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The Determinants of CEO Cash Compensation in Commercial Banks: Evidence from Jordan

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Abstract
Compensation paid to top executive managers is one of the sensitive areas in modern corporate finance. The objective of this paper is to investigate the determinants of the Chief Executive Officer and/or the Chairman of the board of directors' cash compensation. It tests mainly the linkage between ownership concentration, role duality, financial performance, among other variables, and executives cash compensation for a sample of 8 commercial banks listed on Amman Stock Exchange during the period 2010-2013. By using panel data analysis, I find little evidence that highly concentrated ownership structures reduce Chairmen of the boards, but not CEOs, cash compensations. In addition, financial performance plays a major role in setting the Chairmen of the boards, but not CEOs, pay levels. Moreover, CEOs in larger banks are more compensated than others in smaller ones. Whereas, CEOs in high-risk banks are not provided with higher rewards. More importantly, the analysis fails to link executives cash compensation to role duality, suggesting that there is a small and negligible role for the separation of the positions of CEO and Chairman of the board of directors in determining CEO cash compensation. Overall, the results revealed that the factors influencing CEO cash compensation in banking industry are remarkably different of those influencing the Chairman of the board cash compensation. In summary, agency problem in Jordanian banks may not be that severe. Executives' compensation contracts and ownership structures are, to some extent, effective mechanisms for alleviating the classical agency problem and aligning the interests of owners and managers. However, Jordanian CEOs are unjustifiably overcompensated as they fail to prove their worth, in light of such lamentable performance of the Jordanian banks, which raises questions about executives' compensations determining mechanism, and the process of hiring CEOs in the first place.
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1. Introduction

1.1 Executive Compensation and Agency Problem

The agency relationship can be defined as a contract under which one or more owners (shareholders) engage another person (manager, executive) to perform some services on their behalf, which involves delegating some decision-making authority to the manager. The classical agency problem occurs when there is a separation of ownership and control, separation of ownership from management function leads to a conflict of interest between owners and managers because they have different concerns. The agency theory; given by Jensen and Meckling (1976), identifies the conflict of interest between owners and managers and how a firm attempts to overcome such conflicts, it states that both the owner and the manager of the firm want to achieve their maximum utility and, therefore, they will not act in the best interest for each other. Owners are interested in maximizing the firm value, while managers are interested in the maximization of their well-being (maximization of wealth and minimization of efforts). Therefore, managers may not manage the firm to maximize shareholders' wealth, they might pass up profitable investments because taking those investments requires more effort on their part.

Many methods have been used in modern corporations to solve the classical agency problem, one of which is the use of compensation contracts where the salary of the manager is linked to the firm performance. In order to maximize the value of the firm, shareholders choose an executive compensation contract that specifies the level of compensation as a function of performance (Core et al., 1999). In addition, shareholders are willing to pay a considerable amount of compensation to attract high-quality executive(s), in an attempt to maximize the level of efforts undertaken by the manager(s) and to influence the way the firm is run, which eventually leads to a significant increase in the value of their firm. Executive compensation can be used as a tool to align the interests of owners and managers, reduce agency costs and improve firm performance.

1.2 Executive Compensation, Ownership Structure and Role Duality

Another avenue that has been used to align the interests of owners and managers and to restrict the classical agency problem is ownership concentration. It is widely accepted that ownership concentration has the potential to limit the agency problem, which in turn improves the performance of the firm. Grossman and Hart (1986) argue that the largest shareholders are more willing to play an active role in firm decisions because they partially internalize the benefits from their monitoring effort. Shareholders with large ownership stakes have stronger incentives and

greater power at a lower cost to supervise managerial actions and mitigate potential Chief Executive Officer (CEO) entrenchment. As a result, concentrated ownership often indicates that shareholders can better guard their interests in their firms. However, firms with concentrated ownership may have a conflict of interest between majority and minority shareholders causing larger agency costs (La Porta et al., 1998; La Porta et al., 2000). Moreover, minority shareholders in highly concentrated ownership firms may be subject to potential expropriation through executive compensation. In general, executive compensation and ownership concentration are among the techniques that are used to bound executives to act in the best interest of the shareholders. Furthermore, this paper focuses on the role duality of CEO and Chairman positions. Jensen (1993) posits that the role of the Chairman of the board of directors is to run the board meetings and oversee the process of hiring, evaluating, compensating and firing the CEO. Therefore, CEO-Chairs cannot perform both functions without conflicts of interest. For the board to be effective and to perform its critical functions in protecting shareholders' interests against managerial opportunism, it is vital to separate the positions of the CEO and Chairman. These arguments propose a positive relationship between role duality and executive compensation since owner-managers may decide on their compensation regardless of the firm performance (Cheung et al., 2005). The role of the board of directors' independence and the pay committees' independence in influencing the CEOs' compensations have been examined in several papers, and have been extended to examine the role of duality (e.g., Jensen, 1993; Anderson & Bizjak, 2003; Chen et al., 2010). Therefore, this study focuses on the extent to which ownership concentration and role duality affect executive compensation.

1.3 Institutional Environment and Corporate Ownership in Jordan

Jordanian firms listed on Amman Stock Exchange (ASE) are mostly characterized by highly concentrated ownership structures and dominance of duality (Tayem, 2015). In addition, large owners assume managerial, which means that the largest shareholder usually performs the duties of the Chairman and/or the CEO. Therefore, in the case of Jordan, the largest shareholders become insiders rather than monitors (Tayem, 2015). Controlling owners have stronger incentives and greater power to extract private benefits for themselves in the form of higher compensations (Cheung et al., 2005). Finally, there is little known about CEO compensation and its relation to firm performance and ownership structure in Jordan. Not too many numbers of studies regarding CEO compensation have been conducted in small emerging economies, most studies focus on the U.S. and other well-established markets, with mixed results reported (e.g., Grossman & Hart, 1986; Jensen, 1993; Goldberg & Idson, 1995; Murphy, 1999; Core et al., 1999; La Porta et al., 2000; Zhou, 2000; Gregg et al., 2005; Sapp, 2007; Ozkan, 2007, among others). Based on the above, it is important to test such ownership patterns impact on executives' compensation.

