The Relationship Between Corporate Governance Mechanisms and Financing Decision: Evidence from Listed Egyptian Firms

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Abstract

The primary objective of this study is to conduct an empirical investigate how mechanisms of Corporate Governance are associated with the Financing Decisions made by corporations in Egypt. Financing decision is measured by using debt ratio. The Corporate Governance mechanisms are measured by the board size, board independence, CEO duality, managerial ownership, and institutional ownership. Furthermore, this study incorporates four control variables that represent characteristics of the company, specifically, company size, company age, profitability, and liquidity. Historical data from Egyptian firms listed and traded on the Egyptian Stock Exchange (EGX) consisting of 90 firm-year observations for the period between 2019 and 2021 are utilized.

The study utilized multiple linear regression analysis to assess the association between mechanisms of corporate governance and financing decisions. The findings revealed a significant association between board size and CEO duality and financing decisions, proxied by the debt ratio, among the leading Egyptian firms. Moreover, the results highlighted the considerable influence of profitability, liquidity, and firm size on the way these firms make financing decisions.

Conversely, the findings of the study also imply that the variables of the board independence, managerial ownership and institutional investor may not have a significant influence shaping the financing choices within these companies.

Keywords: corporate governance, financing decision, debt ratio, firm size, profitability, liquidity.
1. Introduction

The financing decision of an organization is a debatable issue in the fields of accounting and finance. In line with agency theory, the financing decision plays a central role in mitigating conflicts between shareholders and management. The financing decision is how a company chooses the resources it will use to finance its operations. This includes identifying the most appropriate composition of capital structure and how it will be used to maximize the wealth of its shareholders. (Balagobei and Velnampy 2018; Pike, Neale, Linsley, & Akbar, 2018; Naseem, Zhang, Malik, and Rahman (2017). However, making the best choice can be challenging for financial managers. This topic has received considerable attention in accounting and finance literature, with several theories addressing it.

According to Li and Islam (2018), suggest that the determination of a firm's capital structure is closely tied to how the company finances its assets and operations. It involves finding the right mix of debt and equity that aligns with the company's leverage. The capital structure of a company holds significant importance as it directly influences the company's ability to meet the demands of its stakeholders.

Specifically, the term "financing decision" in this study specifically refers to the company's leverage, as measured by the debt ratio. The debt ratio indicates the proportion of a company's activities and assets that are financed through debt.
In Al Slehat’s study from 2020, it is demonstrated that the decision of finance is linked to the use of the debt-to-total-assets ratio. The amount of debt a company takes on to support its assets is known as the debt ratio, or leverage. Through the utilization of a variety of financial instruments, Leverage permits a corporation to potentially enhance its return on investment. This allows investors to assess and determine the most appropriate businesses for investment. However, in the event that a corporation possesses a larger debt ratio, the act of investing in this business may entail a heightened degree of risk for the investor.

When making a financing decision, it should be considered that each funding source, whether it is debt or equity, has its own benefits and drawbacks. Equity financing can consist of both common and preferred stocks, while debt financing includes both long-term and short-term debts.

Equity financing allows for sharing ownership and control of the business. Investors who provide equity capital become shareholders and may have voting rights and the potential to receive dividends. Additionally, equity financing does not require repayment of the investment.

On the other hand, giving up ownership and control of the business is a potential drawback of equity financing. For example, issuing equity can be expensive for a corporation, especially when the interest rates for financing through debt exhibit competitiveness. Equity financing is often associated with significant costs, mostly driven by shareholders' high dividend expectations and the company's
requirement to provide appealing returns in order to attract future investors \textit{Naluwi and Ramakrishnan (2018)}.

\textbf{Abor (2007)} corporations possess superior access to resources in comparison to potential investors, resulting in investors anticipating higher returns on their investments.

Regarding the benefit of debt financing is that the firm owner retains ownership and control. Lenders who provide debt capital do not acquire ownership rights or voting power. Interest payments on debt can be deducted from taxes, and debt enables the corporation to maintain ownership. When interest rates are low, borrowing becomes a convenient alternative for accessing funding instead of raising capital through stock markets \textit{Mohamad, Bujang, and Hakim (2019)}. Debt financing also allows for the repayment of the loan, which reduces the obligation over time.

Despite these advantages, one drawback of debt financing is the obligation to make regular interest payments and repay the principal amount according to the agreed terms. Failure to meet these obligations may result in financial penalties or legal consequences. Furthermore, high levels of debt can increase financial risk and impact the company's creditworthiness.

According to \textit{(Semaun, 2022)} Each category of capital has a distinct impact on a company's net income. Utilizing funds obtained through loans leads to a decrease in net income due to the associated interest payments. The interest amount serves as a tax deduction that the company is responsible for. Conversely, utilizing own capital,
which is compensated through dividend payments derived from post-tax net profit, affects net income differently. Achieving an optimal capital structure entails striking a balance between long-term debt and equity while minimizing the average cost of capital. Potential investors consider the company's financial performance as one of the key factors when assessing whether to invest in its stocks. Maintaining and enhancing financial performance is crucial for every company to not only survive but also to remain attractive to investors.

