous analyses. Additionally, our analyses do not focus on a specific scenario only (Bao & Lewellyn, 2017); instead, a broader context was considered, including emerging countries; such a perspective provides more robust results.

The theoretical and practical implications arising from this study's findings are significant for both companies and their respective stakeholders, as the results highlight the importance of CG as an effective mechanism for reducing EM in Latin American companies and reinforce the relevance of transparency, accountability, and control structures practices.

For companies, the findings suggest that implementing and improving CG practices might be effective strategies to mitigate managers' opportunistic practices. Such practices are especially relevant at a company's early stages when the relationship between governance and EM is more pronounced. Companies may use these results as a guide when adopting measures intended to ensure greater alignment of interests between shareholders, directors, and managers and better monitor management activities.

Stakeholders, including shareholders, investors, creditors, and regulators, can use this study's findings to indicate the effectiveness of CG practices in Latin American companies. Understanding that governance contributes to reducing EM might influence an organization's investment, financing, and monitoring decisions. Furthermore, the fact that a company's development stage might impact the relationship between its governance practices and EM shows the need for differentiated governance approaches at different stages of an organization's life cycle.

In the broader context, these results advance the literature on CG and EM, providing valuable insights into how these mechanisms interact at different stages of company development. Hence, these results can influence the formulation of public policies and regulatory guidelines, promoting more effective governance practices and encouraging a culture of transparency and responsibility among companies.

In summary, the results of this study provide theoretical contributions to the academic milieu and are also expected to benefit companies by implementing solid CG practices in different LCS. These findings can potentially guide business strategies and investment decisions, promoting greater trust and efficiency in Latin American financial and business markets.

Despite this study's contributions, some limitations must be considered. First, the CG proxy adopted here significantly diminished the study sample, considering many companies did not present CG scores. Additionally, EM was analyzed only from the perspective of discretionary accruals; other forms of EM, such as actual activities, were not analyzed. Likewise, only a single model estimated discretionary accruals. Nonetheless, the results were sensitive to the estimated model, considering that the OLS model was inferior to the Heckman model despite the relationships maintaining the same direction and statistical significance. Therefore, any generalizations based on the results of this study must consider such limitations.

Nevertheless, these limitations do not invalidate the findings; rather, future studies should consider them as a starting point. Therefore, further research could expand the sample and analyze countries with more developed economies, in addition to using other EM models and/or proxies for the quality of accounting information.

References

Alves, L. C. O., & Marques, J. A. V. D. C. (2007). Identificação das fases do ciclo de vida de empresas através da análise das demonstrações dos fluxos de caixa. *Base Revista de Administração e Contabilidade da UNISINOS*, *4*(3), 249-262.

Americanas (2023). Relatório Circunstanciado das Atividades das Recuperandas em Conjunto com Relatório Mensal de Atividades da Administração Judicial das Americanas S.A., de 21 de março de 2023. Recuperado em: https://api.mziq.com/mzfilemanager/v2/d/347dba24-05d2-479e-a775-2ea8677c50f2/da93fbb7-a688-f9ae-bc41-29968212359a?origin=1, acessado em 06 de ago. de 2023.

Anthony, J. & Ramesh, K. (1992*).* Association between accounting performance measures and stock prices: a test of the life cycle hypothesis*. Journal of Accounting and Economics,* 15(2-3), 203-227. https://doi.org/10.1016/0165-4101(92)90018-W

Assunção, R. R., De Luca, M. M. M., de Vasconcelos, A. C., & da Costa Cardoso, V. I. (2014). Os artefatos da contabilidade gerencial e o ciclo de vida organizacional. *ConTexto-Contabilidade em Texto*, *14*(28), 69-82.

Bajra, U., & Cadez, S. (2018). The impact of corporate governance quality on earnings management: Evidence from European companies cross-listed in the U.S. *Australian Accounting Review*, 28(2), 152-166. https://doi.org/10.1111/auar.12176

Bao, S. R., & Lewellyn, K. B. (2017). Ownership structure and earnings management in emerging markets – An institutionalized agency perspective. *International Business Review*, 26(5), 828-838. https://doi.org/10.1016/j.ibusrev.2017.02.002

Bastos, F. S. (2018). Modelos de Seleção Amostral Heckman Generalizado e Birnbaum-Saunders. Tese de Doutorado, Programa de Pós-graduação em Estatística do Instituto de Ciências Exatas, Universidade Federal de Minas Gerais, Minas Gerais.