This paper sets out to examine factors that may cause CEO cash compensation to vary among ASE listed banks. It is noteworthy that this paper is an extended and complementary work to a previously published paper titled "The Determinants of CEO Cash Compensation in Non-Financial Listed Firms: Evidence from Jordan" by the same author. A major contribution of this paper is that it will give a broader picture of the executive compensation issue, and shed a light on the determinants of CEO cash compensation in Jordan (Note 1), using a panel data set of 8 listed commercial banks during the period 2010-2013. The results help ensure that the interests between management and shareholders are aligned by linking executive compensation to bank performance. In addition, the results help determine the optimal CEO pay level and assess the performance of the sampled banks.

2. Literature Review

As a result of the sensitivity and importance of the issue on hand, the interest in studying executive compensation has significantly increased. Academics and researchers around the world have shown a wide variety of determinants of CEO compensation. Moreover, they have tried to link CEO compensation to an even wider set of explanatory variables including corporate governance elements (i.e., ownership structure and CEO role duality), board of directors characteristics (i.e., board size, independence and pay committee independence), CEO characteristics (i.e., CEO ownership, age and tenure) and firm-specific characteristics (i.e., financial performance, dividends policy, profitability, growth opportunities, Market-to-Book (MBR) ratio, number of employees, leverage ratio, sales, industry effects, firm age and size). However, they reported mixed results (e.g., Belliveau et al., 1996; Finkelstein & Boyd, 1998; Tosi et al., 2000; Brick et al., 2006; Chen et al., 2010, among others). This section gives an overview of the main studies that have been conducted regarding executive compensation.

This paper relates mainly to a study by Cheung et al. (2005). The authors examine the impact of ownership concentration on executive compensation using a sample of 412 firms from Hong Kong during the period from 1995 to 1998. They argue that in the presence of information asymmetry between inside and outside investors, a concentrated ownership structure allows owners to use their ownership rights to extract private benefits through higher compensation. The authors find that there is a positive relationship between managerial ownership and cash compensations received by the CEO and the Chairman but to varying degrees based on the level of ownership. It is noteworthy that an approach similar to the one used in Cheung et al. (2005) will be adopted in this paper, due

to the similarities between the ownership structures of Hong Kong firms with those of Jordan.

Also, related to this paper is the seminal work by Core et al. (1999). Using a sample of 205 U.S. listed firms over a three-year period, the authors examine the cross-sectional variation in executive compensation. They document that the board and ownership structure are associated with the level of CEO compensation. The authors find that higher-quality board characteristics are associated with lower compensation. Among these characteristics is the role duality, which they find that, on average, is associated with around a 150,000 U.S. Dollars increase in executive compensation. However, their ownership measures are negatively related to CEO compensation, as these measures proxy for monitoring by block-holders rather than the expropriation of insiders.

Houston and James (1995) examine the structure and level of CEO compensation in banking industry and compare it to compensation in other industries using a sample of 134 commercial banks listed in the Forbes surveys during the period from 1980 to 1990. They find that the factors influencing compensation in the banking industry are remarkably similar to those in other industries, however, bank CEOs receive less cash compensation, and receive a smaller percentage of their total compensation in the form of options and stock than CEOs in other industries. Moreover, they find that, on average, CEO cash compensation (i.e., salary plus cash bonus) is more sensitive to firm performance (measured by the stock returns) in banking than in other industries. The authors concluded that compensation policies in banking are not designed to encourage excessive risk taking, suggesting that attempts by regulators to control compensation in banking are likely to be ineffective. Carr (1997) studies a sample of small U.S. listed firms and documents that firm performance (measured using return on equity) and firm risk are significant factors in influencing the pay of executives. In addition, Gray and Cannella (1997) argue that firms with substantial risk should provide CEOs with greater total compensation. They find that unsystematic, rather than systematic, risk is related to executive pay. Conyon (1997) examines CEO cash compensation using a sample of 213 large UK firms during the period from 1988 to 1993. The author finds that remuneration committees may have some influence on CEO compensation. He concludes that separating the roles of CEO and Chairman of the board of directors, which might potentially mitigate agency problems associated with top pay setting, plays a minor role in influencing CEO pay. Moreover, Conyon and Murphy (2000) analyze differences in CEO pay and incentives in the U.S. and UK for the fiscal year 1997 and find that CEO compensation in the U.S. is higher than in the UK.

In the context of other developed countries, Zhou (2000) using a sample of 755 Canadian firms over the period from 1991 to 1995 finds that firm performance and firm size play a key role in explaining CEO pay. Gregg et al. (2005) using a sample of large UK firms over the period from 1994 to 2002 find that there is little relationship exists between cash compensation and performance. However, Ozkan (2007) studies the relationship between compensation, performance and governance variables for a sample of 390 UK nonfinancial firms during the period from 1999 to 2005. The author uses cash and equity-based compensation and finds that firm performance is positively related to the cash component of compensation only. Moreover, the author finds that institutional ownership positively influences the pay-performance relationship.