It is important for businesses to carefully consider the advantages and disadvantages of each funding source and assess their specific financial needs, risk tolerance, and long-term goals when making financing decisions.

According to the Organization for Economic Co-operation and Development (OECD), corporate governance can be defined as follows:

*The procedures and processes according to which an organization is directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among the different participants in the organization — such as the board, managers, shareholders, and other stakeholders — and lays down the rules and procedures for decision-making. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance (OECD, 1999).*

A good corporate governance framework is essential for a corporation to establish suitable objectives and implement effective systems and structures to achieve these objectives. Moreover, it
facilitates the establishment of mechanisms that enable internal and external stakeholders to exercise control and oversight over the corporation's activities and its managerial personnel (Rankin, Stanton, McGowan, Ferlauto, & Tilling, 2012).

Abor (2007) claims that bad corporate governance might result in bad financial decisions, which can then lead to weak performance.

Shleifer and Vishnyme(1997) highlight that across various regions, corporations frequently have large shareholders who actively participate in corporate governance. These significant shareholders often include institutional investors like mutual funds, pension funds, commercial banks, and insurance companies. Also, the study states that the best way to maximize shareholders’ wealth is through sound corporate governance and prudent financial decisions. A higher level of financial leverage reduces a firm's worth since it raises the probability that the company may go bankrupt. Corporate governance (CG) has mostly been used in developed markets and mostly by large firms that are listed on stock markets.

In recent years, however, many developing countries have put a term on their development plans. This is because they have realized that corporate governance is essential for the promotion of sustainable growth since it improves the bottom line (Anthony and Nicholas 2006).

The relationship between Financing Decision or capital structure and corporate governance lies in the way they interact and influence each other. Good corporate governance practices can contribute to
sound capital structure decisions by promoting transparency, accountability, and effective oversight of financial decisions. Good corporate governance practices also help ensure that capital structure decisions are made in the best interest of shareholders and other stakeholders and are supported by proper risk management and control mechanisms.

Moreover, the capital structure of a company can have implications for corporate governance. A highly leveraged company with a significant debt burden may face specific governance challenges, such as increased financial risk, potential conflicts of interest between different stakeholders or the need for enhanced monitoring and control mechanisms.

Therefore, a well-balanced capital structure can contribute to a stable financial position, mitigate agency problems, and enhance corporate governance practices.

In summary, corporate governance plays a vital role in shaping financing decisions. It impacts a company's ability to access capital, influences the cost of capital, and provides assurance to investors and lenders, ultimately affecting the overall financial health and success of the organization. An effective corporate governance framework can influence capital structure decisions, while the capital structure of a company can impact its governance practices and financial stability. Both elements are crucial for ensuring the long-term sustainability and success of a company.
Based on the discussion above, the primary objective of this study is to investigate the association between mechanisms of corporate governance and financing decisions within the context of Egyptian firms, specifically focusing on the context of emerging markets. The study seeks to investigate how mechanisms of corporate governance influence the financing decisions made by these firms. The study intends to provide insights into the determinants that shape the financing strategies of Egyptian firms operating in an emerging market environment.

**Research problem**

When a company has a good corporate structure (CS), it's considerably simpler to obtain financing from investors since the shareholders' rights are better safeguarded, information is more easily shared, and agency conflicts are minimized. When managers of a company can readily get private benefits because of a weak CG structure, the company is more likely to have agency problems (Balagoei and Velnampy2018).

Poor corporate governance not only contributes to poor business performance and riskier patterns of financing, but it also makes macroeconomic crises more likely to occur (Claessens et al., 2003).

There are several reasons related to why corporate governance is becoming more important. These include the recent trend of privatization around the world over the past 20 years; the reform of pension funds and the growth of private savings; the takeover wave of
the 1980s; the deregulation and integration of capital markets; the East Asia Crisis of 1997; and a series of recent corporate scandals in the United States and other places (Becht et al. 2002).

Good corporate governance is becoming more and more popular in developing countries because it can have a positive effect on sustainable growth.

Therefore, it is critical to examine the effect of corporate governance mechanisms on financial decision among Egyptian publicly traded companies. This paper presents empirical evidence regarding the relationship between corporate governance and company funding decisions in a developing economy, specifically focusing on Egypt as an example of an emerging market.

The research question addressed in this study is: "To what extent does corporate governance mechanisms affect financing decisions among Egyptian publicly traded companies?"

Research Objective: The primary objective of this study is to examine how corporate governance mechanisms impact the financing choices made by publicly traded companies in Egypt.

This research study makes a valuable contribution to the existing literature by presenting empirical evidence that establishes a correlation between corporate governance mechanisms and the level of financial leverage observed in Egyptian firms. While this correlation has received a lot of attention in more developed economies, it has received far less attention in emerging markets, and is especially scarce in the Egyptian market and other Middle Eastern nations. Examining this
question in the context of Egyptian publicly listed firms has the potential to build on existing research and provide novel answers that contrast with those found in studies conducted in more economically developed nations.

