



## The Relationship between Executive Cash Compensation and Corporate Governance, Income Smoothing, Discretionary Accruals, and Firm Value

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### Abstract

The disclosure of executive compensation arrangements in annual reports would allow investors and other interested parties to make informed judgments about manager motivation and commitment to maximize shareholder wealth. This study examines the relationship between Executive cash compensation, corporate governance, Income smoothing, Discretionary accruals, and firm value in companies listed on the Tehran Stock Exchange. The statistical population of this study is Iran-Tehran Stock Exchange during 2013-2017. The results showed that Corporate Governance has a Negative and Significant Impact on Executive cash compensation. Executive cash compensation does not significantly negatively affect income smoothing, and Executive cash compensation does not have a positive and significant effect on Discretionary accruals. And, Executive cash compensation has a significant impact on decreasing Firm value.

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**Keywords:** executive cash compensation; corporate governance; income smoothing; discretionary accruals

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## 1. Introduction

Continuous innovation is key to survival for the firms in a competitive business environment. Cultivating an innovative culture demands critical investments in the research and development projects, with a long-sighted futuristic opinion. In association with the principal shareholders, the CEO and board of directors can significantly yield efficient innovation output. The relationship between the CEO, the board of directors, principal shareholders, and innovation is very complex. It cannot be explained with the help of a single theory because a single theory lacks the broader scope and often takes the support of different assumptions. The agency theory's optimal contracting theory perspective predicts that the principal shareholders' independent surveillance can incorporate an efficient, goal-oriented, and motivating environment. It can help organizations get a sustainable competitive advantage. Secondly, according to the resource-based view, organizations with valuable, rare, perfect, and non-substitutable resources will nourish a continually innovative and competitive environment. Zulfiqar et al. (2019)

The corporate boards involve an arm's length transaction with the CEO and design such compensation plans that provide the CEO with efficient incentives to maximize the shareholder value (Jensen & Meckling, 1976). This predicts a positive link between CEO compensation and firm performance. However, Bebchuk and Fried (2003) challenge the assumption of arm's length transactions between CEO and the board over compensation arrangements and state that CEOs, being in power, set their pay excessively, which is less likely to correlate with firm performance. Therefore, the CEO compensation contract is an agency problem rather than a tool to reduce agency problems. The statistical population of this study is Iran-Tehran Stock Exchange during 2013-2017.

## 2. Literature Review

Attempts at improving CG practices in SA companies began with the publication of the first King Report in 1994 (King I) (Armstrong et al., 2006). In particular, King I emphasized the importance of properly functioning corporate board of directors, as well as adopting many of the standards and principles that were contained in a plethora of national and international CG codes, especially those of the UK's 1992 Cadbury Report (Rossouw et al., 2002). However, while King I suggested that executives' remuneration should be recommended by a remuneration committee (RCOM), it failed to address the composition and independence of the committee, as well as the structure and possible involvement of shareholders in the determination of executive pay (Rossouw et al., 2002)

During the late 1990s, the country experienced several high-profile corporate failures, such as the collapse of the Macmed, Leisurennet, and Nedbank companies, attributed mainly to poor CG practices, including increased executive compensation (Okeahalam, 2004). These domestic problems, in combination with increased international attention on CG (Rossouw et al., 2002; Mangena and Chamisa, 2008), resulted in a review of King I and the subsequent publication of a second King Report (King II) in 2002.

Good compensation schemes motivate managers to make expenditure decisions that maximize shareholders' wealth. A manager whose compensation consists entirely of a fixed salary would have no incentive to increase shareholder wealth because he does not share any of the resulting gains (Murphy, 1998). This incentive problem can be reduced by making part of an executive's compensation, depending on its financial performance. Lambert and Larcker (1985) concluded that compensation schemes do matter in the sense that executives respond predictably to the incentives built into their compensation contracts. Furthermore, they noted that changes in compensation plans affect executive decision making in ways consistent with agency theory. Ozkan (2007) found a positive and significant link between CEO cash compensation and firm performance. He also

noted a positive but not significant relationship between total compensation and firm performance.

Iatridis(2018) examined the association between executive compensation and corporate governance, income smoothing, discretionary accruals, and firm value. This study showed that executive cash compensation is negatively associated with corporate governance.

Safa Lazzem and Faouzi (2017) showed that firms' financial leverage positively affects French firms' interest management. Gombola et al. (2016) suggested that high-performing firms are more likely to perform interest management activities when debt increases.

Kim and Shin (2013) provided evidence that there is a positive relationship between CEO motivation and audit costs. Researchers concluded that the relationship between CEO motivation and audit costs in firms at higher risk faces petition would increase.

Kannan et al. (2014) realized that CEO and financial incentives positively correlated with audit costs. Still, the same researchers also concluded that CEO change over the past year and financial manager with audit costs do not have any relationships.