Studies from developing markets test the association between several corporate governance mechanisms and executive compensation. For example, Cheung et al. (2005) examine the impact of ownership concentration on executive compensation using a sample of 412 firms from Hong Kong during the period from 1995 to 1998. They argue that in the presence of information asymmetry between inside and outside investors, a concentrated ownership structure allows owners to use their ownership rights to extract private benefits through higher compensation. The authors find that there is a positive relationship between managerial ownership and cash compensations received by the CEO and the Chairman but to varying degrees based on the level of ownership. Kato and Long (2006) using a sample of Chinese listed firms during the period from 1998 to 2002 show that the performance-pay sensitivity is affected by the type of ownership structure. In addition, the authors document that state ownership exerts a negative impact on performance-pay sensitivity. Similarly, Firth et al. (2007) examine the impact of the board of directors' characteristics, level and type of ownership on executive compensation, and the influence of these characteristics on the performance-pay relation using a sample of 549 Chinese listed firms during the period from 1998 to 2000. The authors document a negative relationship between performance and executive pay for firms with dual positions. However, they report an insignificant negative relationship between duality and executive compensation. Lee and Chen (2011) examine the relationship between CEO compensation and CEO ownership, among other variables, using a sample of firms listed in Taiwan's stock market during the period from 1995 to 2004. Their results show that institutional ownership and CEO ownership are positively related to CEO compensation.

As for the Jordanian market, Abed et al. (2014) examine executive compensation in Jordan using a sample of 70 industrial listed firms for the period from 2005 to 2010. The authors investigate the relationship between compensation, performance and governance variables, including institutional and managerial ownership, CEO tenure, CEO age, role duality, firm age and the board size. Abed et al. (2014) document that (1) younger executives are more compensated than older ones; (2) the board of directors is influenced by the presence of the CEO among them; (3) newly established firms give higher compensations to their executives compared to mature firms, and

(4) firm size is positively related to CEO compensation. However, their results revealed that institutional ownership, board of directors' size, firm performance and leverage do not have a statistically significant effect on CEO compensation in Jordanian industrial firms.

More recently, Almughrabi (2022) examines executive compensation in Jordan using a sample of 81 non-financial listed firms for the period from 2010 to 2013. The author finds conclusive evidence that (1) dual CEOs receive higher cash compensation compared to those who do not hold the position of Chairman; (2) CEOs in larger firms are more compensated than others in smaller ones, and (3) firm's leverage, financial performance and ownership structure do not affect CEO cash compensation. The author concluded that neither compensation contracts nor concentrated ownership structures can alleviate the agency problem or reduce agency costs in Jordanian firms. Even though extant research examines the determinants of CEO compensation extensively, the relationship between executive compensation, ownership structure and role duality in emerging markets is not thoroughly examined. This study aims at filling the gap in the literature by extensively investigating the determinants of CEO and Chairman of the board of directors' cash compensation in the context of Jordan's capital market.

3. Hypotheses Development

3.1 Ownership Concentration

Ownership concentration is a double-edged sword, it may have a positive effect on executive compensation because concentrated ownership allows shareholders with large ownership to exercise control over the firm and, hence, extract benefits through higher compensation. On the other hand, ownership concentration may have a negative effect because, for large shareholders, the benefits of extracting benefits through compensation are lower than the benefits of maximizing their share in the firm. Moreover, the efficient monitoring hypothesis emphasizes that executives in highly concentrated ownership firms are closely monitored by large shareholders, which prevents management from getting higher compensations for themselves. Goldberg and Idson (1995) find a negative relationship between executive compensation and the percentage of stock held by the firm's top five shareholders, which implies that concentrated ownership reduces agency costs of managerial discretion (hence; executive compensation). Consistent with Goldberg and Idson (1995), this study contends that ownership concentration, regardless of ownership type, has a positive impact on lessening executive compensation. Thus, the following hypothesis is formulated:

H01: There is a significant negative association between ownership concentration and CEO cash compensation.

3.2 Role Duality

When the same person becomes both the CEO and Chairman of the board of directors his influence on the board increases, which allows him to get higher cash compensation (Chen et al., 2010). By separating the Chairman and CEO positions the board will have the ability to effectively monitor the CEO and control his compensation since they will be subject to less CEO influence, which in turn improves corporate governance mechanisms. Therefore, separation of the positions of CEO and Chairman of the board may result in lower executive compensation. This study focuses on the extent to which role duality affects executive compensation. Following previous studies (Jensen, 1993; Core et al., 1999; Chen et al., 2010), this study expects that firms with the same CEO-Chairperson pay higher executive compensation. Thus, the following hypothesis is formulated:

H02: There is a significant positive association between CEO role duality and his cash compensation.

3.3 Performance

As mentioned earlier, the agency theory suggests a positive relationship between CEO pay and firm performance. According to Murphy (1999), firms can align the interests between management and shareholders by linking executive compensation to firm performance. Therefore, numerous empirical studies have been conducted to examine such link, but they report conflicting findings. For example, Finkelstein and Boyd (1998), Tosi et al. (2000) and Abed et al. (2014) could not find any relationship between firm performance and executive compensation, whereas Belliveau et al. (1996), Brick et al. (2006) and Ozkan (2007) find a strong and positive relationship between them. Firm performance can be measured by Return on Assets (ROA), this ratio has been previously used as a proxy for firm performance in many papers like Core et al. (1999) and Abed et al. (2014). This study focuses on the extent to which a firm's financial performance affects executive compensation. Following previous studies (Murphy, 1999; Zhou, 2000; Ozkan, 2007), this study expects that as firms perform better, their CEOs will be granted higher rewards. Thus, the following hypothesis is formulated:

H03: There is a significant positive association between firm performance and its CEO cash compensation.

3.4 Size

The size of the firm has been proposed in the literature as one of the most important variables in explaining the variation in executive compensation, it is widely used as a control variable when it comes to examining CEO

compensation. Many measures have been previously used as a proxy for firm size (i.e., firm sales, total assets and market capitalization). For the purposes of this study, firm size has been measured using market capitalization, which has been previously used in many papers like Ozkan (2007) and Cadman et al. (2009). Larger firms are more complex and, therefore, they necessitate hiring high-quality executives at higher salaries. This study expects that the larger the size of the firm, the greater will be the CEO compensation and more prospects for conflict of interest will emerge. Thus, the following hypothesis is formulated:
H04: There is a significant positive association between firm size and the cash compensation given to the CEO.