Bloomberg Línea (2022). Quanto os países da América Latina contribuem para a economia mundial? Disponível em: https://www.bloomberglinea.com.br/2022/09/25/quanto-os-paises-da-america-latina-contribuem-para-a-economia-mundial/, acesso em 25 de fev. 2023.

Cabello, O. G., & Pereira, C. A. (2015). Efeitos das práticas de tributação do lucro na effective tax rate (ETR): uma abordagem da teoria das escolhas contábeis. *Advances inScientific and Applied Accounting*, 8(3), 356-373. https://doi.org/10.14392/asaa.2015080305

Campbell, J. L., Hollingsworth, J. R. & Lindberg, L. N. (1991). *Governance of the American Economy*. Cambridge: Cambridge University Press.

Ching, K. M., Firth, M., & Rui, O. M. (2006). Earnings management, corporate governance and the market performance of seasoned equity offerings in Hong Kong. *Journal of Contemporary Accounting & Economics*, *2*(1), 73-98. https://doi.org/10.1016/S1815-5669(10)70017-5

Choi, J., Choi, W., & Lee, E. (2016). Corporate life cycle and earnings benchmarks. *Australian Accounting Review*, *26*(4), 415-428. https://doi.org/10.1111/auar.12100

Costa Filho, F. C., De Luca, M. M. M., Góis, A D., Lima, G. A. S. F. (2018). GERENCIAMENTO DE RESULTADOS: O IMPACTO DO CICLO DE VIDA ORGANIZACIONAL E DA ADOÇÃO DAS IFRS. *In: XXI SemeAd, Seminários em Administração*, São Paulo – SP, nov.

Correia, L. F., Amaral, H. F., & Louvet, P. (2017). Governança corporativa e earnings management em empresas negociadas na BM&FBOVESPA. *Contabilidade Vista & Revista*, *28*(2), 1-29.

Costa, C. M., & Soares, J. M. M. V. (2022). Standard Jones and Modified Jones: An earnings management tutorial. *Revista de Administração Contemporânea*, 26(2), e200305. https://doi.org/10.1590/1982-7849rac2022200305.en

Costa, W. B. da, Macedo, M. A. da S., Yokoyama, K. Y., & Almeida, J. E. F. de. (2017). Os Determinantes das Etapas do Ciclo de Vida das Empresas Brasileiras de Capital Aberto: Um Estudo Baseado em Variáveis Contábeis Financeiras. *Brazilian Business Review*, *14*(3), 304–320. https://doi.org/10.15728/bbr.2017.14.3.3

Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of accounting and economics*, *50*(2-3), 344-401. https://doi.org/10.1016/j.jacceco.2010.09.001

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. *The Accounting Review*, 86(6), 1969-1994. https://doi.org/10.2308/accr-10130.

Diri, M. E., Lambrinoudakis, C. & Alhadab, M. (2020). Corporate governance and earnings management in concentrated markets. *Journal of Business Research*, 108, 291-306. https://doi.org/10.1016/j.jbusres.2019.11.013

Duarte, E. R., Galdi, F. C., & Damasceno, F. S. (2020). Gerenciamento de resultado contábil e ruptura dos covenants: Um estudo empírico no Brasil. *Revista de Educação e Pesquisa em Contabilidade (REPeC)*, *14*(3). https://doi.org/10.17524/repec.v14i3.2445

Erfurth, A. E., & Bezerra, F. A. (2013). Gerenciamento de resultados nos diferentes níveis de governança corporativa. *Revista Base* (Administração e Contabilidade) da UNISINOS, 10(1), 32-42.

Esqueda, O. A., & O'Connor, T. (2020). Corporate governance and life cycles in emerging markets. *Research in International Business and Finance*, *51*, 101077. https://doi.org/10.1016/j.ribaf.2019.101077

Filatotchev, I., Toms, S., & Wright, M. (2006). The firm's strategic dynamics and corporate governance life-cycle. *International Journal of Managerial Finance*, 2(4), 256-279. https://doi.org/10.1108/17439130610705481.