### 3. Research methodology

#### 3.1 Data

This research's statistical population included all institutions listed on the Tehran Stock Exchange that have been active in the stock exchange from the beginning of 2013 to the end of 2017. In this regard, the statistical sample of this research included all companies that had the following conditions:

- 1) During the years 2013 to the end of the financial year 2017 in stock.
- 2) The Institute is not one of the banks, institutes of investment, mediation, insurance, and monetary and financial institutions because the nature of these institutes' operation is different from other institutions.
- 3) The financial year of them ended in March each year, and during the above period, their financial year did not change.
- 4) In all the studied years, the end of the financial year information and data required were available.

#### 3.2. Research Hypotheses

- 1) Corporate governance has a significant and negative impact on executive cash compensation.
- 2) Executive cash compensation has a significant negative effect on interest smoothing.
- 3) Executive cash compensation has a positive and significant effect on Discretionary accruals.
- 4) Executive cash compensation has a significant effect on Firm value Decrease

#### Research Model

The first hypothesis test model:

$$\begin{aligned} \text{incomp}_{it} = & \alpha_0 + \beta_1 CG_{it} + \beta_2 r_{it} + \beta_3 br_{it} + \beta_4 \Delta oi_{it} + \beta_5 \text{negoi}_{it} + \beta_6 \Delta cf_{it} \\ & + \beta_7 \text{negcf}_{it} + \beta_8 l1cf_{it} + \beta_9 11\text{negcf}_{it} + \beta_{10} \ln MV_{it} + \beta_{11} Debt_{it} \\ & + \beta_{12} \text{growth}_{it} + \beta_{13} Age_{it} + \beta_{14} E_{it} + \beta_{15} 11\text{eps}_{it} + \beta_{16} Eps_{it} \\ & + \beta_{17} \text{eps}3_{it} + \beta_{18} r3_{it} + \beta_{19} Beta_{it} + \beta_{20} BM_{it} + \beta_{21} Loss_{it} + \beta_{22} Dac_{it} \\ & + \beta_{23} Ppe_{it} + \beta_{24} mva_{it} + \beta_{25} S\&A_{it} + \beta_{26} Opa_{it} + \beta_{27} \ln sales_{it} + \varepsilon_{it} \end{aligned}$$

The second hypothesis test model:

$$\begin{aligned} \text{inasm}_{it} = & \alpha_0 + \beta_1 \text{incomp}_{it} + \beta_2 r_{it} + \beta_3 br_{it} + \beta_4 \Delta oi_{it} + \beta_5 \text{negoi}_{it} + \beta_6 \Delta cf_{it} \\ & + \beta_7 \text{negcf}_{it} + \beta_8 l1cf_{it} + \beta_9 11 \text{negcf}_{it} + \beta_{10} \ln MV_{it} + \beta_{11} \text{Debt}_{it} \\ & + \beta_{12} \text{growth}_{it} + \beta_{13} \text{Age}_{it} + \beta_{14} E_{it} + \beta_{15} l1 \text{eps}_{it} + \beta_{16} \text{Eps}_{it} \\ & + \beta_{17} \text{eps3}_{it} + \beta_{18} r3_{it} + \beta_{19} \text{Beta}_{it} + \beta_{20} \text{BM}_{it} + \beta_{21} \text{Loss}_{it} + \beta_{22} \text{Dac}_{it} \\ & + \beta_{23} \text{Ppe}_{it} + \beta_{24} \text{mva}_{it} + \beta_{25} \text{S\&A}_{it} + \beta_{26} \text{Opa}_{it} + \beta_{27} \text{lnsales}_{it} + \varepsilon_{it} \end{aligned}$$

The third hypothesis test model:

$$\begin{aligned} \text{Dac}_{it} = & \alpha_0 + \beta_1 \text{incomp}_{it} + \beta_2 r_{it} + \beta_3 br_{it} + \beta_4 \Delta oi_{it} + \beta_5 \text{negoi}_{it} + \beta_6 \Delta cf_{it} \\ & + \beta_7 \text{negcf}_{it} + \beta_8 l1cf_{it} + \beta_9 11 \text{negcf}_{it} + \beta_{10} \ln MV_{it} + \beta_{11} \text{Debt}_{it} \\ & + \beta_{12} \text{growth}_{it} + \beta_{13} \text{Age}_{it} + \beta_{14} E_{it} + \beta_{15} l1 \text{eps}_{it} + \beta_{16} \text{Eps}_{it} \\ & + \beta_{17} \text{eps3}_{it} + \beta_{18} r3_{it} + \beta_{19} \text{Beta}_{it} + \beta_{20} \text{BM}_{it} + \beta_{21} \text{Loss}_{it} + \beta_{22} \text{Dac}_{it} \\ & + \beta_{23} \text{Ppe}_{it} + \beta_{24} \text{mva}_{it} + \beta_{25} \text{S\&A}_{it} + \beta_{26} \text{Opa}_{it} + \beta_{27} \text{lnsales}_{it} + \varepsilon_{it} \end{aligned}$$