Significance: The findings of the present study provide potential value for investors and economists, helping them understand the factors influencing capital structure decisions and promoting efficiency and good corporate governance. This study intends to address the knowledge gap in academic literature concerning the association between corporate governance mechanisms and financing choices within the Egyptian market.

The present paper is organized in the subsequent manner: The subsequent part provides a concise overview of the empirical literature that relates to the issue in question. The methodology of the research will be discussed in the next part. The findings of the analysis are presented and discussed in the penultimate section. The concluding section of the study presents a concise overview of the research findings and effectively finishes the ongoing discussion.

2. Literature Review

El-Habashy, 2018

This study examines how corporate governance affects capital structure decisions in listed firms in Egypt. The hypothesis was tested using a sample of 240 observations from the most active non-financial firms that were gathered from 2009 to 2014. There are seven variables
that are employed in the measurement of the characteristics of corporate governance. These variables are the management ownership, institutional shareholding, shares owned by a significant block, board size, board composition, separation of CEO/Chair positions, and audit type. The capital structure was measured using four ratios: total debt to assets, long- and short-term debt to assets, and debt to equity. The results indicate that corporate governance characteristics have a significant effect on the capital structure decisions of Egyptian public companies. In Egypt, the choice of capital structure is also influenced by business-specific characteristics such as profitability, tangibility, growth opportunities, corporation tax, firm size, and non-debt tax shields.

**Lokman and Yazid 2020**

The purpose of this study is to investigate the relationship between corporate governance and the decision of financing for the top one hundred publicly traded companies in Malaysia (PLCs). This research looks at five different aspects of corporate governance: the size of the board, the independence of the board, the dual role of the CEO, managerial ownership, and institutional ownership. In addition, this research takes into consideration the following four control variables: company age, company profitability, company size, and company liquidity. The final sample of 77 firms was observed for three years, from 2016 to 2018. The study assessed financing choices by analyzing the debt ratio, and the results indicated that the Top 100 PLCs had a moderate level of debt. The results revealed that none of the corporate
governance characteristics have a significant relationship with financing decisions. The results also demonstrate that a company's liquidity and size have a substantial impact on its debt ratio. In sum, the findings imply that financial needs and firm characteristics, rather than governance characteristics, are more important when deciding whether or not to fund a certain business activity.

**Balagobei and Velnampy, 2018**

The purpose of this research is to investigate of corporate governance systems on financing decisions of publicly traded Sri Lankan manufacturing companies from 2012 to 2016. The findings show that the size of the board of directors has a considerable influence on the financing decisions of listed industrial businesses in Sri Lanka. Other corporate governance characteristics are shown to have no significant influence on financing decisions. Firms should raise their board size to access more debt financing, as a larger board size puts pressure on management to improve the firm's value through stricter monitoring and regulatory mechanisms. However, beyond a certain level, increasing board size may have negative consequences.

**Anandasayanam and Velnampy, 2018**

This study examines the correlation between corporate governance and financing decisions within Sri Lanka's listed companies in the Beverage, Food, and Tobacco sectors. Data for the study is collected from the annual reports of the selected companies, covering the financial years from 2011 to 2015. The analysis, conducted through pooled and fixed-effect regression models, reveals several findings.
Firstly, firm size and block shareholders exhibit a positive relationship with financing decisions. In contrast, board composition, the presence of female directors, and the frequency of board meetings are found to have a negative impact on financing decisions. Interestingly, CEO duality does not demonstrate any significant influence on the financing decisions of the listed Beverage, Food, and Tobacco companies in Sri Lanka Al-Nodel and Hussainey 2010

The purpose of this study is to add to the existing literature on corporate governance in emerging economies by investigating the impact of different corporate governance mechanisms on financing decisions in Saudi Arabian public firms. More specifically, they investigate how the size of the board of directors, the concentration of ownership, and the reporting requirements for corporate governance affect the debt-to-equity ratio. The content analysis methodology is utilized to evaluate the reporting on corporate governance. The study discovered that a company's debt-to-equity ratio is positively associated with both the size of its board of directors and the concentration of its ownership, even after controlling for the profitability of the firms and the opportunities for growth they present. Strong corporate governance may lead managers to choose more financial leverage (large number of directors on the board and higher ownership concentration). They found no statistical correlation between corporate governance and debt-to-equity ratio. This shows asymmetric information is not a major factor in Saudi Arabian companies' financing decisions. It could be ascribed to the business environment in Saudi Arabia.
Research hypotheses

To examine the effect of corporate governance mechanisms on financial decision among Egyptian publicly traded companies. The study formulated five research hypotheses: The effect of mechanisms such as Board Size, Board Independence, CEO Duality, Managerial Ownership, and Institutional Ownership on decisions related to financing.

