




## OWNERSHIP STRUCTURE AND CEO COMPENSATION: EVIDENCE FROM JORDAN



 **Jebreel  
Mohammad Al-Al-  
Msiedeem**<sup>1\*</sup>


<sup>1,2</sup>College of Business Tafila Technical University Tafila, Amman, Jordan.

<sup>1</sup>Email: [Dr.Jebreel@ttu.edu.jo](mailto:Dr.Jebreel@ttu.edu.jo) Tel: +962796844845

<sup>2</sup>Email: [F.sawalqah@ttu.edu.jo](mailto:F.sawalqah@ttu.edu.jo) Tel: +962772282190



(+ Corresponding author)

 **Fawzi A. Al  
Sawalqa**<sup>2</sup>

### ABSTRACT

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The current study examines the effect of ownership structure (i.e., government ownership, family ownership, and foreign ownership) on chief executive officer (CEO) compensation in an emerging market, by considering Jordan as a case study. By using a sample of 136 non-financial firms listed on the Amman Stock Exchange over the period of 2015–2019, we find that family ownership has a positive and significant impact on CEO compensation. The finding regarding foreign ownership is contrary to expectations, with a higher foreign ownership reflecting a higher CEO compensation. Overall, these results imply that the ownership structure of Jordanian companies exerts a significant influence on the CEO pay setting process. However, government ownership has no relationship with CEO compensation. This indicates that government ownership is ineffective in determining CEO compensation. We further find that firm size is positively related to CEO compensation, indicating that larger companies have more ability to generate high internal funding, and can afford to pay higher compensation to quality managerial talent. In contrast, the effects of firm age and liquidity are not at significant levels.

**Contribution/ Originality:** This study contributes to the existing literature by recognizing the interests of regulators, readers, practitioners, and academics to gain more insight into and knowledge of corporate governance practices in an emerging market, such as Jordan.

## 1. INTRODUCTION

Recently, there has been global debate on CEOs in the corporate governance literature, including how ownership structure might affect CEO compensation (Baixauli-Soler & Sanchez-Marin, 2015; Cheung, Stouraitis, & Wong, 2005; Conyon & He, 2011; Rashid, 2013; Sheikh, Shah, & Akbar, 2018; Ullah, Jiang, Shahab, Li, & Xu, 2020).

Executive compensation is one of several mechanisms for corporate governance Aggarwal and Samwick (1999). It can be argued that executive compensation is very important for shareholders and policymakers (Bebchuk.. & Fried, 2004). Supporting this argument, Gopalan, Milbourn, Song, and Thakor (2014) point out that executive compensation plays a vital role in mitigating the company's agency cost, by effectively aligning the interests of shareholders and managers. In this vein, companies are either managed by professional managers or there is an effective separation of ownership and management (Berle & Means, 1932). As noted by Jensen and Meckling (1976) this effective separation of ownership and management generates a relationship between owners/shareholders and

managers/agents, which is known as the “agency relationship” or “traditional agency conflict”. Such an agency relationship leads to conflicts of interest between owners and managers, in that owners and managers each tend to act in their own interests. According to [Lei, Lin, and Wei \(2013\)](#), agency relationship issues can be generally categorized into two groups: agency problems between shareholders and managers, and agency problems between large shareholders and minority shareholders. The appearance of agency conflict in firms hinders performance by increasing the company’s agency cost.

After the wave of financial collapses that occurred in companies in the early 21<sup>st</sup> century (e.g., WorldCom, Enron, and HIH), shareholders’ confidence has crumbled due to dubious accounting practices and company failures. Firms such as these lost billions of dollars for shareholders around the world. This has given impetus to shareholders’ concerns about the effectiveness of corporate governance practices. Therefore, a vital political issue has appeared in developed countries, especially in companies in the United States, known as “executive compensation” ([Murphy, 1999](#)).

As noted by [Jensen and Murphy \(1990\)](#), there are a considerable issues with CEO compensation. They argue that the amount CEOs are paid is not of concern. The real problem is how they are paid ([Jensen & Murphy, 1990](#)). Others support this by claiming that executive compensation can function not only as a tool for alleviating agency conflict, but also as part of the agency problem itself ([Bebchuk & Fried, 2003](#)). It is claimed that executives are paid like bureaucrats; however, annual changes in such executive compensation do not necessarily reflect the performance of the firm ([Jensen & Murphy, 1990](#)). CEOs do not always act to maximize the company’s value. [Friebel and Matros \(2005\)](#) pointed out that the executives of well-performing companies receive lower wages than executives of distressed firms. This may be because, in most firms, the executives’ compensation is actually independent of performance ([Hill, Lopez, & Reitenga, 2016; Jensen & Murphy, 1990](#)).

In the governance literature, this has led to the question of whether overpaid top executives are actually working well. Consequently, on the one hand, criticisms from shareholders and unions have increased, and, on the other, a series of legislative reforms have been repeatedly debated, reframed, and renewed by related parties in developed economies like the United States. Therefore, various reforms have become an increasingly significant agenda item in the world’s pursuit of sustainable and strengthened firm value. In response, the dispute about executive pay returned, especially after the 2008 global financial crisis which, in the United States, prompted “the receipt of federal bailout money by the executives of most distressed financial institutions” ([Rashid, 2013](#)). President Barack Obama criticized the practice of awarding top CEOs of such companies bonuses, yet throughout this period the practice of rewarding CEOs was not unusual.