The fourth hypothesis test model:

$$\begin{aligned} R - R_{p_{it}} = & \alpha_0 + \beta_1 \text{incomp}_{it} + \beta_2 r_{it} + \beta_3 br_{it} + \beta_4 \Delta oi_{it} + \beta_5 \text{negoi}_{it} + \beta_6 \Delta cf_{it} \\ & + \beta_7 \text{negcf}_{it} + \beta_8 l1cf_{it} + \beta_9 11 \text{negcf}_{it} + \beta_{10} \ln MV_{it} + \beta_{11} \text{Debt}_{it} \\ & + \beta_{12} \text{growth}_{it} + \beta_{13} \text{Age}_{it} + \beta_{14} E_{it} + \beta_{15} l1 \text{eps}_{it} + \beta_{16} \text{Eps}_{it} \\ & + \beta_{17} \text{eps3}_{it} + \beta_{18} r3_{it} + \beta_{19} \text{Beta}_{it} + \beta_{20} \text{BM}_{it} + \beta_{21} \text{Loss}_{it} + \beta_{22} \text{Dac}_{it} \\ & + \beta_{23} \text{Ppe}_{it} + \beta_{24} \text{mva}_{it} + \beta_{25} \text{S\&A}_{it} + \beta_{26} \text{Opa}_{it} + \beta_{27} \text{lnsales}_{it} + \varepsilon_{it} \end{aligned}$$

As you can see, the details of the research variables are described in Table 1.

**Table 1.** Research Variables

| Brief variable name (According to model) | Full variable name               | Variable measurement method  |
|--|----------------------------------|--|
| Incomp                                   | executive cash compensation      | does the natural logarithm of total turnover scale executive cash compensation   |
| R-Rp                                     | Return -returns of the portfolio | R is the stock return;<br>Rp is returns of the portfolio matched with each sample firm based on size and book to market value as in Fama and French (1993);  |
| Dac                                      | discretionary accruals           | The study uses the following model residuals as discretionary accruals.<br>$TA_{i,t}/A_{i,t-1} = \alpha_0 (1/A_{i,t-1}) + \alpha_1 (\Delta REV_{i,t}/A_{i,t-1}) + \alpha_2 (PPE_{i,t}/A_{i,t-1}) + \alpha_3 (ROA_{i,t-1}) + u_{i,t} + \varepsilon_{i,t}$ |
| Insm                                     | income smoothing                 | The measure of income smoothing, inasm, is obtained as follows. First, the discretionary accruals, dac, are estimated using the modified Jones model . The study uses the residuals of the following model a discretionary accruals.                     |
| CG                                       | Corporation Government           | The hybrid corporate governance variable contains a set of corporate governance items:<br>Employers' independence<br>Employer duality<br>Change agency management<br>Number of Board Members<br>Major contributors                                       |
| Ind                                      | independent directors            | is the percentage of independent directors on the board  |
| Dual                                     | Duality CEO                      | is a dummy variable that takes 1 if the CEO and chairman is not the same person and 0 otherwise  |

|                |  |  |
|----------------|--|--|
| Mgtchange      | CEO change                                   | are a dummy variable that takes 1 if the CEO has changed and 0 otherwise   |
| Board          | Board  | is the number of directors on the board  |
| Block          | Shareholders                                 | is the percentage of outstanding shares owned by shareholders that hold more than 5% of the share capital                        |
| Bigau          | big auditor                                  | is a dummy variable that takes 1 for firms that are audited by a Big 1 auditor and 0 otherwise                                   |
| R              | Return                                       | R is the stock return  |
| Br             | Negative Return                              | is a dummy variable that takes 1 if r is negative and 0 otherwise  |
| $\Delta oi$    | Change Operation income                      | do total assets scale the change in operating income   |
| Nego <i>i</i>  | Negative Change Operation income             | is a dummy variable that takes 1 if $\Delta oi$ is negative and 0 otherwise  |
| $\Delta cf$    | change in net cash flows                     | is the change in net cash flows from operating activities scaled by total assets   |
| Negcf          | The negative change in net cash flows        | is a dummy variable that takes 1 if $\Delta cf$ is negative and 0 otherwise  |
| <i>l1c</i>     | Lagged change in net cash flows              | is 1 year lagged $\Delta cf$   |
| <i>l1negcf</i> | Negative Lagged change in net cash flows     | is a dummy variable that takes 1 if <i>l1cf</i> is negative and 0 otherwise  |
| lnMV           | Ln Market Value                              | is the natural logarithm of the market value of equity   |
| Debt           | Debt   | is total debt scaled by total assets   |
| Growth         | Growth                                       | is market to book value  |
| Age            | Age  | is the natural logarithm of the number of years since the firm foundation  |
| E              | Error  | is the error term  |
| <i>l1eps</i>   | Lagged Earnings per share                    | is 1 year lagged earnings per share scaled by the stock price at the beginning of the year                                       |
| Eps            | Earnings per share                           | does the stock price scale the earnings per share at the beginning of the year   |
| eps3           | Earnings per share 3 years future            | is the sum of earnings per share in years $t + 1$ , $t + 2$ , and $t + 3$ scaled by the stock price at the beginning of year $t$ |
| r3             | Return future three years later              | is the annually compounded stock return for years $t + 1$ , $t + 2$ , and $t + 3$  |
| Beta           | Beta   | is the beta coefficient as obtained from DataStream  |
| BM             | book to the market value of equity           | is the book to the market value of equity  |
| Loss           | Loss   | is a dummy variable that takes 1 for loss-making firms and 0 otherwise   |
| <i>Dac</i>     | discretionary accruals                       | (see also Kothari et al. 2004)   |
| <i>Ppe</i>     | net property plant and equipment             | is property, plant, and equipment  |
| <i>Mva</i>     | market value                                 | is the market value of assets scaled by total assets   |
| S&A            | selling, general and administrative expenses | is selling, general and administrative expenses scaled by sales  |