3.5 Risk
Financial policies with a higher level of leverage increase the firm's financial risk. One of the most commonly used measures of financial risk is leverage, which measures the firm's use of borrowed funds. Leverage is potentially associated with CEO compensation, many studies expected that CEOs demand higher compensation in exchange for higher risk. Gray and Cannella (1997) argue that if high-risk compensation contracts are imposed on executives with no corresponding increase in pay level, higher-quality executives may seek opportunities elsewhere. This study expects that as firms take more risk (in the form of higher leverage), executives will demand higher compensation. Thus, the following hypothesis is formulated:
H05: There is a significant positive association between firm risk and CEO cash compensation.

4. Methodology
4.1 Sample and Data Source
The study starts with all commercial banks listed on ASE during a four-year period (2010-2013). Some banks were excluded due to insufficient data, as their annual reports do not contain all the required information. This case is possible because of missing information on the CEO and/or Chairman of the board of directors' compensation. Therefore, the final sample includes 8 banks (32 firm-year observations) covering 2010 to 2013. Banks were selected due to their unique characteristics, such as high levels of capital and sufficient levels of liquidity. Moreover, banks are closely monitored, more regulated and likely to compensate their CEOs remarkably different than firms in other sectors, which justifies the necessitate of studying banks apart from other non-financial firms. In this paper, the required financial, accounting and other data were manually obtained from banks' annual reports. Financial reports are a reliable source of data for public firms as they are audited externally. All Jordanian listed firms are required by law to disclose information on their executives' compensation in the annual reports (Note 2). Data were double-checked and carefully examined to assure their accuracy and integrity. All errors are my own. Appendix A gives a detailed list of the banks included in this study. It is noteworthy that only one bank in the selected sample has a female CEO, however, all of them have a female board member.

4.2 Construction of Variables
Executives are mainly driven by two incentives; the first one is cash compensation (base salary and bonus), the second incentive arises from executives' ownership of the firm's stocks (the CEOs' shareholdings in the firm). Accordingly, executives' compensations have two crucial components; the proportion of compensation from cash-based sources (non-equity based), and the proportion of compensation from equity-based incentives (see, for instance, the discussion on equity-based contracts in Core & Guay, 1999 and Core et al., 2003). Many studies were conducted using equity-based compensation only (e.g., Zhou, 2000; Cheung et al., 2005; Coles et al., 2006; Harford & Li, 2007; Zheng & Zhou, 2009; Jansen et al., 2009; Chen et al., 2011, among others). Other studies examined both cash and equity-based compensations (e.g., Ozkan, 2007; Jouber & Fakhfakh, 2011). However, the focus of this study will be on cash-based compensation only. Although cash compensation provides only one source of incentives for CEOs, the use of cash compensation is consistent with previous research (e.g., Kato & Long, 2006; Firth et al., 2007; Gu & Kim, 2009; Abed et al., 2014; Al-mughrabi, 2022).

The dependent variable; executive compensation, for the purposes of this study has been measured using cash compensation (the natural logarithm of the cash rewards received yearly by the CEO, where cash rewards include salary and bonus only). Jordanian listed banks provide their CEOs with several direct and indirect cash rewards that are designed to contrive good performance and maintain a commitment to the bank, namely salary, bonus, housing and hospitality allowances, travel and transport expenses within Jordan and abroad (including a vehicle for personal use, and its driver salary, flight tickets and staying expenses), in addition to a membership bonus (bonus that the CEO receives for serving as a board member besides serving as a CEO). In some cases, CEOs receive a representation bonus for representing their bank in other firms (for instance, being a member of the board of directors in other firms and acting on behalf of their bank). Finally, some CEOs may have a retirement bonus (indemnity that CEOs receive once they retired). As for the independent variables, the literature suggests several explanatory variables that may explain the variation in CEO cash compensation. This study includes two sets of variables: The first set includes proxies for corporate governance, these are ownership concentration (the number of shares held by the largest three shareholders divided by the total number of shares outstanding) and CEO role

duality (dummy variable that takes the value of one if a bank CEO also serves as the Chairman of the board of directors, and zero otherwise). The second set of variables includes proxies for firm performance and fundamentals, these are return on assets (calculated as Earnings Before Interest and Taxes (EBIT) scaled by total assets), market capitalization (logarithmic transformation of the fiscal year-end share price times the total number of shares outstanding) and debt-to-asset ratio (the percentage of total or long-term debt relative to assets).

It is widely known that firm's growth is measured by market to book ratio. Market capitalization is the numerator in calculating market to book ratio, a decrease in market capitalization would mean a decrease in market to book ratio (if there are no significant changes in the book value of equity). Therefore, market capitalization is a reasonable measure not only of firm size but also firm's growth opportunities, despite the fact that market capitalization may be correlated with total shareholder return and, hence, performance. Furthermore, concerning return on assets, the majority of prior studies have calculated ROA using net income. However, this study uses EBIT instead of net income in calculating return on assets, which eliminates the effect of different interest expenses and tax rates imposed on Jordanian banks. Excluding both interest expenses and taxes (which may be adjusted occasionally based on government objectives) helps compare firm performance over time, it also makes it easier for cross-firm comparison. Finally, regarding CEO role duality, much prior research assumes a firm to have dual positions when its CEO belongs to the board of directors (a member of the board of directors). In contrast, for the purposes of this study, only banks with the same person occupying both the CEO and Chairman of the board positions are considered to have CEO role duality. Table 1 below summarizes the definitions of the variables used in the regression model.