Among the many reforms adopted by the US government, was that the Securities Exchange Commission required more information about executives’ compensation in firms’ disclosures. Furthermore, the government imposed a policy to limit executive compensation contracts for companies accepting public bailout funds ([DeVaro & Fung, 2010](#)). To this end, President Barack Obama signed the Recovery and Reinvestment Act on February 17, 2009. This caps executive compensation at \$500,000 per year for companies receiving public bailout funds ([DeVaro & Fung, 2010](#)). These reforms were, in part, an attempt to do away with the system of executives being rewarded for failure. Such reforms may help to bring a better balance of power within the firm to accomplish its goals more effectively.

However, proponents of generous executive compensation justify it by arguing that the incremental wealth of shareholders is created by CEOs ([Core & Guay, 2010; Gong, 2011](#)). [Oyer \(2004\)](#) indicated that agency theory ignores other factors that can determine some common schemes of CEO compensation in which employees are usually remunerated or punished based on matters beyond their control. [Fulmer \(2009\)](#) supported this argument that “labor market-related factors and characteristics explain additional variance in annual pay” of CEOs (p. 659). This argument is further supported by [Kaplan \(2008\)](#). [Chen and Leng \(2004\)](#) reported that the more proficient the managers in the market, the more sensitive the market’s average pay-performance. [Gabaix and Landier \(2008\)](#) and

Rajgopal, Shevlin, and Zamora (2006) suggested that differences in CEOs' talents justify the great divergence in CEO compensation.

The board can assist in maximizing shareholder value by designing a CEO compensation scheme to achieve this objective (Bebchuk, Fried, & Walker, 2002). For this reason, commentators and researchers have suggested an "optimal contracting approach" in which executive compensation in firms is thought to help mitigate the agency cost that may arise between shareholders and managers (Bebchuk et al., 2002). This is a stock-based compensation plan. As Zhang, Tang, and Lin (2016) indicate, the optimal contracting approach does not disconnect the executive contract from firm performance. This approach may play a pivotal role as a governance tool in companies where monitoring and controlling are difficult. As stated by Bebchuk and Fried (2005), financial economists examining CEO compensation "have typically assumed that pay arrangements are produced by arm's length contracting—contracting between executives attempting to get the best possible deal for themselves and boards trying to get the best possible deal for shareholders" (p.1). Therefore, this approach eventually promotes firm performance and ameliorates agency cost, so it may maximize shareholder value.

However, an unsoundly designed stock-based compensation plan can lead to excessive levels of compensation and damage the corporation's value (Jensen, Murphy, & Wruck, 2004). Further, when compensation is greatly reliant on stock options, managers are motivated to maximize short-term results to augment their own compensation (Maher & Andersson, 2000). As the management team prepares the accounting profit, executive managers are more likely to use specific accounting methods to improve performance (Barth, Gulbrandsen, & Schonea, 2005). And, if top executives are paid on the basis of accounting profits, controversial accounting practices will be used to manipulate the accounting profit, which is a simple process, as Pham, Suchard, and Zein (2011) confirmed. In the words of Baker (2002), "paying executives on the basis of accounting profits may induce them to engage in wasteful or even counterproductive activities". There persists a failure to identify how CEOs' compensation should best be determined. The focus of this study is whether the ownership structure (government ownership, family ownership, or foreign ownership) influences CEO pay in an emerging economy, with Jordan as the context.

The rest of the paper is organized as follows: In the second section, company ownership structure in Jordan is described. In the third and fourth sections, a literature review and the theoretical background of this study are provided, respectively. The hypothesis development is outlined in the fifth section. The study method is described in the sixth section. The results of the study are provided in the seventh section, while conclusions, implications and limitations are set out in the final section.

## 2. CORPORATE GOVERNANCE AND OWNERSHIP STRUCTURE IN JORDAN

Generally speaking, corporate governance and its issues are comparatively new to Jordan (Jaafar & El-Shawa, 2009). The signing of Securities Law No. 23 marked an important moment for the Jordanian economy. Three institutions emerged out of what had, until 1997, been the Amman Financial Market – namely, the Jordan Securities Commission (JSC), the Amman Stock Exchange, and the Securities Depository Centre (Jordan Securities Commission JSC, 2012). Due to the increased importance placed on practices of corporate governance in Jordan by international donor agencies such as the World Bank and the Organization for Economic Cooperation and Development, serious reforms have been conducted to achieve sustainable and strengthened economic growth. For instance, Jordan has issued numerous corporate governance codes. These are instructions of corporate governance for private shareholding firms, shareholding listed companies, banks, limited liability firms and non-listed public shareholding companies, and insurance companies.

In Jordan, the tools of firms' control are often internally oriented, similarly to companies in Japan and Germany. In Jordanian companies, there is a high concentration of ownership by the corporation's founding family, leading to high levels of control (Alhababsah, 2019). Unlike Anglo-American firms, the ownership of Jordanian

companies is highly concentrated (Qa'dan & Suwaidan, 2019; Yassin, 2017). Further, individual shareholdings are vast, and the structure of cross-shareholding is uncommon. As Xu and Wang (1999) pointed out, the ownership structure generally represents the main shareholders' own voluminous stakes within a single corporation, which is also indicative of the well-known "ownership control approach" to company management. In other words, these shareholders are often the board directors of the company. Thus, these shareholders hold positions both on the board and in top management, leading to weak monitoring of management and performance. The governance of the company is, therefore, strenuously influenced by its major shareholders. Most corporate governance in Jordan can be described as an "ownership-based model".