|                |                            |   |
|----------------|----------------------------|---|
| <i>Opa</i>     | Operating profit to assets | is operating profit scaled by lagged total assets |
| <i>Lnsales</i> | logarithm of sales         | is the natural logarithm of sales                 |

#### 4. The results of the research hypothesis

The first hypothesis test

Corporate governance has a significant and negative impact on executive cash compensation.

$H_0$ : Corporate Governance does not have a significant and negative impact on executive cash compensation.

$H_0: \beta_i = 0$

$H_1$ : Corporate Governance has a significant and negative impact on executive cash compensation.

$H_1: \beta_i \neq 0$

Whether it is possible to determine whether the use of a panel data approach would effectively estimate the Fixed Effects Tests determine the model and the Hausman test is used to detect fixed or random effects.

According to the Fixed Effects test results and P-value (0.0000), the  $H_0$  hypothesis test at the confidence level is 95% rejected, and the panel Data approach can be used. Also, according to the Hausman results from est and P-value (0.0003) is less than (0.0 so the  $H_0$  hypothesis test at the level of confidence 95% was rejected, and the  $H_1$  hypothesis was accepted. Therefore, the fixed effects approach was used. The results of these tests are presented in Table 2 and Table 3.

**Table 2.** Redundant Fixed Effects Tests of Model 1

| Effects Test    | Statistic | df.       | Prob.  |
|-----------------|-----------|-----------|--------|
| Cross-section F | 4.311774  | (160,461) | 0.0000 |

**Table 3.** Correlated Random Effects - Hausman Test of Model 1

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 51.049435         | 21           | 0.0003 |

The amount of P-value related to the statistics Prob (F-statistic) that expresses the regression's meaningfulness is equal to 0.000 and indicates that the confidence model level is 99% meaningful. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (Corporate Governance), which is equal to (0.0132), is less than 0.05; therefore, the first research hypothesis is confirmed. And it can be said: Corporate Governance has a significant and negative impact on executive cash compensation. The results of these tests are presented in Table 4.

Executive cash compensation has a significant negative effect on interest smoothing.

$H_0$ : Executive cash compensation does not have a significant negative effect on interest smoothing compensation.

$H_0: \beta_i = 0$

$H_1$ : Executive cash compensation has a significant negative effect on interest smoothing.

$H_1: \beta_i \neq 0$

According to the Fixed Effects test results and P-value (0.000), the  $H_0$  hypothesis test at the confidence level was 95% rejected, and the Panel Data approach can be used. According to the Hausman test results, P-value (0.9956) was more than (0.05), so the  $H_0$  hypothesis test at the level of confidence 95% was accepted, and the  $H_1$  hypothesis was

rejected. Given that no significant regression model has random effects, it is a meaningful model using a fixed-effects approach. The results of these tests are presented in Table 5 and Table 6.