Table 1. Variables definitions

Variable	Definition
COMP	Natural logarithm of the cash rewards (expressed in Jordanian Dinars) received yearly by the CEO, where cash rewards include salary and bonus only.
COMP (Chairman)	Natural logarithm of the cash rewards (expressed in Jordanian Dinars) received yearly by the Chairman of the board of directors, where cash rewards include salary and bonus only.
OwnCon	Ownership concentration, the ownership percentage of the largest three shareholders.
DUAL	CEO role duality, a dummy variable that equals one if the CEO also serves as Chairman of the board of directors, and zero otherwise.
ROA	Return on assets, the ratio of earnings before interest and taxes to total assets, a proxy for a bank's financial performance.
MktCap	Market capitalization, the natural logarithm of the bank's fiscal year-end price per share multiplied by the total number of shares outstanding, a proxy for bank size.
LEV	Leverage ratio, the ratio of total liabilities to total assets, a proxy for a bank's financial risk.
Year2011	Time dummy variable that equals one if the year is 2011, and zero otherwise.
Year2012	Time dummy variable that equals one if the year is 2012, and zero otherwise.
Year2013	Time dummy variable that equals one if the year is 2013, and zero otherwise.

4.3 Model

A model similar to Al-mughrabi (2022) will be adopted to test the research hypotheses (at a 0.05 level of significance), the following multiple linear regression model will be used:

$$COMP_{it} = \beta_{0} + \beta_1 OwnCon_{it} + \beta_2 DUAL_{it} + \beta_3 ROA_{it} + \beta_4 MktCap_{it} + \beta_5 LEV_{it} + \varepsilon_{it} \quad (1)$$

where COMP is the natural logarithm of the annual salary and bonus given to the CEO; OwnCon is the fraction of total bank shares outstanding held by the largest three owners; DUAL is a dummy variable that takes the value of one if a bank CEO also serves as the Chairman of the board of directors, and zero otherwise; ROA is earnings before interest and taxes divided by total assets; MktCap is the natural logarithm of the fiscal year-end share price multiplied by the total number of shares outstanding; LEV is total debt divided by total assets; ε is the error term, assumed to be independently and identically distributed, with zero mean and σ_ε^2 variance; $\beta_{0...}\beta_5$ are the regression coefficients; the subscripts i and t denote bank and time, respectively. Time dummies are included to remove any impact of macroeconomic conditions change. Furthermore, the regression model was estimated after the realization of the required modifications; the logarithmic transformation of cash compensation and market capitalization has been used to normalize the variables and mitigate Heteroskedasticity resulting from extreme skewness.

4.4 Research Limitation

As mentioned earlier, CEO total compensation consists of two components; cash and equity-based compensation. Cash-based compensation provides a substantial source of incentives for CEOs, the other source of CEOs' incentives arises from equity-based compensation (i.e., CEO stock ownership, dividends, long-term incentive plans, restricted stock and options). Equity-based compensation is normally measured as the fraction of total firm shares outstanding held by the CEO and his immediate family. In some cases, it is hard to link such shares

ownership to the CEO, as there are family members or friends who hold shares that are unable to trace. In addition, equity-based incentives represent a relatively small portion of total compensation. Therefore, and due to a lack of available data, the equity-based component of compensation is excluded from the analysis. The focus of this study will be on cash-based compensation only. Nevertheless, the empirical results are presented next.

5. Empirical Results

5.1 Descriptive Statistics

Table 2 presents summary statistics for the dependent and independent variables employed in the analysis model for banks listed on ASE during the four-year study period (2010-2013).

Table 2. Descriptive statistics

	Mean	Median	Max.	Min.	Std. Div.	Skewness	Kurtosis
Cash Compensation[a]	345900.6	307313	773000	91718	125934	1.137	5.598
COMP	5.511	5.488	5.888	4.962	0.164	-0.761	5.641
OwnCon	0.563	0.529	0.877	0.289	0.218	0.241	1.557
DUAL	0.125	0.000	1	0	0.336	2.268	6.143
ROA	0.016	0.018	0.026	-0.001	0.007	-0.961	3.039
MktCap	8.475	8.263	9.727	7.640	0.635	0.813	2.256
Total Assets[b]	4699.825	1201.742	24538.370	342.656	7652.008	1.999	5.365
LEV	0.849	0.848	0.892	0.780	0.021	-0.558	4.947

Note. Variables are as defined in Table 1. Number of observations= 32.

[a] Cash Compensation is expressed in Jordanian Dinars (JODs) and is not used in the analysis.

[b] Total Assets is expressed in millions of JODs and is not used in the analysis.

Table 2 reports that a CEO in Jordanian bank, as depicted by the selected sample, typically earns 345,900 Jordanian Dinars as annual cash compensation, varying from a minimum of 91,718 Jordanian Dinars to a maximum of 773,000 Jordanian Dinars. It also shows the widespread of executives' compensations, as the standard deviation of cash compensation is 125,934. In addition, about 56% of Jordanian listed banks are owned by their largest three shareholders, which points to the highly concentrated ownership structures. Moreover, 12.5% of Jordanian listed banks do not separate the CEO and Chairman of the board positions.

Return on assets has an average of 1.6 percent, varying from a minimum of -0.1 percent to a maximum of 2.6 percent, the negative values of ROA are linked to banks with inferior performance that experienced a loss in one or more years during the study period, where the loss occurs when the bank's expenses exceed its revenues. In addition, ROA is considered as an indicator of how profitable a firm is relative to its total assets, which gives a clue about how inefficient management is at using its assets to generate earnings. It is well-documented that economic turbulence affects the operations, financial transactions and, thus, earnings of all the firms in the economy. As a consequence of the global financial crisis, Jordanian listed banks have witnessed a significant drop in the market prices of shares, which led to a decrease in the market capitalization, accompanied with low growth opportunities (measured by market to book ratio). However, Jordanian listed banks have average (median) total assets of almost JOD4.7 billion (JOD1.202 billion), varying from a minimum of JOD342.656 million to a maximum of JOD24.538 billion. Whereas, the leverage ratio has a mean value of 84.9 percent, with a standard deviation of 2.1 percent, suggesting that Jordanian listed banks, in general, are highly leveraged. Apparently, banks depend heavily on debt rather than equity to finance their assets, which is not surprising due to the nature of their core business, as banks debt consists mainly of customers deposits.