In Jordanian firms, a one-tier system operates (European Bank for Reconstruction and Development, 2017). Thus, the board chairperson and CEO carry out responsibilities and duties together in one organizational layer, which is a popular arrangement in Anglo-American countries (Maassen, 2002). Hence, the boards of many listed Jordanian companies tend not to monitor top management, as CEO duality is prevalent (Shanikat & Abbadi, 2011). Therefore, the features of corporate control are mostly internally oriented (Zheng, Moudud-Ul-Huq, Rahman, & Ashraf, 2017). In addition, although stocks are listed on the stock market, ownership is greatly concentrated with very extensive insider representation on the firms' boards (Solomon, 2007).

It is worth noting that there are several institutional differences between developing economies, including Jordan, and developed economies. In developed economies, as noted by Rashid (2015), firms tend to appoint professional managers because of dispersed ownership, with no one person holding a major ownership stake. In contrast, 90 per cent of Jordanian firms are owned by families, as Al-Azzam, Al-Mohameed, and Al-Qura'an (2015) confirmed. In practice, Jordanian boardrooms are powerfully dominated by shareholders who belong to one family, with the father serving as board chairman while the son acts as CEO. Thus, in the Jordanian non-financial sector, the executive managers are the family who own the firm. These owners are highly motivated to control their firms, which reduces the need for performance related pay (Banghøj, Gabrielsen, Petersen, & Plenborg, 2010). Consequently, the approach of share-based pay is absent in Jordanian firms (Olaniyi, Obembe, & Oni, 2017).

Despite the fact that listed Jordanian firms are controlled by the regulations and legislations of the JSC (Alhusban et al., 2020), the major problem of Jordanian corporate governance is the weakness of the institutional framework and a lack of enforcement capabilities, along with strong dominance by the country's main families. The institutional regulatory bodies fail to exert pressure on firms to follow principles, standards, and rules as reliable guidelines. Therefore, the differences in governance structure and regulatory systems between developed markets and the developing market of Jordan mean that Jordanian businesses are probably prone to agency problems.

To enhance corporate governance practices in Jordan, the JSC issued the first Jordanian corporate governance code for firms listed on the Amman Stock Exchange based on a "comply or explain" approach. Later in 2009, the JSC issued another code for companies listed on the Amman Stock Exchange. Subsequently, to address new instructions, Jordan issued new corporate governance directives for listed companies, effective from 22 May 2017. According to (article 2, p. 3) of the instructions of corporate governance for shareholding listed companies for the year 2017, an executive board member was defined as "a member who is a full-time employee or an employee of the company or receives a salary therefrom" (Jordan Securities Commission JSC, 2012) Furthermore, the board of directors was made responsible for forming a nomination and remuneration committee for the company. This committee develops the policy for the granting of incentives, bonuses, benefits, and salaries at the firm and reviews it annually. Further, the code for listed firms recommends that the board of directors should be responsible for assessing executive managers and ensuring compliance (Jordan Securities Commission JSC, 2012).

### 3. LITERATURE REVIEW

As mentioned previously, executive compensation has appeared as an important internal mechanism of corporate governance. It can be argued that executive compensation is the "smoking gun of governance failure"

(Monks, 2005). Monks (2005) claimed that if a company is incapable of regulating and monitoring their executive compensation, there may also be evidence that they cannot monitor other less obvious issues in the company. Furthermore, executive pay can serve as an effective tool instead of outside directors, especially in the case of insiders with ownership stakes (Coulton & Taylor, 2004). Drawing on agency theory, ownership plays a pivotal role in identifying the extent to which the interests of shareholders and managers are aligned (Connelly, Hoskisson, Tihanyi, & Certo, 2010; Demsetz & Lehn, 1985; Zahra & Pearce, 1989). Large shareholders could affect corporate strategies and plans by exercising their voting rights and control power (Hoang, Nguyen, & Hu, 2017). It is argued that ownership concentration carries with it a strong motivation to control managers because of the owners' significant interests (Hope, 2013; Shleifer & Vishny, 1986). Thus, such ownership concentration can serve an essential internal mechanism of corporate governance that can alleviate potential problems arising from the opportunistic behavior of managers (Rashid, 2016) and it can add value, especially in the absence of an effective legal environment (Alhababsah, 2019). Hence, the ownership structure is one of the most critical factors shaping governance systems in countries around the world.

Most prior studies have examined the implications of management compensation from the perspective of performance outcomes (e.g., Bhuyan, Butchey, Haar, & Talukdar, 2020; Brick, Palmon, & Wald, 2006; Core, Holthausen, & Larcker, 1999; Elsayed & Elbardan, 2018; Ozkan, 2011; Rashid, 2013; Tosi, Misangyi, Fanelli, Waldman, & Yammarino, 2004; Zoghلامي, 2021), with inconclusive results.

Regarding the ownership structure and its effect on CEO compensation, Lambert and Larcker (1993) indicated that when managers have a higher share of the ownership stake, CEO compensation is lower. Supporting this view, Core et al. (1999) found that CEO compensation is lower in the case of insider ownership of stock value. Yet, in an earlier study, Holderness and Sheehan (1988) took an opposing view and documented that managers who are main shareholders received higher managerial compensation than other officers. Studying a sample of US banks from 2005 to 2008, Victoravich, Xu, and Gan (2013) found that ownership by the top five investors is related to higher total compensation. It is confirmed that the institutional ownership has a significant influence on the executive compensation structure, and how executives' compensation is paid. Based on 17,056 observations of firms listed on the Shenzhen and Shanghai Stock Exchanges for the period 2008-2016, Ullah et al. (2020) concluded that the increase of institutional ownership is positively related to CEO compensation, while the increase of state ownership is negatively related to CEO compensation. Su, Li, and Li (2010) in an empirical Chinese study, found no significant association between ownership concentration – as measured by the ownership ratio of the largest shareholder – and executive compensation in state-owned enterprises, whereas there is a U-shaped association in non-state-owned enterprises.