Hypothesis of Board Size

The studies by Ahmad, Akhter, Siddiq, and Iqbal (2018), Puente Esparza et al. (2018), Abdul-Qadir et al. (2015); Wen, Rwegasira, and Bilderbeek (2002), Abor (2007), Hussainey and Aljifri (2012), Ganiyu and Abiodun (2012), and Agyei & Owusu (2014) collectively support the hypothesis that there is a significant positive relationship between board size and leverage. According to these studies, larger firms with bigger boards tend to have higher levels of debt, indicating that a larger board size is associated with increased borrowing. This positive relationship suggests that a larger number of board members may send a message to creditors that the organization is well-governed, resulting in more favorable debt terms, such as lower interest rates. However, it is also noted that a larger board may face challenges in decision-making consensus, impacting corporate governance quality and potentially leading to higher levels of financial leverage.

This finding is consistent with the theory proposed by Abor (2007), which suggests that a larger board size is associated with a
greater degree of control over management. This increased control is believed to serve as a safeguard against management's potential attempts to enhance the value of the firm by excessively relying on debt.

Contrary to the earlier studies, more recent research by Elgammal (2022), Kumalasari, Murhadi, and Wijaya (2019), El-Habashy (2018), Yusuf and Sulung (2019), Purag, Abdullah and Bujang (2016), and Heng et al. (2012) suggests different findings regarding the relationship between board size and leverage. Although the specific findings of these studies may vary, they generally present alternative perspectives that do not support a significant positive relationship between board size and leverage.

For example, Elgammal (2022) and Kumalasari et al. (2019) found no significant relationship between board size and leverage. El-Habashy (2018) and Yusuf and Sulung (2019) reported a negative association between board size and leverage, indicating that larger boards may be associated with lower levels of debt. Additionally, Purag, Abdullah and Bujang (2016) and Heng et al. (2012) proposed that the relationship between board size and leverage may be nonlinear, indicating that the impact of board size on leverage may vary depending on the specific context and other factors at play. These studies suggest that the relationship between board size and leverage is complex and can be influenced by various factors, including the industry, country, corporate governance practices, and specific characteristics of the firms being studied. The underlying justification for this phenomenon is in the fact that larger boards frequently impose encourage management to
seek reduced levels of debt in order to improve the overall performance of the company (Berger et al., 1997). This finding serves as the basis for the development of the following research hypothesis.

*H1: All else being equal, there exists a relationship between the board's size and the decision of financing.*

**Hypothesis of Board Independence**

There is a lack of consensus among the empirical findings about the independence of boards of directors and the debt ratio as a proxy of financing decision.

The empirical research undertaken by Ahmad et al. (2018), Sheikh and Wang (2012), Abor (2007), and Heng et al. (2012) collectively establish a favorable correlation between board independence and debt ratio. The aforementioned studies indicate that there is a correlation between the composition of a board of directors and the adoption of a high-debt policy. Specifically, boards with a substantial representation of independent members are more inclined to pursue this strategy to enhance the firm's value by leveraging debt tax protection. The rationale behind this assertion is that independent directors bring diverse knowledge and expertise to the board, which may lead to a strategic decision to utilize debt financing as a means of securing long-term funds.

On the other hand, various earlier studies, like Puente Esparza et al. (2018); Purag et al. (2016); Abdoli et al. (2012); and Anderson et al. (2004) The results showed no significant association between board independence and the debt ratio or financial leverage, indicating
that the presence of independent directors does not have a direct influence on a firm's debt financing decisions. One perspective in the literature suggests that increased board independence is associated with a corporation's pursuit of low leverage and debt levels. The rationale behind this is that independent directors, who are not directly affiliated with the management or major shareholders, are more likely to prioritize the long-term stability and financial health of the company over short-term gains. They may advocate for a conservative approach to financing decisions, emphasizing prudence and risk management.

By promoting low leverage and debt levels, independent directors aim to protect the interests of shareholders and safeguard the company's long-term sustainability. They may advocate for a more balanced capital structure, emphasizing equity financing or retained earnings rather than excessive reliance on debt. This approach helps to reduce financial risks, enhance financial flexibility, and maintain a strong creditworthiness for the organization.

However, it is important to note that the relationship between board independence and leverage is not universally consistent across all studies and contexts. There may be variations depending on industry dynamics, firm size, regulatory frameworks, and other contextual factors. Therefore, further research is necessary to explore the nuanced effects of board independence on leverage and debt levels in different settings. This discovery prompts the development of the second research hypothesis, which is as follows:
**H2: All else being equal, a relationship exists between board independence and financing decisions.**

**Hypothesis of CEO Duality**

The relationship between CEO duality and the debt ratio (or leverage) has been a topic of interest in corporate governance studies. Different studies have yielded mixed findings regarding this relationship.

CEO dualism and debt ratio were shown to be significantly positively correlated by Bajagai et al. (2019); El-Habashy (2018); Abor (2007). All these positive associations imply that a business with a dual CEO prefers to use debt capital rather than raise additional stock to finance its operations. There are several possible explanations for this relationship. Firstly, having a dual CEO may indicate a concentration of power within the organization, allowing for easier decision-making and implementation of financial strategies, including leveraging debt. Additionally, a dual CEO may have more control and influence over the financing decisions of the company, leading to a preference for debt capital.