More broadly speaking, banks are remarkably of higher financial risk, larger size, inferior performance, futile profitability, less prevalence of duality, more concentrated ownership structures and compensate their CEOs with higher rewards compared to Jordanian non-financial listed firms (i.e., services and industrial firms).

It is noteworthy that a CEO in Jordanian bank, as shown in Table 2, typically earns 28,825 Jordanian Dinars per month (345,900 Jordanian Dinars per year) as cash rewards. Although this pay level seems low by U.S. standards, it is extremely high compared to the average employee wage in Jordan. During the four-year study period (2010-2013), the average minimum wage in Jordan was 170 Jordanian Dinars per month, which means that a CEO in Jordanian commercial bank receives an amount equivalent to 169.5 times the average minimum wage (Note 3). Additionally, the Department of Statistics reports that the average wage per employee (senior officials and managers only) for both public and private sectors during the study period was 1,288 Jordanian Dinars per month, therefore, the average CEO cash compensation in Jordanian commercial banks is about 22.5 times that of a typical senior manager in the public or private sector (Note 4). Moreover, CEOs in Jordanian listed banks receive significantly higher compensations than Chairmen of the boards of directors. Finally, as documented in Table 2, the dependent and independent variables report skewness and kurtosis values close to normal distribution. Therefore, the normality problem does not seem to exist in this study. The final sample consists of 8 commercial banks (32 firm-year observations) listed on ASE.

5.2 Correlation Results

Pearson correlation matrix is presented next in Table 3, it shows significant pairwise correlations between some variables.

Table 3. Pearson correlation matrix [a]

	COMP	OwnCon	DUAL	ROA	MktCap	LEV
COMP	1					
OwnCon	-0.211	1				
DUAL	0.293	-0.189	1			
ROA	0.081	0.084	0.417**	1		
MktCap	0.453***	-0.420**	0.033	0.144	1	
LEV	0.268	-0.128	0.226	-0.180	-0.070	1

Note. Variables are as defined in Table 1.

[a] Listwise, Number of observations= 32.

***and ** Denote significance at the 0.01 and 0.05 levels, respectively, for a two-tailed test.

First, MktCap is negatively and significantly correlated with OwnCon at a 5% significant level. Contrariwise, a significant positive correlation exists between MktCap and COMP at a 1% level of significant, indicating that CEOs in larger banks demand more compensation, as larger banks require more effort on their part. It is typical that larger banks are likely to have less concentrated ownership structures and tend to pay higher levels of compensation to their CEOs compared to smaller banks. Second, DUAL is positively and significantly correlated with ROA at a 5% significant level, suggesting that banks with the same CEO-Chairperson are of superior performance and higher profitability compared to banks with separated CEO and Chairman positions. Table 3 does not record any significant association between other variables, the magnitude of correlations does not exceed 0.30 and, therefore, the relations between variables appear small. However, Table 3 reports a negative insignificant correlation between OwnCon and COMP, whereas the latter is positively and insignificantly correlated with DUAL, which is supported by the negative correlation between OwnCon and DUAL, implying that neither ownership structure nor role duality affects CEO cash compensation. Moreover, Table 3 reports a positive insignificant correlation between LEV and COMP, meaning that any increase (decrease) in the level of financial risk is not associated with higher (lower) CEO cash rewards. None of the remaining variables is correlated to an extent that merits noting.

5.3 Regression Results

To examine the determinants of CEO cash compensation, the regression equation presented earlier has been used. Table 4 below reports the estimated results of the Ordinary Least Squares (OLS) regression model.

Table 4. Regression results

Dependent variable: COMP	Coefficient	Std. Error	t-statistic	Prob.
Constant	2.678	1.240	2.159	0.042
OwnCon	0.071	0.137	0.515	0.611
DUAL	0.141	0.093	1.520	0.142
ROA	-2.899	4.549	-0.637	0.530
MktCap	0.132	0.046	2.863	0.009
LEV	1.927	1.319	1.461	0.158
Year2011	0.047	0.072	0.655	0.519
Year2012	0.121	0.072	1.684	0.106
Year2013	0.112	0.072	1.542	0.137
R-square= 0.440		Adj. R-square= 0.246		
F-statistics= 2.263		Prob. F-statistics ≤ 0.060		

Note. Variables are as defined in Table 1. Number of observations=32.

Table 4 shows that, inconsistent with the efficient monitoring hypothesis and the study predictions, ownership concentration has no influence on CEO cash compensation, indicating that concentrated ownership does not reduce agency costs in Jordanian banks. Moreover, minority shareholders are not well-protected and may be subject to potential expropriation through executive compensation, as executives are not closely monitored by large shareholders, which is inconsistent with Goldberg and Idson (1995) and Core et al. (1999), who find that ownership concentration has a positive impact on lessening executive compensation. Table 4 also shows that role duality has an insignificant positive relationship with CEO cash compensation, suggesting that being the same CEO-Chairperson is not associated with higher cash rewards. In other words, there is a small and negligible role for the separation of the positions of CEO and Chairman of the board of directors in determining CEO cash compensation and mitigating agency problem. Although this result is inconsistent with the study predictions, it is in line with

Conyon (1997) and Firth et al. (2007) results.

Surprisingly, inconsistent with the study predictions, bank performance (measured by return on assets) has an insignificant negative relationship with CEO cash compensation, implying that CEOs' compensation contracts are not contributing to maximizing the value of the bank. This result tends to suggest that the CEO and directors engage in cronyism (if he was not hired based on nepotism, or family ties in the first place) and is getting paid regardless of the performance of the bank, which can have adverse effects on the bank and its shareholders. Although this result is inconsistent with some previous studies (e.g., Carr, 1997; Brick et al., 2006; Ozkan, 2007), it is in line with Tosi et al. (2000) and Abed et al. (2014) results.