Cheng and Firth (2006) used a sample of leading Hong Kong firms for nine years (1994–2002), with findings indicating that, on the one hand, block holders are associated with lower executive pay and with higher pay performance sensitivity, and on the other, directors' stockholdings mitigate pay. Pinto and Leal (2013) explored the effect of ownership concentration on executive and board compensation in Brazil, using a data set of 315 Brazilian firms traded on the National Exchange over the period of 2008–2009. Interestingly, a statistically significant negative relationship was documented between the degree of ownership concentration and executive compensation. Similarly, Khan, Dharwadkar, and Brandes (2005) maintained that ownership concentration is associated with lower levels of management compensation. However, in Pakistani companies, Sheikh et al. (2018) found that ownership concentration is positively associated with CEO compensation. It is worth noting that family controlled firms create special concerns for minority shareholders and represent challenges to good practices of corporate governance (Cheng & Firth, 2006). Hence, a CEO will earn higher compensation when the structure of corporate governance is less effective (Core et al., 1999).

Some prior researchers have addressed whether executive pay is affected by firm size. Countless previous studies have demonstrated that firm size is positively associated with executive compensation (e.g., Lee and Chen's



(2011) Taiwanese research, and Yang, Singh, and Wang's (2020) Canadian study). Chung and Pruitt (1996) suggested that a 10 per cent increase in firm size (as measured by total assets) relates to an average increase of 2.78 per cent in CEO compensation. Although with an inherent bias against excess CEO compensation, in an earlier study involving 1993 US companies, Boyd (1994) pointed out that CEO compensation is not significantly associated with firm size. Similarly, Hill et al. (2016) found no evidence of executive pay excess in the largest firms.

A review of the governance literature shows an extensive debate on CEO compensation. However, results about the effects of ownership structure on CEO compensation have so far been inconclusive, which has prompted this research. This study is an investigation of whether the ownership structure (in the form of government ownership, family ownership, or foreign ownership) influences CEO compensation in emerging markets, with a specific emphasis on the Jordanian market.

Jordan is an interesting setting in which to study the interplay of ownership structure and CEO compensation. Unlike most developed markets, Jordanian listed firms are characterized by a high ownership concentration, often with an individual (and his/her family) owning more than 85 percent of the total shares issued. Thus, executive managers in 90 percent of all Jordanian firms are family-based company owners (Al-Azzam et al., 2015). In addition, there are institutional differences between developed markets and the Jordanian market, such as Jordan's lower government enforcement, high insider representation in the Jordanian boardrooms, and its legal and regulatory environment. It has been argued that the ownership structure offers an effective governance mechanism, especially in the absence of a strong legal and regulatory environment (Alhababsah, 2019).

This research further distinguishes itself from other prior research by taking into account all the most prevalent ownership structures in the Jordanian market. To the best of our knowledge this is the first study into the influence of the ownership structure (government ownership, family ownership, or foreign ownership) on CEO compensation in Jordanian firms. There is scant information or knowledge about the ownership effect on CEO compensation in Jordan. A notable exception is (Abed, Suwaidan, & Slimani, 2014), whose research into the determinants of CEO compensation revealed it is strongly influenced by firm size and CEO tenure. This study responds to the call of earlier research for studies of this nature in the context of developing markets like Jordan. Hence, this study provides new insight into the effects of ownership structure on CEO compensation in a far less investigated institutional setting.

#### 4. THEORETICAL BACKGROUND AND HYPOTHESIS DEVELOPMENT

Broadly speaking, there are two theories found in the governance literature which explain the influence of ownership structure on CEO compensation – stewardship theory and agency theory. Prior studies have widely depended on these theories, with non-conclusive evidence. A brief sketch of these theoretical foundations follows.

Stewardship theory has recently developed as an alternative to the agency theory of the nature of executive management (Davis, Schoorman, & Donaldson, 1997; Donaldson, 1990; Donaldson & Davis, 1991; Hernandez, 2012). Proponents of stewardship theory argue that the manager is motivated to work in the interests of owners (Donaldson & Davis, 1991). In the words of Davis et al. (1997) “managers are not motivated by individual goals, rather, they are stewards, whose motives are aligned with the objectives of their principals”. The concept of corporate governance is based on the idea that people are essentially dependable and can be trusted (Tricker, 1994) and under this theory, therefore, executive managers can be counted on to work in the best interests of shareholders (Donaldson & Davis, 1991). As noted by Davis et al. (1997), under stewardship theory, “the model of man is based on a steward whose behavior is ordered such that pro-organizational, collectivistic behaviors have higher utility than individualistic, self-serving behaviors”. Organizational goals, rather than self-interested goals, take precedence (Lin, 2005). Therefore, stewardship theory holds that there is no conflict of interest between principals (shareholders) and agents (managers). Defenders of stewardship theory have argued that CEOs who serve as stewards are able to work in the best interests of shareholders when the corporate governance model gives them

substantial power and discretion (Lin, 2005). Qiao, Fung, Miao, and Fung (2017) confirmed that executive managers act as stewards to the benefit of their firms. Unlike in agency theory, CEOs are considered as efficacious company stewards whose objectives are consistent with those of owners. It is argued that some executive managers are likely to protect their firms' interests even when they conflict with the executive managers' self-interest (Davis et al., 1997). In addition, stewardship theory suggests that appropriate incentives and good organizational structure can motivate CEOs to act in line with their company strategy (Hernandez, 2012).

