# IMPACT OF THE SIZE OF BOARD OF DIRECTORS ON EARNINGS QUALITY WHEN STOCK OPTIONS ARE EXPENSED UNDER SFAS 123 (R)

Veronica Paz*
Suneel Maheshwari**
Geoffrey Tickell***

***PURPOSE***
*THE paper examines the association between the number of Board of Director (BOD) members and earnings quality when stock options are expensed under SFAS 123 (R) as part of CEO compensation. The paper analyzes the effect of expensing CEO Stock options on earnings quality when the BOD size serves as a mitigating variable.*

***Design/Methodology/Approach:*** *Data for the period of 2000-2009 was collected from three databases – The ExecuComp database on CEO compensation, Corporate Governance database provides BOD number and Compustat for firm specific data. SFAS 123 (R) became effective in 2005; therefore, this study omits the year 2005. The study uses publically traded US firms and compensation data for its CEOs.*

***Findings:*** *Multiple regression results support a positive association between expensing of stock options and earnings quality when firms have a large number of BOD members. Results are consistent with expectations established by prior research that compare earnings quality and BOD governance.*

***Research Limitations/Implications:*** *The study is conducted with US publically traded firms only.*

***Originality/Value:*** *Our findings contribute to the body of knowledge on CEO stock options compensation and earnings quality as well as BOD size and earnings quality, by showing that earnings quality is stronger when stock options are expensed as part of CEO compensation especially for the firms that have a larger BOD.*

***Key Words:*** *CEO compensation, Stock Options, Earnings Quality, SFAS 123 (R), Executive Compensation, Board of Directors, Corporate Governance.*

## Introduction

Prior to SFAS No. 123 (R) being introduced, Accounting for Stock-Based Compensation, firms could account for stock options using either the fair value method or the intrinsic value method prescribed by APB No. 25 (FASB, 1995). Prior to SFAS 123 (R), SFAS 123 allowed stock options to be valued using the intrinsic method and not expensed, but include the valuation of stock options granted on the Balance Sheet. FASB currently requires stock options expensing under SFAS 123 (R).

* *Associate Professor, Department of Accounting, Eberly College of Business and Information Technology, Indiana University of Pennsylvania, Indiana, USA.*

** *Professor, Department of Accounting, Eberly College of Business and Information Technology, Indiana University of Pennsylvania, Indiana, USA.*

*** *Professor, Department of Accounting, Eberly College of Business and Information Technology, Indiana University of Pennsylvania, Indiana, USA.*

Earnings quality may suffer when stock options are part of compensation because agency theory applies to the executive of a firm acting on behalf of and in the interest of absentee owners of the firm. Agency theory holds that executive officers of a firm will tend to act in their own self-interest rather than in the interest of the owners who seek to maximize the value of their investment (Butler & Newman, 1989). One of the pivotal roles of the board of directors is in the design of executive compensation contracts (Hermalin & Weisbach, 2003). To mitigate this agency conflict, the BOD may have an impact on the earnings quality of the firm.

Our research poses the question whether the number of Directors on the Board (BOD) has an impact on earnings quality when stock options are expensed as part of CEO compensation. Thus, this study examines the association between the size of the BOD and stock option expensing with regards to CEO compensation.

By providing empirical evidence of the association between expensing CEO stock options as per SFAS 123 (R), BOD size, and earnings quality, our findings contribute to the body of knowledge on CEO stock options compensation and earnings quality, as well as BOD size and earnings quality. Our study shows that earnings quality is stronger when stock options are expensed as part of CEO compensation and when firms have a larger BOD.

## Review of Literature and Hypothesis Development

### Earnings Quality

Earnings quality is considered high if earnings are persistent; that is, show small variations from the trend as measured by the time-series properties of earnings (Dechow & Dichev, 2002). Comiskey and Mulford (2000) define earnings as high-quality if earnings accurately represent the economic implications of underlying transactions and events. Dechow & Dichev (2002) define earnings by measuring the variations of the current accruals to the cash-flow from operations for the last-period, current-period, and next-period. Dechow & Dichev suggest that, in terms of CEO compensation, shareholders should not only use earnings quality, but also additional information about the CEO's actions relating to cash flow to assess firm valuation.

Comiskey and Mulford (2000) define earnings as high-quality if the contemporaneous cash inflows from operations are greater (less) than the recognized revenues or gains (expenses or losses), and low-quality if the associated cash flows are less than (greater than) the recognized revenues or gains (expenses or losses). In contrast, Dechow and Dichev (2002) define earnings to be of equal quality for firms with high vs. low realizations of the sum of the error terms if the variance of the sum of the errors for the firms is equal.

Earnings management is when management manipulates the accounting records towards an outcome they prefer (McNichols, 2002). Therefore, less active earnings management suggests higher earnings quality (Yang, 2006). Additionally, less active earnings management suggests alignment between CEOs and shareholders.

CEOs, as agents of the firm, should be maximizing short term and long-term shareholder wealth, as they are now shareholders also. Executive compensation reduces shareholder agency costs and in turn enhances firm value (Kanagaretnam, Mathieu, & Ramanan, 2009). CEOs awarded with high equity compensation prefer higher earnings quality, as higher earnings quality relates to lower cost of capital or higher stock price (Francis, LaFond, Olsson, & Schipper, 2004, 2005). High CEO ownership is associated with lower cost of equity capital (Huang, Wang, & Zhang, 2009) and thereby increasing the firm valuation and earnings quality. Less expenditure in the form of lower cost of equity capital improves earnings quality. Attaway (2000) finds a positive relationship between firm performance and stockholder equity as part of CEO compensation, thereby increasing earnings quality when CEOs are shareholders. Executive stock options are effective in generating

positive future payoffs for the firm in terms of accounting earnings (Erickson, Hanlon, & Maydew, 2006). Furthermore, accounting earnings have a positive impact on earnings quality and firm valuation.