Moreover, using debt as a source of finance can have certain advantages for a business. It allows for tax benefits through interest deductions, maintains ownership control for existing shareholders, and can provide flexibility in managing the company's capital structure.

Overall, these studies suggest that businesses with a dual CEO are more likely to choose debt financing over equity financing,
potentially driven by the perceived benefits and advantages associated with debt capital.

On the other hand, Ahmad et al. (2018), Heng et al. (2012), and Sheikh and Wang (2012) have shown that there is no association between CEO duality and the debt ratio. Overall, the negative relationship between CEO duality and debt usage suggests that CEOs who concurrently serve as board chairmen tend to exhibit a preference for lower levels of debt to manage risk, maintain control, and safeguard the company's financial stability and reputation. This finding prompts the development of three research hypotheses related to this topic.

**H3: All else being equal, there exists a relationship between the dual position of the CEO and the financing decisions.**

**Hypothesis of Managerial Ownership**

Managerial ownership refers to the ownership of shares in a company by its managers or executives. When managers have ownership stakes in the company they work for, they have a dual role as both managers and shareholders. This means that they have a financial interest in the success of the company beyond their regular managerial responsibilities.

Further, when managers have a significant ownership stake in the company, their financial well-being is directly tied to the company's performance and shareholder value. This alignment of interests can motivate managers to make decisions that are in the best interest of the company and its shareholders.
The studies conducted by Elgammal (2022), El-Habashy (2018), and Bokpin and Arko (2009) have shown a positive correlation between management ownership and the company's overall capital structure. This implies that when managers have a higher ownership stake in the company, they are more likely to choose debt as a means of financing. The rationale behind this relationship is that managers with a significant ownership stake can maintain their preferred stock shares by utilizing debt financing. This aligns with the findings of Berger et al. (1997), which suggest that firms with high management ownership may prefer debt as a financing option. These findings highlight the influence of management ownership on the capital structure decisions of a company, indicating that it plays a role in shaping the financing choices made by managers.

In contrast to prior research, the studies conducted by Sheikh and Wang (2012) and Ahmad et al. (2018) present evidence indicating a negative relationship between management ownership and a firm's capital structure, specifically its debt ratio. The negative association between management ownership and the debt ratio of a firm suggests that as the level of ownership by managers increases, the firm tends to rely less on debt as a source of financing. This finding is consistent with agency theory, which posits that when managers have a higher stake in the company through ownership, their interests align more closely with those of external shareholders. As a result, managers have less incentive to take on excessive debt that may increase financial risk and conflict with the interests of shareholders.
Therefore, it is crucial for companies to have proper corporate governance mechanisms in place to ensure that managers with ownership stakes act in the best interest of the company and all shareholders.

By having a greater ownership stake, managers have a stronger motivation to maximize the long-term value of the company, which can be achieved by maintaining a conservative capital structure. This means that managers are more likely to prioritize equity financing or internal funds rather than relying heavily on debt to finance the firm's operations and investments.

The observed inverse relationship between management ownership and the debt ratio implies that managerial motivations are in line with those of shareholders, hence mitigating the likelihood of conflicts of interest inside the organization. With a higher level of management ownership, there is less need for external monitoring mechanisms such as debt financing, as managers have a greater personal stake in the firm's performance and are motivated to act in the best interest of shareholders.

Overall, these findings highlight the importance of management ownership in shaping the financing decisions of a firm. A higher level of management ownership can lead to a more conservative approach to financing, with a reduced reliance on debt. This leads to the four-research hypothesis:

\( H4: \textit{All else being equal, there exists a relationship between managerial ownership and the financing decisions.} \)
Hypothesis of Institutional Ownership

Limited empirical study exists about the relationship between institutional ownership and capital structure, specifically the debt ratio. Furthermore, the existing studies in this area display inconsistencies. Institutional investors are recognized as financial entities that possess the capacity to exert influence over corporate practices and enact reforms within governance processes (Ahmad, Baek, Kim, & Shah, 2019). The active monitoring theory states that institutional investors' participation will reduce the problem of moral hazard associated with management ownership by closely monitoring it (Shleifer & Vishny, 1986; Jensen, 1986).

Based on a number of empirical investigations (Elgammal, 2022; Ahmad et al., 2018; Sun et al., 2016; Abdoli et al., 2012), it has been seen that institutional ownership exerts a positive and statistically significant impact on the indebtedness of firms. The authors claimed that having institutional investors can enhance the confidence of its creditors and the public, leading to a lower cost of debt and increased access to debt financing for the company. As a result, firms with larger institutional investors are more likely to decide to keep more debt when determining their capital structure, as they believe these investors will increase the company's value.

The studies conducted by (El-Habashy, 2018; Hussaine and Aljifri, 2012; Lakshmi, 2009) have found an adverse relationship between institutional investors and the debt-to-equity ratio. This suggests that firms with a substantial presence of institutional investors prefer to employ lower levels of debt to sustain their business activities.
These findings suggest that the presence of institutional investors may result in stricter monitoring and oversight, reducing the need for excessive debt.