While the stewardship model assumes that CEOs act to benefit their corporations, agency theory proposes a darker side. Agency theory suggests that CEOs may work to benefit themselves, likely at the expense of owners' interests (Eisenhardt, 1989; Fama, 1980; Jensen & Meckling, 1976). Due to the separation of ownership and management, proponents of the agency theory argue there is a conflict of interest between owners and managers, based on that theory's assumption that CEOs are self-interested and opportunistic (e.g., they prefer a higher financial reward), rather than being concerned, as their main priority, with the overall advantage for the firm. Executive managers will thus act to maximize their own wealth. Supporting this view, Deegan (2006) stated that CEOs will engage in self-interested activities that can reduce the wealth of owners unless they are constrained in some way. Based on agency theory, companies incur many types of agency costs, such as earnings management, operating costs, and wealth expropriation.

The current study is built on the assumption set out by Davis et al. (1997) that CEOs can serve as stewards. Due to the stewards' belief that the benefits gained from a firm are greater than the benefits gained through self-interested activities, the steward's interests are limited. Thus, stewards hold the view that their own interests are aligned with those of the company's owners. Hence, stewards create value for the organization, maximizing and protecting owners' wealth through the company's performance. This leads to the maximization of the steward's own interests. It is argued that the executive must have an income to continue acting in the interests of the corporation and the simple difference between the executive managers and shareholders is how these needs are met (Davis et al., 1997). Therefore, "a steward's autonomy should be deliberately extended to maximize the benefits of a steward, because he or she can be trusted" (Davis et al., 1997). In this study, the question is examined whether the ownership structure (in the form of government ownership, family ownership, or foreign ownership) influences CEO compensation; in doing so, the study relies on stewardship theory, rather than agency theory. The following subsections present the hypotheses for this research.

#### *4.1. Government Ownership and CEO Compensation*

The role of government ownership in influencing executive compensation has received only minimal attention in the governance literature (Ramaswamy, Veliyath, & Gomes, 2000). Government ownership is a unique ownership form because government representatives have no rights to cash flow and they are not the real owners (Niemi, 2005). Interestingly, government ownership is described as an ineffective mechanism in terms of corporate governance (Dewenter & Malatesta, 2001; La Porta, Lopez-de-Silanes, & Shleifer, 2002; Sun & Tong, 2003). Prior researchers have argued that factors impacting on CEO compensation are not significantly affected by the presence of government ownership (Chen, Liu, & Li, 2010). Government representatives may be compensated by economic benefits or extra implicit political means, thus the presence or absence of government ownership has no effect in determining CEO compensation (Bin, Chen, & Ngo, 2020). (Randøy & Nielsen, 2002) confirmed that government representatives are rarely appointed to Swedish boardrooms and not allowed on Norwegian boards. This makes the role of government ownership in these countries inefficient and its influence on executive pay may be minimal. Therefore, in these contexts, government ownership does not seem to play a vital role in deciding CEO compensation. In Jordan, government ownership has been significantly reduced since the mid-1990s due to a privatization process (Alhababsah, 2019) which was completed in 2006. Accordingly, it is expected that government

ownership has no effect in deciding CEO compensation in Jordanian firms. The following hypothesis has been posed:

*H1: There is no relationship between government ownership and CEO compensation.*

#### *4.2. Family Ownership and CEO Compensation*

Family-based company ownership is prevalent in developing countries including Jordan. In the Jordanian context, earlier evidence shows that firm size, CEO age, and CEO tenure have a main role in determining CEO compensation. (Abed et al., 2014) demonstrated that the presence of the CEO on the board of directors is considered a main factor in deciding their compensation. The authors also documented that CEO tenure has a positive relationship with CEO compensation, whereas CEO age has a significant negative effect on CEO compensation.

More income from family ownership can be paid to executive managers when these managers facilitate rent extraction (Bebchuk & Fried, 2003). The concentration of ownership and management in a family business gives power to those family members and allows them to conduct activities in a way that is beneficial to family members and detrimental to the minority shareholders. Therefore, the family business owners may pay themselves huge compensation (Cheng & Firth, 2006). Family ownership may also affect the level of CEO compensation. In family companies, CEOs may receive higher compensation packages if they maximize the wealth of the family. Barontini and Bozzi (2010) support this view by confirming that family-owned Italian companies pay their CEOs more than other Italian companies do. It is argued that families overpay their CEOs in order to gain their loyalty (Croci, Gonenc, & Ozkan, 2012). Barak, Cohen, and Lauterbach (2011) provided empirical evidence that even though family CEOs are compensated for bad performance, professional CEOs are compensated when they increase organizational value. Another argument is that in family firms, the level of executive pay depends on whether the executive managers are family members or not. Pinto and Leal (2013) indicated that family-controlled firms pay more to their CEO, but not to the management team as a whole. In addition, CEOs' compensation was thought to be higher due to the fact that CEOs are appointed by the family (Barontini & Bozzi, 2010). Haid and Yurtoglu (2006) also found a significant positive relationship between family ownership and CEO compensation. Accordingly, the following hypothesis has been formulated:

*H2: There is a positive relationship between family ownership and CEO compensation.*