Francis, J., Olsson, P., & Schipper, K. (2008). Earnings quality. *Foundations and Trends in Accounting*, 1(4), 259-340. http://dx.doi.org/10.1561/1400000004

González, J. S., & García-Meca, E. (2014). Does corporate governance influence earnings management in Latin American markets?. *Journal of business ethics*, 121(3), 419-440. https://doi.org/10.1007/s10551-013-1700-8

Gu, Z., Lee, C. J., & Rosett, J. G. (2005). What determines the variability of accounting accruals? *review of quantitative finance and accounting*, 57, 313–334. http://dx.doi.org/10.2139/ssrn.375661

Habib, A., & Hasan, M. M. (2019). Corporate life cycle research in accounting, finance and corporate governance: A survey, and directions for future research. *International Review of Financial Analysis*, *61*, 188-201. https://doi.org/10.1016/j.irfa.2018.12.004

Haga, J., Ittonen, K., Tronnes, P. C., & Wong, L. (2018). Is earnings management sensitive to discount rates? *Journal of Accounting Literature*, 41(1), 75-88. https://doi.org/10.1016/j.acclit.2018.03.001

Hasan, M.M., Hossain, M., Cheung, A.W.-K. and Habib, A. (2015), "Corporate life cycle and cost of equity capital", *Journal of Contemporary Accounting and Economics*, 11(1), 46-60. https://doi.org/10.1016/j.jcae.2014.12.002

Healy, P. M.; Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365-383. https://doi.org/10.2308/acch.1999.13.4.365 Heckman, J. J. (1979). Viés de seleção da sample como um erro de especificação. *Econometria*, *47*(1), 153–161. https://doi.org/10.2307/1912352

Hendriksen, E., & Breda, M. V. (2009). *Teoria da contabilidade*. São Paulo: Atlas, 1999.

Hussain, A., Akbar, M., Kaleem Khan, M., Akbar, A., Panait, M., & Catalin Voica, M. (2020). When does earnings management matter? Evidence across the corporate life cycle for non-financial Chinese listed companies. *Journal of Risk and Financial Management*, 13(12), 313. https://doi.org/10.3390/jrfm13120313

IBCG - INSTITUTO BRASILEIRO DE GOVERNANÇA CORPORATIVA. (2015). *Código das Melhores Práticas de Governança Corporativa.* (5. ed.) São Paulo: IBCG. https://conhecimento.ibgc.org.br/Paginas/Publicacao.aspx?PubId=21138

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.

Konraht, J., Soutes, D. O., & de Alencar, R. C. (2016). A Relação Entre a Governança Corporativa e o Alisamento de Resultados em Empresas Brasileiras. *Revista de Contabilidade & Controladoria*, 8(1).

Krishnan, G. V., Myllymäki, E. R., & Nagar, N. (2021). Does financial reporting quality vary across firm life cycle?. *Journal of Business Finance & Accounting*, *48*(5-6), 954-987. https://doi.org/10.1111/jbfa.1250

Lester, D. L., Parnell, J. A., & Carraher, S. (2003). Organizational life cycle: A five-stage empirical scale. *The International Journal of Organizational Analysis*, 11(4), 339–354. https://doi.org/10.1108/eb028979

Li, Y., & Zhang, X. T. (2018). How Does Firm Life Cycle Affect Board Structure? Evidence from China's Listed Privately Owned Enterprises. *Management and Organization Review*, 14(2), 305-341. https://doi.org/10.1017/mor.2017.55.

Lima, A. S. D., Carvalho, E. V. A. D., Paulo, E., & Girão, L. F. D. A. P. (2015). Estágios do ciclo de vida e qualidade das informações contábeis no Brasil. *Revista de Administração Contemporânea*, 19(3), 398-418. https://doi.org/10.1590/1982-7849rac20151711

Loderer, C., Stulz, R., Waelchli, U. (2012). Firm Age and Governance. *Working paper*. University of Bern.

Lopes, A. B.; Martins, E. *Teoria da contabilidade: uma nova abordagem*. São Paulo: Atlas, 2005.

Machado, V. N., Bianchi, M., Schonerwald, C., Venturini, L. D. B. (2020). INFLUÊNCIA DO CICLO DE VIDA NA RELAÇÃO ENTRE GOVERNANÇA CORPORATIVA E FINANCIAL DISTRESS *In: XIV Congresso Anpcont*, Foz do Iguaçu – PR, 11 a 15 de dez.

Ma, G., Wang, Y., Xu, Y., Zhang, L. (2023). The breadth of ownership and corporate earnings management, *Finance Research Lettes*, *52*, 1-13, https://doi.org/10.1016/j.frl.2022.103549

Martinez, A. L. (2001). *"Gerenciamento" dos resultados contábeis: estudo empírico das companhias abertas brasileiras*. Tese de Doutorado, Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo. doi:10.11606/T.12.2002.tde-14052002-110538.