Based on these research findings, the following are the five hypotheses related to institutional ownership and capital structure.

There are a few possible explanations for this finding. Firstly, the presence of institutional investors may lead to stricter monitoring and oversight of the company's financial decisions. These investors typically have expertise in evaluating companies and may impose restrictions or guidelines on the amount of debt the company can take on. This cautious approach towards debt utilization could be driven by the desire to protect their investment and minimize risk.

Secondly, institutional investors often have a long-term perspective and focus on sustainable growth. They may prefer companies with lower leverage as it reduces financial risk and enhances the company's ability to weather economic downturns. By utilizing less debt, the company may have more financial stability and flexibility in the long run, which can be attractive to institutional investors.

Lastly, institutional investors may prefer companies that prioritize equity financing over debt financing. Equity financing provides a higher level of ownership and control for investors compared to debt financing, which carries an obligation to repay. Institutional investors may value the alignment of interests that comes with higher equity ownership and be more willing to invest in companies that rely less on debt.
Overall, the studies suggest that companies with a significant number of institutional investors tend to utilize less debt in their capital structure, potentially due to increased monitoring, a long-term growth perspective, and a preference for equity financing.

Based on these findings, the following is the five-research hypothesis:

\[ H5: \text{All else being equal, there exists a relationship between institutional ownership and funding decisions.} \]

3. Methodology

**Sample and Data Collection**

This study's sample includes the firms with the highest market capitalization on the Egyptian Stock Exchange. The banking and insurance businesses were not included; only corporate annual reports from the much more active non-financial businesses were gathered. Consequently, the final sample employed in this study includes 30 firms with a total of 90 firm years - observation. Data is collected for the years 2019 to 2021.

**Variables and Measurements**

Table 1 below provides data about the variables and measures utilized in the investigation.
Table 1: Measurement Summaries

<table>
<thead>
<tr>
<th>Variables</th>
<th>Definition</th>
<th>Measurement</th>
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<tbody>
<tr>
<td><strong>Dependent Variables: Financing Decision</strong></td>
<td></td>
<td></td>
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<tr>
<td>Financing Decision (DEBTRAT)</td>
<td>Debt-to-Assets ratio/ Debt ratio</td>
<td>Debt Ratio = \frac{Total Debt}{Total Assets}</td>
</tr>
<tr>
<td><strong>Independent variables: Governance variables</strong></td>
<td></td>
<td></td>
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<tr>
<td>Board size (BORDSZ)</td>
<td>The total nun of director on the board</td>
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<tr>
<td>Board independence (BORDIND)</td>
<td>The ratio of independent non-executive directors to the total number of board members.</td>
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<tr>
<td>CEO duality (CEODUA)</td>
<td>A binary variable is employed to represent the scenario in which the Chief Executive Officer (CEO) concurrently holds the position of chairman, with a value of &quot;1&quot;, whereas a value of &quot;0&quot; is assigned when the roles of CEO and chairman are held by distinct individuals.</td>
<td></td>
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<tr>
<td>Managerial ownership (MAOWNR)</td>
<td>The calculation involves dividing the total shares held by directors and management by the overall number of shares issued.</td>
<td></td>
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<tr>
<td>Institutional investor (INSTINV)</td>
<td>The total number of ordinary shares held by the institutional investor over the total number of shares issued.</td>
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<tr>
<td><strong>Control Variables</strong></td>
<td></td>
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<tr>
<td>Firm Size (LogFirmSize)</td>
<td>Natural log of the of total assets</td>
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<tr>
<td>Age of Firm (AGEFIM)</td>
<td>The number of years between observation year and year of incorporation.</td>
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<tr>
<td>Liquidity (LIQUID)</td>
<td>The net asset divided by current liabilities.</td>
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<tr>
<td>Profitability (PROFTAB)</td>
<td>The net profit over total assets.</td>
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**Regression Model**

The following model of financing decision is used to investigate the potential association between corporate governance mechanisms and financing decisions:

\[
DEBTRAT = \alpha + \beta_1 BORDSZ + \beta_2 BORDIND + \beta_3 CEODUA + \beta_4 MAOWNR + \beta_5 INSTINV + \beta_6 LogFirmSize + \beta_7 AGEFIM + \beta_8 LIQUID + \beta_9 PROFTAB + \varepsilon
\]
In this model, the dependent variable known as financing decision (DEBTRAT) is assessed by the ratio of total debt to total assets. The characteristics of good corporate governance are the independent variables. These characteristics include board size, board independence, CEO duality, management ownership, and institutional investors.

As additional control variables, the model takes into consideration the firm's size, age, liquidity, and profit. The dependent, independent, and control variables of this investigation are summarized and described in Table 1.

4. Empirical Results

1. Descriptive statistics

Panel (a) of Table 2 presents the descriptive statistics for all variables of this study, including the mean, median, standard deviation, Min and Max. Panel B provides Pearson correlation matrix for selected variables.