#### *4.3. Foreign Ownership and CEO Compensation*

In recent decades, foreign ownership has increased drastically in Jordanian firms, due to privatization, the main aim of which was to attract foreign investments by opening up the Jordanian market. In Jordan, local business owners welcome foreign owners because they believe that foreign owners enhance firm value (Alhababsah, 2019). Past empirical studies have indicated that the presence of foreign investors influences CEO compensation (Yoshikawa, Phan, & David, 2005; Yoshikawa, Rasheed, & Del Brio, 2010). Specifically, foreign investors have been seen to limit CEO compensation (Li, Moshirian, Nguyen, & Tan, 2007). It can be argued that foreign investors have one goal, financial returns, and thus they reduce the level of executive pay, especially when company performance is low (Yoshikawa et al., 2005). Rashid (2015) argued that, in general, external owners may have other preferences and goals and they may try to limit the level of CEO compensation. Yoshikawa et al. (2010) documented that foreign shareholders negatively impact the connection between strategy variables and CEO compensation in Japanese firms, indicating that foreign investors play an active role in mitigating cash bonus payments. Yoshikawa et al. (2005) stated that "because they can hedge their risks through portfolio diversification, they are more likely to be concerned with the immediate efficiencies achieved through wage cuts and layoffs". In light of the above arguments, the following hypothesis has been formed:

*H3: There is a negative relationship between foreign ownership and CEO compensation.*



## 5. RESEARCH METHOD

### 5.1. Sample Selection

There were 191 companies listed on the Amman Stock Exchange as of 31st December 2019. Following the earlier studies of Rashid (2013), Sheikh et al. (2018) and Ullah et al. (2020) this study was restricted to non-financial firms. Financial institutions (e.g., insurance firms, banks, and other financial institutions) were ignored because these have different corporate governance disclosure rules and a different regulatory structure. Companies with inadequate data were also excluded. The remaining 136 companies represented 71.20% of the total population of listed companies for the period of 2015 to 2019. The company specific data (for accounting information such as assets and liabilities and ownership structure information) were collected from firms' annual reports.

### 5.2. Definition of Variables

#### 5.2.1. Dependent Variables

The main dependent variable in this study is CEO compensation. The listed firms in Jordan are not required to disclose information about any individual executive's pay, including the pay of executive managers. Thus, consistent with prior studies (such as Firth, Fung, and Rui (2007); Rashid (2013); Brick et al. (2006); Victoravich et al. (2013)), total salaries of all executive managers are considered as the proxy measure of CEO compensation. Total salaries are made up of the salary, bonus, gratuity and other benefits a firm pays to its executives managers. Due to a lack of disclosure about the pay of non-executive managers, the CEO compensation in this study is based only on the pay of executive managers. This is not thought to bias the findings of the research, as the objective is to investigate CEO compensation. Following Core et al. (1999) and Abed et al. (2014) the total salary is used for the purpose of neutralizing the variability in CEO compensation. Therefore, this constitutes the variable of CEO compensation (COMP).

#### 5.2.2. Key Independent Variable

The independent variable in this study is the ownership structure. Three ownership variables exist: government ownership (GOVOWN), family ownership (FAMOWN) and foreign ownership (FOROWN). Following previous studies, such as Firth et al. (2007) and Sahakiants and Festing (2019), GOVOWN is a dummy variable equal to one if the Jordanian government has shares, and zero otherwise. FAMOWN is a ratio representing the shares held by family members or relatives divided by the total number of issued shares (see (Cheng, Lin, & Wei, 2015; Ramaswamy et al., 2000)). FOROWN refers to the ratio of shares owned by foreign investors divided by the total number of issued shares (Amewu & Alagidede, 2020; Rahman, 2017; Sakawa, Moriyama, & Watanabel, 2012).

#### 5.2.3. Control Variables

Three control variables are included: liquidity, firm age, and firm size. Liquidity may influence CEO compensation in that a firm's excess liquidity may lead to an excess of CEO compensation (Rashid, 2013). Liquidity (LIQ) is calculated as current assets divided by current liabilities. Firm age may influence the CEO compensation as a well-established firm can attract managerial talent (Rashid, 2013). A firm's age (AGE) is calculated as the natural logarithm of the total number of years a company has been listed on the stock exchange. The size of the firm is another important variable influencing the CEO's compensation (Finkelstein & Hambrick, 1989). In large companies, task complexity exists, and the executive managers may be required to conduct multiple tasks. Additionally, large companies hire professional executive managers to maximize the firm's value. Hence, large companies may pay higher compensation to quality managerial talent (Merhebi, Pattenden, Swan, & Zhou, 2006). In this study, firm size (FSIZ) is measured as the natural logarithm of the firm's total assets.

### 5.3. Regression Model Specification

To capture the influence of ownership structure in determining CEO compensation, the following model has been developed:

$$Y = \alpha + \beta_1 \text{GOVOWN} + \beta_2 \text{FAMOWN} + \beta_3 \text{FOROWN} + \beta_4 \text{LIQ} + \beta_5 \text{AGE} + \beta_6 \text{FSIZ} + \varepsilon$$

Where Y comprises the overall measure of CEO compensation, namely (COMP). GOVOWN is a dummy variable equal to one, if the Jordanian government has shares, and zero otherwise. FAMOWN refers to shares held by family members or relatives divided by the total number of issued shares. FOROWN refers to shares owned by foreign investors divided by the total number of issued shares. LIQ is the liquidity. LEV is the ratio of total debt to total assets. AGE is the natural logarithm of the total number of years a firm has been listed on the stock exchange. FSIZ is the natural logarithm of the total assets. The intercept is denoted by  $\alpha$ ,  $\beta$  is the regression coefficient, and  $\varepsilon$  is the error term.