It can be seen in Table 4 that bank size (measured by market capitalization) is the only predictor that was found to be positively and significantly related to CEO cash compensation ($\alpha \leq 0.01$). The fact that the coefficient of bank size is positive positing that CEOs in larger banks are more compensated than others in smaller ones. Consistent with the study predictions, CEOs in larger banks demand more compensation, as larger banks are more complex and, therefore, require more effort on their part. This finding is in line with Zhou (2000) and Abed et al. (2014) findings.

Finally, there is an insignificant positive relationship between leverage and CEO cash compensation, indicating that financial risk plays a small and negligible role in setting executives' cash compensation, which is inconsistent with the study predictions. Gray and Cannella (1997) argue that if high-risk compensation contracts are imposed on executives with no corresponding increase in pay level, higher-quality executives may seek opportunities elsewhere. In addition, time dummies have not been found to have a statistically significant relationship with CEO cash compensation, suggesting that CEO cash compensation has not increased over time relative to the 2010 fiscal year. A possible explanation is that, during the study period, banks suffered financially from the 2008-2009 global financial crisis, so they did not raise their CEOs' pay levels.

5.4 Chairman of the Board of Directors' Cash Compensation

As shown in Table 2, almost 88 percent of Jordanian listed banks have the positions of CEO and Chairman of the board separated. Therefore, it is vital to scrutinize the determinants of the Chairman of the board of directors' cash compensation. In order to do so, the regression equation presented earlier has been replicated using the Chairman of the board of directors' cash compensation as the dependent variable. Table 5 below shows the estimated results of the OLS regression model.

Table 5. Regression results (Chairman of the board cash compensation)

Dependent variable: COMP (Chairman)	Coefficient	Std. Error	t-statistic	Prob.
Constant	4.794	4.272	1.122	0.273
OwnCon	-1.710	0.472	-3.624	0.001
DUAL	0.106	0.320	0.330	0.744
ROA	37.590	15.672	2.398	0.025
MktCap	0.160	0.159	1.010	0.323
LEV	-0.957	4.545	-0.211	0.835
Year2011	0.265	0.247	1.076	0.293
Year2012	0.044	0.247	0.177	0.861
Year2013	0.046	0.250	0.185	0.855
R-square= 0.591		Adj. R-square= 0.449		
F-statistics= 4.156		Prob. F-statistics ≤ 0.003		

Note. Variables are as defined in Table 1. Number of observations=32.

Table 5 shows that ownership concentration is negatively and significantly related to Chairman cash compensation ($\alpha \leq 0.01$), indicating that highly concentrated ownership structures play a significant role in lessening Chairman cash compensation. In other words, Chairmen of the boards do not set their desirable pay level. Table 5 also shows that bank performance (measured by return on assets) is positively and significantly related to Chairman cash compensation ($\alpha \leq 0.05$), suggesting that banks with superior performance compensate their Chairmen of the boards with higher rewards.

It can be seen in Table 5 that role duality has no influence on Chairman cash compensation, implying that there is a negligible role for the separation of the positions of CEO and Chairman of the board of directors in influencing Chairman cash compensation. In addition, bank size (measured by market capitalization) has an insignificant positive relationship with Chairman cash compensation, positing that Chairman cash compensation is not affected by bank size and, therefore, larger banks do not compensate their Chairmen of the boards with higher rewards.

The results of the regression model report that there is an insignificant negative relationship between leverage and Chairman cash compensation, indicating that Chairman cash compensation is not tied to the bank's financial

risk and, therefore, Chairmen of the boards in highly leveraged banks are not compensated with higher rewards. Whereas, there is an insignificant positive relationship between time dummies and the cash compensation received by the Chairman of the board, suggesting that Chairman cash compensation has not increased over time relative to the 2010 fiscal year.

The estimated results regarding Chairman of the board cash compensation (reported above in Table 5) diverge sharply in comparison to those of the CEO cash compensation (reported earlier in Table 4), for instance, ownership concentration is negatively and significantly related to Chairman cash compensation, while the opposite relationship exists in case of CEO cash compensation, also the significance level disappears. Indicating that highly concentrated ownership structures play an important role in lessening Chairman cash compensation, but not the CEO cash compensation. On the contrary, the results documented that bank performance (measured by ROA) is positively and significantly related to Chairman cash compensation, while the opposite relationship exists in case of CEO cash compensation, also the significance level disappears. Suggesting that Chairmen of the boards in superior performance banks are compensated with higher rewards, while CEOs are getting paid regardless of the bank performance. Moreover, the estimated results demonstrated that bank size (measured by market capitalization) is positively and significantly related to CEO cash compensation, same relationship exists in case of Chairman cash compensation, but the significance level disappears. Implying that CEOs in larger banks are more compensated than others in smaller ones, however, larger banks do not compensate their Chairmen of the boards with higher rewards.

In general, the results showed that there is no apparent difference between CEO and Chairman cash compensation in terms of role duality and leverage. Role duality has kept its insignificant positive relationship with CEO cash compensation and Chairman cash compensation, positing that there is a small and negligible role for the separation of the positions of CEO and Chairman of the board in mitigating agency problem. On the other hand, an insignificant positive relationship exists between leverage and CEO cash compensation, while an insignificant negative relationship exists in case of Chairman cash compensation, indicating that neither CEO cash compensation nor Chairman cash compensation is tied to the bank's financial risk. In addition, time dummies have not been found to have a statistically significant effect on the cash compensation received by the CEO or the Chairman of the board. A possible explanation is that, during the study period, banks suffered financially from the 2008-2009 global financial crisis, so they did not raise their executives' pay levels.