**Table 4.** Model 1, Dependent Variable: INCOMP, Method: Panel EGLS (Cross-section weights)

| Variable                              | Coefficient | Std. Error        | t-Statistic | Prob.  |
|---------------------------------------|-------------|-------------------|-------------|--------|
| CG                                    | -0.001674   | 0.000673          | -2.487942   | 0.0132 |
| BR                                    | 0.021813    | 0.009988          | 2.183937    | 0.0295 |
| CHANGE_OI                             | -1.37E-09   | 7.14E-10          | -1.919638   | 0.0555 |
| NEGOI                                 | -0.024892   | 0.006893          | -3.611159   | 0.0003 |
| CF                                    | 2.29E-11    | 1.03E-09          | 0.022208    | 0.9823 |
| _11NEGCF                              | 0.022330    | 0.007922          | 2.818694    | 0.0050 |
| CF_1                                  | 5.80E-12    | 9.06E-10          | 0.006395    | 0.9949 |
| CHANGE_CF                             | -0.015459   | 0.007185          | -2.151641   | 0.0319 |
| LNMV                                  | -0.000691   | 0.003964          | -0.174247   | 0.8617 |
| DEBT                                  | -0.022485   | 0.019577          | -1.148562   | 0.2513 |
| GROWTH                                | -0.000169   | 4.64E-05          | -3.641614   | 0.0003 |
| EPS                                   | 7.13E-06    | 1.00E-05          | 0.711081    | 0.4774 |
| EPS_1                                 | -5.52E-06   | 8.82E-06          | -0.626151   | 0.5315 |
| EPS_2                                 | 2.29E-05    | 8.62E-06          | 2.655671    | 0.0082 |
| R3                                    | -0.004596   | 0.004862          | -0.945269   | 0.3450 |
| LOSS                                  | 0.084626    | 0.037193          | 2.275326    | 0.0233 |
| PPE                                   | 2.30E-10    | 6.76E-10          | 0.339729    | 0.7342 |
| MVA                                   | 0.011869    | 0.006218          | 1.908754    | 0.0569 |
| SALE_ADMIN                            | -1.76E-09   | 2.45E-09          | -0.717839   | 0.4732 |
| OPA                                   | 0.000512    | 0.001121          | 0.456822    | 0.6480 |
| INSALES                               | -0.021729   | 0.011073          | -1.962322   | 0.0503 |
| C                                     | 3.845857    | 0.197402          | 19.48237    | 0.0000 |
| AR(1)                                 | 0.383638    | 0.031768          | 12.07627    | 0.0000 |
| Effects Specification                 |             |                   |             |        |
| Cross-section fixed (dummy variables) |             |                   |             |        |
| Weighted Statistics                   |             |                   |             |        |
| R-squared                             | 0.999404    | Mean dependent    | 14.98465    |        |
| Adjusted R-squared                    | 0.999168    | S.D. dependent    | 25.74074    |        |
| S.E. of regression                    | 0.795129    | Sum squared resid | 291.4581    |        |
| F-statistic                           | 4244.152    | Durbin-Watson     | 2.189913    |        |
| Prob(F-statistic)                     | 0.000000    |                   |             |        |
| Unweighted Statistics                 |             |                   |             |        |
| R-squared                             | 0.934678    | Mean dependent    | 3.487191    |        |
| Sum squared resid                     | 538.0347    | Durbin-Watson     | 2.352934    |        |
| Inverted AR Roots                     | .38         |                   |             |        |

The second hypothesis test

**Table 5.** Redundant Fixed Effects Tests of Model 2

| Effects Test    | Statistic | d.f.      | Prob.  |
|-----------------|-----------|-----------|--------|
| Cross-section F | 2.271951  | (160,623) | 0.0000 |

**Table 6.** Correlated Random Effects - Hausman Test of Model 2

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 7.887064          | 21           | 0.9956 |

The amount of P-value related to the statistics Prob (F-statistic) that expresses the regression's meaningfulness is equal to 0.000. It indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (Executive cash compensation), equal to (0.3973), is

more than 0.05, it can be said: Executive cash compensation does not have a significant negative effect on interest smoothing. The results of these tests are presented in Table 7.