Martinez, A. L. (2008). Detectando earnings management no Brasil: estimando os accruals discricionários. *Revista Contabilidade & Finanças*, *19(46),* 7-17. https://doi.org/10.1590/S1519-70772008000100002

Miller, D; Friesen, P. H. (1984) A longitudinal study of the corporate life cycle. *Management Science, 30(10)*, 1161-1183. https://doi.org/10.1287/mnsc.30.10.1161

Morás, V. R., & Klann, R. C. (2020). Influência da governança corporativa na escolha do tipo de gerenciamento de resultados. *Revista Contemporânea de Contabilidade*, *17*(44), 105-122. https://doi.org/10.5007/2175-8069.2020v17n44p105

Muda, I., Maulana, W., Sakti Siregar, H., & Indra, N. (2018). The analysis of effects of good corporate governance on earnings management in Indonesia with panel data approach. *Iranian Economic Review*, *22*(2), 599-625. DOI: https://doi.org/10.22059/IER.2018.66169

Nazir, M. S., & Afza, T. (2018). Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market. *Future Business Journal*, *4*(1), 139-156. https://doi.org/10.1016/j.fbj.2018.03.001

Nguyen, Q., Kim, M. H., Ali, S. (2023). Corporate governance and earnings management: Evidence from Vietnamese listed firms. *International Review of Economics & Finance*, 89 (A), 775-801. https://doi.org/10.1016/j.iref.2023.07.084

O'Connor, T., & Byrne, J. (2015). Governance and the corporate life-cycle. *International Journal of Managerial Finance*, *11(1),* 23-43. https://doi.org/10.1108/IJMF-03-2013-0033

Oliveira, A. M, & Soares, R. O. (2018). Gestores Excessivamente Confiantes e Otimistas Gerenciam Resultados? Evidências em Companhias Listadas na B3. *Advances in Scientific &Applied Accounting*, 11(3) 410-429. http://dx.doi.org/10.14392/asaa.2018110303

Oliveira, A. S., & Girão, L. F. D. A. P. (2018). Acurácia na previsão de lucros e os estágios do ciclo de vida organizacional: evidências no mercado brasileiro de capitais. *Revista de Educação e Pesquisa em Contabilidade (REPeC)*, *12*(1). https://doi.org/10.17524/repec.v12i1.1530

Oliveira, W. D. C. D., & Monte-Mor, D. S. (2022). A Influência do Ciclo de Vida Organizacional na Violação de Covenants Financeiros. *Revista Brasileira de Gestão de Negócios*, *24(4)*, 708-722. https://doi.org/10.7819/rbgn.v24i4.4204

Pae, J. (2005) Expected accrual models: The impact of operating cash flows and reversals of accruals. *Review of Quantitative Finance and Accounting*, 24, 5–22. https://doi.org/10.1007/s11156-005-5324-7

Paulo, E. (2007). *Manipulação das informações contábeis: uma análise teórica e empírica sobre os modelos operacionais de detecção de gerenciamento de resultados*. Tese de Doutorado, Faculdade de Economia, Administração e Contabilidade, Universidade de São Paulo, São Paulo. doi:10.11606/T.12.2007.tde-28012008-113439.

Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting*, 32(7-8), 1311-1346. https://doi.org/10.1111/j.0306-686X.2005.00630.x

Rahman, R. A., & Ali, F. H. M. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783-804. https://doi.org/10.1108/02686900610680549

Resende, M., & Wyllie, R. (2006). Retornos para educação no Brasil: evidências empíricas adicionais. *Economia aplicada*, *10(3)*, 349-365. https://doi.org/10.1590/S1413-80502006000300003

Ribeiro, F.; Carneiro, L. M.; Scherer, L. M. (2018) Ciclo de Vida e Suavização de Resultados: Evidências no Mercado de Capitais Brasileiro. *Contabilidade, Gestão e Governança*, 21(1), 63–79. DOI: https://doi.org/10.21714/1984- 3925_2018v21n1a4

Ribeiro, J. P. M., da Silva Viana, D. M., & Martins, O. S. (2021). Efeito do Ciclo de Vida na Relação entre Qualidade da Governança Corporativa e Custo da Dívida das Empresas Abertas no Brasil. *Contabilidade Gestão e Governança*, *24*(3), 293-311. http://dx.doi.org/10.51341/1984-3925_2021v24n3a3