6. Conclusions and Recommendations

The objective of this paper was to investigate the impact of several variables on executives' cash compensation for a sample of commercial banks listed on ASE during a four-year period (from 2010 to 2013) using panel data analysis. The findings of this paper have shown that market capitalization is the only explanatory variable that has a positive and significant effect on CEO cash compensation, positing that CEOs' pay levels depend strongly on bank size, as larger banks pay higher levels of cash compensation to their CEOs, but not their Chairmen of the boards. Furthermore, the results provided evidence that ownership concentration and return on assets significantly influence the Chairman of the board cash compensation, but not the CEO cash compensation. The negative coefficient of ownership concentration implies that Chairmen of the boards are monitored to an extent that prevents them from getting higher compensations for themselves. The positive coefficient of return on assets suggests that Chairmen of the boards' compensation contracts are structured to enhance the performance of the bank and promote its value. Whereas, CEOs effectively decide on the level of their own compensation regardless of the bank performance.

The findings of this paper have also shown that role duality is not an effective determinant when it comes to examining executives' compensation, indicating that the board of directors is not influenced by the presence of the CEO among them and, hence, they do not compensate him more. In addition, bank's financial risk has not been found to have a statistically significant effect on the CEO and/or Chairman of the board of directors' cash compensation, positing that executives in highly leveraged banks do not require higher compensation in exchange for the financial risk, as increased risk (higher leverage) will not be attributed to them. Moreover, time dummies have not been found to have a statistically significant effect on the CEO and/or Chairman of the board of directors' cash compensation, implying that executives cash compensation has not increased over time relative to the 2010 fiscal year. A possible explanation is that, during the study period, banks suffered financially from the 2008-2009 global financial crisis, so they did not raise their CEOs' pay levels.

In general, the results revealed that the factors affecting CEO cash compensation differ from those affecting Chairman of the board cash compensation in banking industry. Whereas, there is no apparent difference between banking and other industries in terms of the determinants of executives' cash compensations (except for role duality, which tends to be positively and significantly related to executives' cash compensations in the case of non-financial listed firms). More generally speaking, regardless of the high poverty and unemployment rates in Jordan, Jordanian CEOs are "overpaid" considering such lamentable performance of Jordanian banks, there is a marked contrast between banks' financial performance and their executives' compensation. In summary, the

results suggest that executives' compensation contracts and ownership concentration may not be optimal mechanisms for restricting the classical agency problem and aligning the interests of owners and managers in Jordanian listed firms.

Based on these findings, Jordanian listed banks are recommended to (1) set a CEO compensation level that is justified and commensurate to firm performance, which is consistent with the agency theory. It is, therefore, imperative for banks to link CEO reward to corporate and individual performance, to counter the agency problem; (2) prevent the CEO from getting rewards in case of not achieving a predetermined target (profit). Moreover, impose meaningful rewards for superior performance and meaningful penalties for failure. Finally, further research on the determinants of CEO compensation should be primarily aimed at collecting a larger sample size and/or extending the sample period. To produce a more general understanding of the issue on hand, studying the interaction between ownership type (i.e., widely-held firms, state-controlled firms and privately-controlled firms) and CEO compensation is an avenue for further studies. In addition, CEO ownership is another avenue for more research.

Declaration

The views expressed in this paper are those of the author and do not necessarily reflect those of the Central Bank of Jordan, or the Jordanian government.

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This work is dedicated to the soul of my beloved mother, whom I deeply miss, but God's will above everything. We started this venture together; she taught me how to write in the first place. To you; my mom, for all you've done. May Allah bless your soul.

يكرس هــذا العمل إلى روح والدتي الحبيبــة مــنى، التي كانت تنتظر هــذه اللحظة، ولــكن إرادة الله فوق كل شيء

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Notes

Note 1. Jordan's capital market is one of the largest and oldest markets in the area, it was established in 1978. In addition, it has many characteristics similar to other markets in the MENA region, among these characteristics is the pattern of ownership structure and corporate governance mechanisms. Therefore, the results of this study can be generalized to MENA countries.

Note 2. Article 4 of the instructions of issuing companies' disclosure, accounting and auditing standards for the year 2004 states that "The board of directors of the issuing company shall prepare the company's annual report within three months from the end of the company's fiscal year and shall provide the commission therewith. The annual report shall include: the benefits and remunerations of the Chairman, members of the board of directors, and senior executive management, during the fiscal year, including payments received by any of them, such as fees, salaries, bonuses, and otherwise, and their travel and transport expenses within the Kingdom and abroad," among other requirements. Source: Jordan Securities Commission website, (legislations and disclosure). Available at: http://www.jsc.gov.jo/public/mainEnglish.aspx?page_id=1454

Note 3. The minimum wage in Jordan was 150, 150, 190 and 190 Jordanian Dinars for the years 2010, 2011, 2012 and 2013, respectively, which means that the average minimum wage during the study period was 170 Jordanian Dinars per month. Source: Ministry of Labor Annual Report (2013). Available at: http://www.mol.gov.jo/Eng/List/Annual_Reports

Note 4. The average wage per employee (senior officials and managers only) for both public and private sectors in Jordan for the years 2010, 2011, 2012 and 2013 was 1,283, 1,266, 1,282 and 1,321 Jordanian Dinars, respectively, which means that the average wage per senior manager during the study period was 1,288 Jordanian Dinars per month. Source: Department of Statistics website. Retrieved from: http://www.dos.gov.jo/owa-user/owa/employment.em_select?lang=E&dist_t=5

Appendix A.

Table 6. List of the commercial banks included in the sample

Code	Bank name	Symbol
111003	Jordan Commercial Bank	JCBK
111004	The Housing Bank for Trade and Finance	THBK
111005	Arab Jordan Investment Bank	AJIB
111009	Arab Banking Corporation	ABCO
111017	Capital Bank of Jordan	EXFB
111020	Societe Generale De Banque	SGBJ
111022	Bank of Jordan	BOJX
113023	Arab Bank	ARBK