**Table 7.** Model 2, Dependent Variable: INSM, Method: Panel EGLS (Cross-section weights)

| Variable                              | Coefficient | Std. Error     | t-Statistic | Prob.  |
|---------------------------------------|-------------|----------------|-------------|--------|
| INCOMP                                | -0.002942   | 0.003474       | -0.847045   | 0.3973 |
| BR                                    | 0.015938    | 0.008687       | 1.834744    | 0.0670 |
| CHANGE_OI                             | 2.41E-09    | 2.42E-09       | 0.995134    | 0.3201 |
| NEGOI                                 | -0.000716   | 0.007602       | -0.094241   | 0.9249 |
| CF                                    | -3.02E-09   | 1.94E-09       | -1.557057   | 0.1200 |
| _11NEGCF                              | 0.002774    | 0.007579       | 0.366004    | 0.7145 |
| CF_1                                  | 8.48E-10    | 1.55E-09       | 0.545669    | 0.5855 |
| CHANGE_CF                             | -0.018592   | 0.007606       | -2.444384   | 0.0148 |
| LNMV                                  | 0.000848    | 0.003473       | 0.244023    | 0.8073 |
| DEBT                                  | 0.007774    | 0.010206       | 0.761677    | 0.4465 |
| GROWTH                                | 5.89E-05    | 7.73E-06       | 7.618950    | 0.0000 |
| EPS                                   | -1.83E-05   | 4.62E-06       | -3.963419   | 0.0001 |
| EPS_1                                 | -1.38E-05   | 4.74E-06       | -2.910708   | 0.0037 |
| EPS_2                                 | -1.14E-06   | 4.00E-06       | -0.284985   | 0.7758 |
| R3                                    | -0.003479   | 0.004266       | -0.815544   | 0.4151 |
| LOSS                                  | 0.026657    | 0.016229       | 1.642550    | 0.1010 |
| PPE                                   | -1.32E-09   | 1.32E-09       | -0.997695   | 0.3188 |
| MVA                                   | -0.010506   | 0.005306       | -1.980079   | 0.0481 |
| SALE_ADMIN                            | 4.07E-09    | 9.32E-09       | 0.436946    | 0.6623 |
| OPA                                   | -0.004041   | 0.002407       | -1.678811   | 0.0937 |
| INSALES                               | 0.006038    | 0.004079       | 1.480176    | 0.1393 |
| C                                     | 0.069238    | 0.087081       | 0.795097    | 0.4269 |
| Effects Specification                 |             |                |             |        |
| Cross-section fixed (dummy variables) |             |                |             |        |
| Weighted Statistics                   |             |                |             |        |
| R-squared                             | 0.438638    | Mean dependent | 0.036259    |        |
| Adjusted R-squared                    | 0.275546    | S.D. dependent | 0.260447    |        |
| S.E. of regression                    | 0.217636    | Sum squared    | 29.50869    |        |
| F-statistic                           | 2.689506    | Durbin-Watson  | 2.428694    |        |
| Prob(F-statistic)                     | 0.000000    |                |             |        |
| Unweighted Statistics                 |             |                |             |        |
| R-squared                             | 0.256831    | Mean dependent | -0.000545   |        |
| Sum squared resid                     | 31.23832    | Durbin-Watson  | 2.234796    |        |

The third hypothesis test

Executive cash compensation has a positive and significant effect on Discretionary accruals.

H<sub>0</sub>: Executive cash compensation does not have a positive and significant effect on Discretionary accruals.

H<sub>0</sub>:  $\beta_i = 0$

H<sub>1</sub>: Executive cash compensation has a positive and significant effect on Discretionary accruals.

H<sub>1</sub>:  $\beta_i \neq 0$

According to the Fixed Effects test results and P-value (0.0000), the H<sub>0</sub> hypothesis test at the confidence level was 95% rejected and expressed that the Panel Data approach can be used. According to the Hausman test results and P-value (0.4775), which is more than (0.05), the H<sub>0</sub> hypothesis test at the level of confidence 95% was accepted, and the H<sub>1</sub> hypothesis was rejected. Given that no significant regression model has random effects, it is a meaningful model using a fixed-effects approach. The results of these tests are



presented in Table 8 and Table 9.

**Table 8.** Redundant Fixed Effects Tests of Model 3

| Effects Test    | Statistic | d.f.      | Prob.  |
|-----------------|-----------|-----------|--------|
| Cross-section F | 2.665804  | (160,623) | 0.0000 |

**Table 9.** Correlated Random Effects - Hausman Test of Model 3

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 20.697600         | 21           | 0.4775 |

The amount of P-value related to the statistics Prob (F-statistic) that expresses the regression's meaningfulness is equal to 0.000000 and indicates that the confidence model level is 99% meaningful. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. Due to the Surface significant variable (Executive cash compensation), which is equal to (0.0005) that less than 0.05; But the T- statistics and Executive cash compensation has been negative. It can be said: Executive cash compensation does not have a positive and significant effect on Discretionary accruals. The results of these tests are presented in Table 10.