Riwayati, H. E., & Siladjaja, M. (2016). Implementation of corporate governance influence to earnings management. *Procedia-Social and Behavioral Sciences*, 219, 632-638. https://doi.org/10.1016/j.sbspro.2016.05.044

Roma, C. M. S., Louzada, L. C., P. M., Goto, H., & Souma, W. (2021). Earnings management, policy uncertainty and firm life cycle stages: evidence from publicly traded companies in the USA and Brazil. *Journal of Financial Economic Policy*. 13(3), 371-390. https://doi.org/10.1108/JFEP-02-2020-0031

Santos, A. D., & Paulo, E. (2006). Diferimento das perdas cambiais como instrumento de gerenciamento de resultados. *Brazilian Business Review*, 3(1) 15-31.

Santos, K. L., Guerra, R. B., Marques, V. A., & Júnior, E. M. (2020). Os Principais Assuntos de Auditoria Importam? Uma análise de sua associação com o Gerenciamento de Resultados. *Revista de Educação e Pesquisa em Contabilidade (REPeC)*, *14*(1). https://doi.org/10.17524/repec.v14i1.2432

Schuster, H. A., & Klann, R. C. (2019). Responsabilidade Social Corporativa e Gerenciamento de Resultados por Accruals. *Contabilidade Vista & Revista*, *30*(1), 01-26. https://doi.org/10.22561/cvr.v30i1.4490

Shaheen, S., Nazir, R., Mehar, N., & Adil, F. (2020). Impact of Organizational Life Cycle Stages on Quality of Corporate Governance: Empirical Evidence from Pakistan's Corporate Sector. *International Journal of Economics and Financial Issues*, *10*(4), 271. https://doi.org/10.32479/ijefi.10279

Silveira, A. D. M. D. (2006). *Governança corporativa e estrutura de propriedade: determinantes e relação com o desempenho das empresas no Brasil*. Tese de Doutorado, Universidade de São Paulo, São Paulo, SP, Brasil. https://doi.org/10.11606/T.12.2004.tde-23012005-200501

Soschinski, C. K., Haussmann, D. C. S., Peyerl, D. A., & Klann, R. C. (2021). Influência da cultura nacional na relação entre governança corporativa e gerenciamento de resultados. *Revista Contabilidade & Finanças*, *32(86)*, 207-223. https://doi.org/10.1590/1808-057x202110510

Souza, J. L., & Moraes, R. O. (2019). Influência do Ciclo de Vida Organizacional no Trade-off de Gerenciamento de Resultados por meio de *Accruals* e Decisões Operacionais. *In: XIX USP Intenational Conference in Accounting*, São Paulo – SP, 24 a 26 de Jul.

Veganzones, D., Séverin, E., Chlibi, S. (2023). Influence of earnings management on forecasting corporate failure. *International Journal of Forecasting, 39(1)*, 123-143, https://doi.org/10.1016/j.ijforecast.2021.09.006

Wang, P., Chi, M., Wang, X. (2023). Overseas listing and earnings management methods selection. *Finance Research Letters*, 55(B), 1-11, https://doi.org/10.1016/j.frl.2023.103998

Waweru, N. M., & Prot, N. P. (2018). Corporate governance compliance and accrual earnings management in eastern Africa: Evidence from Kenya and Tanzania. *Managerial Auditing Journal*, 33(2), 171-191. https://doi.org/10.1108/MAJ-09-2016-1438

Wooldridge, J. (2011). *Econometric Analysis of Cross Section and Panel Data (2a.)*. MIT-Massachussets Institute Technology

Xie, X., Chang, Y. S., Shiue, M. J. (2022). Corporate life cycle, family firms, and earnings management: Evidence from Taiwan. *Advances in Accounting*, 56, 1-20, https://doi.org/10.1016/j.adiac.2021.100579

Xu, B. (2007). Life cycle effect on the value relevance of common risk factors. *Review of Accounting and Finance*, 6(2), 162-175. https://doi.org/10.1108/14757700710750838.

Xue, S., & Hong, Y. (2016). Earnings management, corporate governance and expense stickiness. *China Journal of Accounting Research*, *9*(1), 41-58. DOI: https://doi.org/10.1016/j.cjar.2015.02.001