As shown in Panel (a) of Table (2), the mean value of Debt-to-Assets ratio (DEBTRAT) is 0.4965 with a standard deviation of 0.2021. That is, on average, Egyptian firms in the sample have 49.65% of their assets financed through debt. The mean board size (BORDSZ) is 9.30 members, with a standard deviation of 2.85. with the largest of 16 members and the minimum board size of 4 members. The board independence (BORDIND) has a mean value of 0.76, indicating that boards are around 76% independent. The low standard deviation of 0.14
reveals that board independence tends to be relatively consistent across Egyptian firms, with minimal variation.

With respect to CEO Dual Role (CEODUA), the mean is 0.58 with standard deviation 0.49, suggesting that CEOs are more likely to serve as CEO and chairman across Egyptian firms in the sample. Managerial ownership (MAOWNR)\(^1\) has a mean value of 0.083 with standard deviation 0.17, which implies that 8.3% of the Egyptian firms' shares in the sample are typically owned by managers (on average, managers in the dataset have a relatively small ownership stake in the company). Institutional investment (INSTINV2) has a mean value of 0.5762 with standard deviation of 0.28 which indicates, on average, institutional investors own 57.62% of the Egyptian firms’ shares in the sample.

The mean profitability (PROFTAB) is 6.66, denoting a 6.66% average profit. The standard deviation of 9.103% indicates considerable variability in profit margins across companies. The mean of liquidity (LIQUID) ratio in the sample of the Egyptian firms is 3.62 with standard deviation of 11.44 involving that, on average, the Egyptian firms in the sample can easily meet its short-term debts because current assets 3.62 times larger than current liabilities. The mean of logarithm of Firm Size (logFirmSize) is 22.20 with small standard deviation of 1.11. Finally, the mean of age’s Egyptian firms (AGEFIM) is 33.30 years, with a relatively high standard deviation of 17.45.

\(^1\) Managerial ownership in statistical analysis results tables is referred to as MAOWNR.
Panel (a) of Table 2

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEBTRAT</td>
<td>90</td>
<td>.0289</td>
<td>.89382</td>
<td>.4965</td>
<td>.20213</td>
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<td>BORDSZ</td>
<td>90</td>
<td>.4</td>
<td>16</td>
<td>9.30</td>
<td>2.858</td>
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<td>BORDIND</td>
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<td>1.0000</td>
<td>.76907</td>
<td>.14822</td>
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<tr>
<td>CEODUA</td>
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<td>0</td>
<td>1</td>
<td>.58</td>
<td>.497</td>
</tr>
<tr>
<td>Managerial ownership2</td>
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<td>.000000</td>
<td>.89119</td>
<td>.0835</td>
<td>.1763</td>
</tr>
<tr>
<td>INSTINV2</td>
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<td>.57625</td>
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<td>PROFTAB</td>
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<td>.0666</td>
<td>.09103</td>
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<tr>
<td>LIQUID</td>
<td>90</td>
<td>.25085</td>
<td>70.121</td>
<td>3.62929</td>
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<tr>
<td>LogFirmSize</td>
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<td>19.58</td>
<td>24.45</td>
<td>22.2044</td>
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<tr>
<td>AGEFIM</td>
<td>90</td>
<td>8</td>
<td>101</td>
<td>33.30</td>
<td>17.453</td>
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</tbody>
</table>

Panel (B) in Table (2) reports the Pearson correlation matrix of the variables used in the analysis. As shown in the table, the correlation between DEBTRAT (Debt Ratio) and CEODUA (CEO Dual Role) is (-.343**), which has a negative and statistically significant at the 0.01 level. This negative correlation implies that as the CEO holds a dual role (both CEO and chairman), the Debt Ratio tends to decrease.

With respect to the correlation between DEBTRAT control variables that reflect characteristics of the firm. The correlation between DEBTRAT and PROFTA1 is (-.389**), which is negative and statistically significant at the 0.01 level. This strong negative correlation suggests that as profitability increases, debt ratio tends to decrease significantly. Also, DEBTRAT and LIQUID have a strong negative correlation of –(0.478**), This suggests that when firms have
lower liquidity to meet their short-term financial obligations, they tend to rely more on taking on debt relative to their assets. This relationship is highly significant at the 0.01 level. Finally, the correlation analysis shows that DEBTRAT has a positive and statistically significant correlation with AGEFIM (.248*) as control variable at the 0.05 level. This positive correlation indicates that older Egyptian firms tend to have higher Debt-to-Assets ratios.

However, the other independent and control variables, which reflect various characteristics of the firm do not show statistically significant correlations with the debt ratio or dependent variable.