**Table 10.** Model 3, Dependent Variable: DAC, Method: Panel EGLS (Cross-section weights)  
Model 3

| Dependent Variable: DAC               |             |                    |             |           |
|---------------------------------------|-------------|--------------------|-------------|-----------|
| Variable                              | Coefficient | Std. Error         | t-Statistic | Prob.     |
| INCOMP                                | -0.016083   | 0.004606           | -3.491489   | 0.0005    |
| BR                                    | 0.016047    | 0.010097           | 1.589219    | 0.1125    |
| CHANGE_OI                             | -6.00E-09   | 4.38E-09           | -1.368789   | 0.1716    |
| NEGOI                                 | 0.002717    | 0.008618           | 0.315318    | 0.7526    |
| CF                                    | -3.58E-09   | 4.38E-09           | -0.817523   | 0.4139    |
| _11NEGCF                              | 0.011832    | 0.008828           | 1.340333    | 0.1806    |
| CF_1                                  | 3.55E-09    | 3.12E-09           | 1.139067    | 0.2551    |
| CHANGE_CF                             | -0.012497   | 0.008815           | -1.417614   | 0.1568    |
| LNMV                                  | -0.000721   | 0.004353           | -0.165732   | 0.8684    |
| DEBT                                  | -0.020044   | 0.023749           | -0.843999   | 0.3990    |
| GROWTH                                | -1.02E-05   | 1.20E-05           | -0.849923   | 0.3957    |
| EPS                                   | 2.90E-06    | 6.25E-06           | 0.463912    | 0.6429    |
| EPS_1                                 | 1.06E-05    | 7.01E-06           | 1.515790    | 0.1301    |
| EPS_2                                 | -3.05E-06   | 6.86E-06           | -0.444159   | 0.6571    |
| R3                                    | -0.006828   | 0.005791           | -1.179018   | 0.2388    |
| LOSS                                  | 0.111664    | 0.025873           | 4.315816    | 0.0000    |
| PPE                                   | 8.03E-10    | 1.81E-09           | 0.444586    | 0.6568    |
| MVA                                   | -0.004573   | 0.006571           | -0.695861   | 0.4868    |
| SALE_ADMIN                            | -6.66E-09   | 1.41E-08           | -0.472272   | 0.6369    |
| OPA                                   | -0.018592   | 0.002552           | -7.285017   | 0.0000    |
| INSALES                               | 0.004542    | 0.008806           | 0.515829    | 0.6062    |
| C                                     | 0.052471    | 0.119304           | 0.439812    | 0.6602    |
| Effects Specification                 |             |                    |             |           |
| Cross-section fixed (dummy variables) |             |                    |             |           |
| Weighted Statistics                   |             |                    |             |           |
| R-squared                             | 0.466123    | Mean dependent var |             | 0.012201  |
| Adjusted R-squared                    | 0.311016    | S.D. dependent var |             | 0.811626  |
| S.E. of regression                    | 0.672099    | Sum squared resid  |             | 281.4195  |
| F-statistic                           | 3.005169    | Durbin-Watson stat |             | 2.310293  |
| Prob(F-statistic)                     | 0.000000    |                    |             |           |
| Unweighted Statistics                 |             |                    |             |           |
| R-squared                             | 0.207147    | Mean dependent var |             | -0.000564 |
| Sum squared resid                     | 344.2552    | Durbin-Watson stat |             | 2.779688  |

The fourth hypothesis test

Executive cash compensation has a significant effect on Firm value Decrease.

$H_0$ : Executive cash compensation does not have a significant effect on Firm value Decrease.

$H_0: \beta_i = 0$

$H_1$ : Executive cash compensation has a significant effect on Firm value Decrease.

$H_1: \beta_i \neq 0$

According to the Fixed Effects test and P-value (0.0000), the  $H_0$  hypothesis test at the confidence level was 95% rejected, and the Panel Data approach can be used. According to the Hausman test results and P-value (0.6586), which is more than (0.05), the  $H_0$  hypothesis test at the level of confidence 95% was accepted, and the  $H_1$  hypothesis was rejected. Given that no significant regression model has random effects, it is a meaningful model using a fixed-effects approach. The results of these tests are presented in Table 11 and Table 12.

**Table 11.** Redundant Fixed Effects Tests of Model 4

| Effects Test    | Statistic | d.f.      | Prob.  |
|-----------------|-----------|-----------|--------|
| Cross-section F | 2.016134  | (160,623) | 0.0000 |

**Table 12.** Correlated Random Effects - Hausman Test of model 4

| Test Summary         | Chi-Sq. Statistic | Chi-Sq. d.f. | Prob.  |
|----------------------|-------------------|--------------|--------|
| Cross-section random | 17.847476         | 21           | 0.6586 |

The amount of P-value related to the statistics Prob (F-statistic) that expresses the regression's meaningfulness is equal to 0.0000. It indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (Executive cash compensation), equal to (0.0217), is less than 0.05. And it can be said: Executive cash compensation has a significant effect on Firm value Decrease. The results of these tests are presented in Table 13.

#### 4. Conclusion

The results of the research hypothesis test at the Companies of sample research are as follow:

- Corporate governance has a significant and negative impact on executive cash compensation.

As observed, the amount of P-value related to the statistics Prob (F-statistic) expresses the meaningfulness of the regression, which is equal to 0.000, and indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (Corporate Governance), which is equal to (0.0132), is less than 0.05; therefore, the first research hypothesis is confirmed. And it can be said: Corporate Governance has a significant and negative impact on executive cash compensation.

Executive cash compensation has a significant negative effect on interest smoothing.

As observed, the amount of P-value related to the statistics Prob (F-statistic) that expresses the meaningfulness of the regression is equal to 0.000. It indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (Executive cash compensation), equal to (0.3973), is more than 0.05; therefore, it can be said: Executive cash compensation does not have a significant negative effect on interest smoothing.