**Table-1.** Correlation matrix of the variables.

Variable	COMP	Govown	Famown	Forown	LIQ	AGE	FSIZ	VIF
COMP	1.00							
GOVOWN	0.1481	1.00						1.21
FAMOWN	-0.0312	-0.1234	1.00					1.09
FOROWN	0.2171	-0.0951	-0.1291	1.00				1.12
LIQ	-0.1077	-0.0746	0.1119	-0.0634	1.00			1.05
AGE	0.1431	0.2879	0.0619	-0.1157	-0.1167	1.00		1.19
FSIZ	0.4461	0.3277	-0.2131	0.2234	-0.2026	0.2750	1.00	1.35

The correlation matrix of the explanatory variables in Table 1 shows that there is no high correlation among the independent variables because the correlation coefficients are very low (less than 0.45 or negative). Further, the variance inflation factors (VIFs) of all the variables are less than 2, while it is argued that a VIF higher than 10 is an indication of multicollinearity (Gujarati, 2003).

## 6. RESULTS AND DISCUSSION

### 6.1. Descriptive Statistics

Descriptive statistics of the investigated variables used in the model of CEO compensation are presented in Table 2. The descriptive statistics involve the mean, maximum, minimum, and standard deviation.

**Table-2.** Descriptive statistics of the sample.

Variable	Mean	Min.	Max.	Std. dev.
COMP	89828.24	0.000	476000	82654.01
GOVOWN	0.338	0.000	1.000	0.473
FAMOWN	0.19	0.000	0.981	0.236
FOROWN	0.117	0.000	0.987	0.210
LIQ	10.46	0.010	902.165	55.543
AGE	2.796	1.098	3.713	0.551
FSIZ	17.04	11.828	21.088	1.400

Table 2 shows that the annual average that Jordanian firms pay their CEOs is 89,828.24 Jordanian dinars (126,518.64 US dollars). The mean value in our study is relatively close to that reported by Abed et al. (2014) who determined that the annual average compensation for Jordanian CEOs between 2005 and 2010 was 70,033.5 Jordanian dinars. Ullah et al. (2020) reported that, from 2008 to 2016, on average, a CEO earned around 97,987 US dollars in Chinese A-share listed companies. This result shows that the compensation in Jordanian firms is quite low compared to CEOs' compensation in developed countries. The mean values of family ownership and foreign ownership are 0.19 and 0.12 respectively. These numbers are quite similar to those documented by Alhababsah

(2019), who also studied Jordanian firms. The mean value of government ownership indicated that, on average, 0.34 of firms in Jordan have government-held shares, despite the privatization process.

## 6.2. Hypothesis Testing

The study has 3 hypotheses. As shown in Table 3, H1 is accepted, as the relationship between government ownership and CEO compensation is positive but insignificant. A similar result was found by Bin et al. (2020) in the case of Chinese firms. It may be argued that government representatives are rarely present in Jordanian companies. Accordingly, their role is very limited in determining the level of CEO compensation. As mentioned previously, due to the privatization process in Jordan, government ownership has been significantly reduced (Alhababsah, 2019). Al Amosh and Mansor (2020) and Altawalbeh (2020) pointed out that the percentage of government ownership in Jordanian industrial companies and non-financial companies listed on the Amman Stock Exchange is 5.396% and 3.715% respectively. It is therefore difficult for government ownership to play any role in deciding CEO pay in listed firms, which explains why the level of CEO pay is unaffected by government ownership in Jordanian firms.

In respect to H2, the results show that there is a significant and positive ( $p = 0.029$ ;  $< 0.05$ ) relationship between family ownership and CEO compensation. Therefore, H2 is accepted. This result is in line with prior studies in the field (e.g. (Barontini & Bozzi, 2010; Cheng et al., 2015; Haid & Yurtoglu, 2006; Pinto & Leal, 2013)).

A major finding of this study is that family ownership increases CEO compensation. The first possible explanation for this could be that, in companies with a high level of ownership concentration, the nature of agency conflict may differ from the agency conflict found in Anglo-American firms. In the context of Anglo-American firms, there is a conflict of interest between dispersed owners and management, while developing markets with high ownership concentration, such as the Jordanian market, may reflect another type of conflict, namely, the Type II agency conflict (principal-principal agency conflict) (Sun, Yuan, Cao, & Wang, 2017). The second possible justification for this could be that, in Jordan's context of high ownership concentration, family-controlled firms pay more to their CEOs, and the CEO compensation increases with a higher proportion of their relatives or control group members on the boards. It has been argued that managers who belong to the family that controls the firm obtain more than their peers (Pinto & Leal, 2013). In Jordanian firms, the high degree of ownership concentration by the founders leads to a high level of ownership control. This situation may lead such families to use their power to pay a greater compensation when their family members hold the top management positions (Cheng et al., 2015). This result aligns with that of Pinto and Leal (2013), who found that family-controlled firms pay 43 percent more to their CEO than other firms. Another explanation is that, when corporate governance practices are less effective, as in developing countries, executive managers earn more compensation (Core et al., 1999; Gu, Wang, & Xiao, 2010). Conyon and He (2012) confirmed that corporate governance mechanisms are an important determinant of differences in CEO pay. Yet another explanation for this could be related to the family reputation. Anderson and Reeb (2003) claimed that family-owned companies have a reputational concern that encourages them to improve the firm's value. In the context of Jordan, this plays an important role, where a company's name is almost directly linked to the family's reputation. In this vein, Alhababsah (2019) argues that "in Jordanian society, people tend to boast of business success and could feel shame in the event of business failure". The need to maintain the family name creates a situation among family members whereby they must earn the loyalty of the executive managers and therefore offer excess compensation to the CEO (Barontini & Bozzi, 2010).