### panel (B) Table2 Pearson correlation matrix

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DEBTRAT</th>
<th>BORDSZ</th>
<th>BORDIND</th>
<th>CEOUDA</th>
<th>Managerial ownership</th>
<th>INSTINV2</th>
<th>PROFTA</th>
<th>B</th>
<th>LIQUID</th>
<th>LogFirmSize</th>
<th>AGEFIM</th>
</tr>
</thead>
<tbody>
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<td>BORDSZ</td>
<td>- .192</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BORDIND</td>
<td>-.042</td>
<td>.284*</td>
<td>1</td>
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<tr>
<td>CEOUDA</td>
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<td>- .108</td>
<td>-.275*</td>
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<td></td>
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<tr>
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<td>.005</td>
<td>-.455*</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>.109</td>
<td>.364*</td>
<td>-.037</td>
<td>-.730*</td>
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<td></td>
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</tr>
<tr>
<td>PROFTA</td>
<td>-.389*</td>
<td>.158</td>
<td>-.133</td>
<td>.263*</td>
<td>.282*</td>
<td>-.191</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIQUID</td>
<td>-.478*</td>
<td>.061</td>
<td>.161</td>
<td>-.198</td>
<td>-.089</td>
<td>.015</td>
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<td>LogFirmSize</td>
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<td>AGEFIM</td>
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<td>.070</td>
<td>-.232*</td>
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<td>.092</td>
<td>-.217*</td>
<td>.166</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**. The correlation is statistically significant at the 0.01 level with a two-tailed test

*. The correlation is statistically significant at the 0.05 level with a two-tailed test

### Results of multiple regression analysis

Table 5 displays the outcomes for R and R² in this study. The value of R² is 0.592 means the proportion of the variation in financing decisions (debt ratio) of Egyptian firms that can be attributed to the independent and control variables addressed in this study. so, the model
interprets about 59.2% of the variation in financing decision (debt ratio) of the Egyptian firms.

Nevertheless, it's important to note that there is a significant portion, around 40.8%, of the variation in the debt ratio that stills unexplained by the corporate governance mechanisms and control variables that examined in this study. This proposes there are other factors besides mechanisms of corporate governance and control variables that affect the Egyptian firm's debt ratio.

The result of the analysis of variance for the regression model ANOVA is presented in Table 6. The P-value for the entire model is 0.000, and the ANOVA results display that it is statistically significant and likely to be an adequate fit for the data.

The findings of the regression analysis, which illustrate the association between all corporate governance mechanisms, control variables with the debt ratio (financing decision), are stated in Table 7.
According to the results of the multiple regression analysis presented in Table 7, it can be concluded that among the investigated independent variables reflecting mechanisms of corporate governance, specifically BORDSZ and CEO duality, there is a statistically significant correlation with the financing decision (proxied by the debt ratio), with recorded P-values of 0.027 and 0.000 respectively.

Turning to the control variables of this study, specifically, profitability (PROFTAB), LIQUID and LogFirmSIze, they exhibit a statistically significant correlation with the financing decision (debt ratio), as shown by the P-values of 0.000, 0.000, and 0.014, respectively.

These findings support the hypotheses H1 and H3 of this study. Whereas, the hypotheses H2, H4 and H5 are rejected.

Table 7: Results of the Multiple Regression Analysis for the Financing Decision
4. Discussion and Conclusion

The objective of this study was to investigate the association between corporate governance mechanisms and financing decisions made by publicly traded companies in Egypt, which were proxied by the debt ratio. The independent variables used to indicate corporate governance mechanisms included board size, board independence, CEO duality, management ownership, and institutional investors. Five hypotheses have been formulated in this study to fit the objectives of the study. Following extensive analysis, this study has effectively addressed the research inquiries.

The study shows that a significant association between both BORDSZ, CEO duality and financing decision (debt ratio) of the Top Egyptian firms. The results support Hypothesis 1, which suggests a negative and statistically significant relationship between board size (BORDSZ) and the financing decision. The findings indicate that as a company's board size increases, it tends to use less debt for financing its assets and activities.

Furthermore, the results provide support for Hypothesis 3, which posits a negative and statistically significant relationship between CEO duality (where the CEO also serves as Chairman of the Board) and financing decisions. This indicates that an increase in CEO duality tends to result in the utilization of less debt in the firm's financing choices.

Conversely, the study's results also indicate the rejection of Hypotheses 2, 4, and 5. This suggests that under ceteris paribus
conditions, board independence, managerial ownership and institutional investor may not significantly influence a firm's financing decisions.

In summary, this study emphasizes the importance of considering specific corporate governance mechanisms when analyzing financing decisions in Egyptian firms. Board size CEO duality emerged as influential factors, board independence, managerial ownership and institutional investor did not show significant relationships with financing decisions. Further research could explore the mechanisms through which these mechanisms impact financing choices and consider additional contextual factors that may affect these relationships.

The study also finds that characteristics of the firm such as profitability, liquidity, and firm size provide insights into how specific factors influence a firm's financing decision, as represented by its debt ratio. The results provide evidence that the size of the firm has a notable impact on its financing decisions, with larger firms tending to use more debt. Profitability has a notable impact on financing decisions, with higher profitability being associated with lower debt ratios and finally, liquidity has a significant impact on financing decisions, with higher liquidity being associated with lower debt ratios.
References