**Table 13.** Model 4, Dependent Variable: R\_RP, Method: Panel EGLS (Cross-section weights)

| Variable                              | Coefficient | Std. Error         | t-Statistic | Prob.    |
|---------------------------------------|-------------|--------------------|-------------|----------|
| INCOMP                                | -0.071529   | 0.031073           | -2.301945   | 0.0217   |
| BR                                    | 0.092685    | 0.087634           | 1.057629    | 0.2906   |
| CHANGE_OI                             | -1.72E-09   | 1.95E-08           | -0.088113   | 0.9298   |
| NEGOI                                 | -0.020082   | 0.077708           | -0.258433   | 0.7962   |
| CF                                    | -2.80E-09   | 2.05E-08           | -0.136385   | 0.8916   |
| _11NEGCF                              | 0.167098    | 0.078987           | 2.115508    | 0.0348   |
| CF_1                                  | 3.21E-08    | 1.79E-08           | 1.795343    | 0.0731   |
| CHANGE_CF                             | -0.167353   | 0.078260           | -2.138406   | 0.0329   |
| LNMV                                  | 0.000223    | 0.024380           | 0.009152    | 0.9927   |
| DEBT                                  | -0.044911   | 0.074650           | -0.601624   | 0.5476   |
| GROWTH                                | -8.19E-05   | 0.000159           | -0.516423   | 0.6057   |
| EPS                                   | -4.06E-05   | 6.99E-05           | -0.580832   | 0.5616   |
| EPS_1                                 | 4.40E-05    | 7.80E-05           | 0.564314    | 0.5727   |
| EPS_2                                 | 0.000146    | 7.08E-05           | 2.055752    | 0.0402   |
| R3                                    | -0.027428   | 0.035466           | -0.773361   | 0.4396   |
| LOSS                                  | -0.515306   | 0.152240           | -3.384828   | 0.0008   |
| PPE                                   | 1.09E-08    | 9.01E-09           | 1.214823    | 0.2249   |
| MVA                                   | 0.158184    | 0.033665           | 4.698774    | 0.0000   |
| SALE_ADMIN                            | -1.80E-07   | 6.03E-08           | -2.977875   | 0.0030   |
| OPA                                   | -0.053251   | 0.011920           | -4.467269   | 0.0000   |
| INSALES                               | -0.075349   | 0.066673           | -1.130114   | 0.2589   |
| C                                     | 2.573006    | 0.991385           | 2.595364    | 0.0097   |
| Effects Specification                 |             |                    |             |          |
| Cross-section fixed (dummy variables) |             |                    |             |          |
| Weighted Statistics                   |             |                    |             |          |
| R-squared                             | 0.398111    | Mean dependent var |             | 4.692130 |
| Adjusted R-squared                    | 0.223245    | S.D. dependent var |             | 3.331475 |
| S.E. of regression                    | 1.406899    | Sum squared resid  |             | 1233.144 |
| F-statistic                           | 2.276658    | Durbin-Watson stat |             | 2.056456 |
| Prob(F-statistic)                     | 0.000000    |                    |             |          |
| Unweighted Statistics                 |             |                    |             |          |
| R-squared                             | 0.236269    | Mean dependent var |             | 3.367993 |
| Sum squared resid                     | 1264.057    | Durbin-Watson stat |             | 2.077284 |

- Executive cash compensation has a positive and significant effect on Discretionary accruals.

As observed, the amount of P-value related to the statistics Prob (F-statistic) that expresses the meaningfulness of the regression is equal to 0.000. It indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. Due to the Surface significant variable (Executive cash compensation), which is equal to (0.0005), that is less than 0.05; But the T-statistics and Executive cash compensation has been negative. And it can be said: executive cash compensation does not have a positive and significant effect on Discretionary accruals.

- Executive cash compensation has a significant effect on Firm value Decrease.

As observed, the amount of P-value related to the statistics Prob (F-statistic) expresses the meaningfulness of the regression, which is equal to 0.000, and indicates that the model is meaningful at the confidence level of 99%. Also, the Durbin-Watson Test of 1.5 to 2.5 is appropriate. The Surface significant variable (executive cash compensation), equal to (0.0217), is less than 0.05. And it can be said: Executive cash compensation has a

significant effect on Firm value Decrease.

The results of the first and fourth hypotheses of this study are consistent with the study of Iatridis (2018) but do not match with Lazzem and Faouzi (2017), Gombola et al. (2016), Kim and Shin (2013), Kannan et al. (2014).

## Suggestions

### Suggestions Based on Research Results

1) Therefore, investors and others are advised to pay more attention to Corporate governance in General Assembly Report and reporting on Board activities. Due to economic sanctions, more attention should be paid to the employees' currency reward and members of the board of directors.

2) Analysts and researchers can re-test interest management through real items. The Stock Exchange also knows that the issue of Executive cash compensation in environmental conditions in financial reports in the coming years is required.

3) The Stock Exchange investors and other stakeholders should pay more attention to the institute's value criteria.

### Further to the Study

1) Researching this issue in the field of institutions accepted in OTC.

2) Review of research by considering the variables like political communication and the institute's life cycle.

3) Review of the research by considering the variables like inflation Uncertainty, exchange rate fluctuations.

4) Review the research on the classification to keep cash from the institutes (The national unit, foreign countries) on domestic and foreign banks.

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