Regarding foreign ownership, the results also show a positive and significant relationship ( $p = 0.000$ ;  $< 0.05$ ) with CEO compensation. Accordingly, H3 is rejected. An important result of this study is thus that foreign ownership increases CEO compensation, with a significant positive relationship between foreign ownership and CEO compensation. This result is consistent with the findings of Rui, Firth, and Fung (2002); Firth et al. (2007) and Mäkinen (2008). It is argued that foreign shareholders are more concerned about their investment in firms, expect a good return, and demand better qualified CEOs to manage this Rahman (2017). As noted by Chen and

Leng (2004) the market's average pay-performance is highly sensitive when more qualified executive managers run firms. In this vein, companies with foreign shareholders have greater pay-for-performance sensitivities (Firth et al., 2007). This result supports the argument that shareholder wealth is created by CEOs (Core & Guay, 2010; Gong, 2011). Importantly, foreign investment in Jordanian firms is increasing day by day.

The results also indicate that firm size has a significant positive relationship with CEO compensation. This shows that firm size is a significant contributing factor in determining the level of CEO compensation (Boyd, 1994; Chung & Pruitt, 1996; Kashif & Mustafa, 2012). This result is in line with prior studies, such as Lau and Vos (2004); Gu and Choi (2004); Lee and Chen (2011); Rahman (2017) and Yang et al. (2020), which provide evidence indicating that firm size impacts CEO compensation. This result implies that large companies have more ability to generate high internal funding which may positively influence their level of CEO compensation. Thus, larger companies have a greater ability to pay higher CEO compensation (Merhebi et al., 2006). In contrast, the findings reveal that liquidity and age are not significant factors.

**Table-3.** The results of regression analysis.

Variable	Model	
	T. value	P. value
Constant	-9.04	0.000***
GOVOWN	0.69	0.489
FAMOWN	2.19	0.029**
FOROWN	3.90	0.000***
LIQ	-0.54	0.592
AGE	0.86	0.388
FSIZ	10.38	0.000***
Adj. R-squared	0.2145	
F-Statistics	31.91	
Probability	0.000	

Note: The significant levels are:  $P < 0.001$  (\*\*\*),  $P < 0.05$  (\*\*), and  $P < 0.10$  (\*), respectively.

## 7. CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

In Jordan, investor protection and the legal environment are weak. As a corollary, the ownership of companies tends to be concentrated in a few families or individuals. Further, the corporate governance code issued to enhance corporate governance practices in Jordan has extensively emphasized the board structure of companies. Given this context, this study has investigated how ownership structure (i.e., government ownership, family ownership, or foreign ownership) contributes towards the setting of CEO compensation. This answers the call of prior researchers that there have not, as yet, been sufficient studies of this nature conducted in developing countries. The current study involved 136 non-financial listed firms in Jordan.

The results of the study indicate that there is a positive and significant relationship between family ownership and CEO compensation. In addition, the results also show a positive and significant relationship between foreign ownership and CEO compensation. In respect to government ownership, results reveal that there is no impact on CEO compensation. Finally, among the control variables studied, only the firm size has a positive and significant impact on CEO compensation.

Aside from its theoretical contributions, this study also offers valuable implications for non-financial sector management, regulatory authorities, and practitioners in developing markets, including the Jordanian market. Firstly, family ownership, foreign ownership, and firm size play a pivotal role in determining CEO compensation. These findings have implications for regulatory authorities, such as the JSC, to encourage the participation of these types of owners in the Jordanian capital markets. Secondly, some useful guidance is offered for firms' owners, in particular minority shareholders. It is likely there is principal-principal agency conflict in non-financial firms, thus,

to prevent their interests being compromised, minority shareholders and other owners should concern themselves with the actions of both the members of the firm-owning family and the firm's executive managers. Finally, with regards to non-financial firms having some degree of government ownership, the guidance offered to these firms' owners is that government ownership is not able to play an important role in determining CEO compensation.

Like any research project, this study has some limitations, and this might warrant future examination. Firstly, financial companies were excluded because these are organized according to different instructions and rules, leading to a decrease in the sample size and diversity of the study. In this vein, future research could focus on the financial sector, given their pivotal role in the Jordanian market. Secondly, this study depended on firms' annual reports to collect data relating to the variables which were used in the regression model specifications. However, firms' annual reports may not be accurate, because the regulatory and legal environment and accounting criteria are less effective in developing markets, including the Jordanian market (Rashid, 2013). Therefore, CEO compensation is difficult to measure because the level of assurance provided by firms is imprecise. Other studies may use a different approach, such as interviews or questionnaires, which might provide more comprehensive insights and a more accurate picture of the roles of different types of ownership structure in determining CEO compensation. Thirdly, only three ownership structure variables, i.e., family ownership, foreign ownership, and government ownership, were included. Future research could explore the effect of different board characteristics (e.g., board composition, the number of board meetings, a board tenure, and board gender diversity) on CEO compensation. Some of the above limitations may have had an influence on the findings of this study. Therefore, the limitations of the study should be taken into account before the findings of this study are generalized in the context of emerging markets.

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