Allowing the CEO to have stock ownership reduces the costs of the firm and provides for more predictable and persistence earnings. The information gap between the CEO and the shareholder lessens when both parties are in alignment. This bond and alignment between the two parties allows earnings persistence, which in turn, can improve earnings quality.

**SFAS 123 (R)**

In December 2004, the Financial Accounting Standards Board (FASB) released SFAS No.123 (R), requiring all firms to expense stock options to employees based on fair value at the grant date (Ferri & Sandino, 2009; Lin, Hua, Lee, & Lee, 2011). The revised statement, SFAS No. 123 (R), *Share-Based Payment*, supersedes APB Opinion No. 25 completely and requires all companies to show the impact of fair value reporting for stock option compensation in their income statements directly. The fair value of an option is determined by option pricing models that take into account current stock price, exercise price, expected dividend yield, expected risk-free interest rate, expected stock price volatility, and expected life of the option (FASB, 2004). SFAS 123 (R) requires stock option expensing at fair value with the transfer of ownership in the form of expensing stock options granted.

The FASB justified the implementation of SFAS No. 123 (R) by stating that "disclosure is not an adequate substitute for recognition" (FASB, 2004, p. 20). FASB believes that the value of stock-based compensation is an expense that should be recognized in the Income Statement (Aboody, Barth, & Ron, 2004) and as such implemented FAS 123 (R). FASB's rationale is that issuing stock options transfers claims on equity from existing stockholders to employees and dilutes existing shareholder interests. Because employees provide services to the firm, the value of the transferred ownerships represents a cost of generating earnings (Lin et al., 2011). Effectively, stock compensation represents a transfer of wealth from stockholders to employees.

SFAS 123 (R) became effective for fiscal years annual or interim periods beginning June 15, 2005 or later, and required all firms to expense stock options based on a fair market value (FMV) as determined by the firm (Young, 2011). SFAS No. 123 (R) recognizes that the adoption of fair value reporting for stock option compensation leads to an additional expense and, therefore, increases the overall conservatism of net income (Heltzer, 2010), thereby improving earnings quality.

**Board of Directors**

According to Hermalin and Weisbach (2003), two important functions of a board of directors (BOD) are (i) monitoring executive management, and (ii) designing executive compensation contracts. The major role of the board of directors is to encourage CEOs to act in the shareholders' best interests and to protect shareholders from CEOs' opportunistic behavior (Brown & Lee, 2006). Shareholders elect a board of directors to act as an intermediary between management and owners for the express purpose of protecting owners' interests. The role of the board is to deal with this potential conflict of interest (McIntyre, Murphy, & Mitchell, 2007). Widely dispersed ownership structures make it both difficult and costly for owners to monitor management directly. The presence of independent directors enhances the monitoring function of the BOD.

Hermalin and Weisbach (1991) argue that the greatest factor affecting the BOD's effectiveness is its independence from the CEO. In situations where monitoring is more difficult, firms may use a higher level of incentive (stock-based) compensation (Core, Holthausen, & Larcker, 1999; Erickson et al., 2006). If the board's responsibilities for setting CEO pay and monitoring CEO decision-making are separated through the formation of committees, then the compensation committee will increase the use of stock-based CEO compensation (Laux & Laux, 2009). Watts and Zimmerman

(1978) postulate that bonus schemes create an incentive for managers to select accounting procedures and accruals to increase the present value of their stock options (Healy, 1985).

Board size may influence board quality. Anderson, Mansi, & Reeb (2004) find that the cost of debt (i.e., interest rates) are lower in firms with large boards indicating that creditors consider large boards more effective monitors. Xie, Davidson, & DaDalt (2003) find that larger boards were effective in reducing earnings management, consistent with the theory that large boards allow representation of broader areas of expertise and adequate resources to perform the necessary monitoring and advisory functions. Thus, board size influences committee composition, which in turn, affects board performance.

Studies also show that boards must be large enough to fulfill their responsibilities but that small boards can be more efficient and less bureaucratic. Brown and Caylor (2004) find that firms with board sizes of 6 to 15 have higher returns on equity and higher net profit margins than firms with board sizes outside this range.

Several studies use board size as a measure of board quality (Cyert, Kang, & Kumar, 2002; Yermack, 1996). Based on the studies mentioned above, we expect a positive association between expensing stock options of CEO compensation and earnings quality. More formally, we expect that association to be stronger when there are a large number of BOD members.

**Hypothesis:** The association between earnings quality will be stronger (weaker) when firms have larger (smaller) number of BOD members when stock options are expensed as part of CEO Compensation.

## Methodology

The model for earnings quality used in this investigation stems from Dechow and Dichev (2002) with cash-flow from operations (CFO) as the primary variable. Earnings predictability and accrual quality, both discretionary and non-discretionary, serves as additional proxies mentioned by Dechow and Dichev (2002) for earnings quality.

The earnings quality (EQ) model is:

$$\Delta WC = b_0 + b_1 * CFO_{t-1} + b_2 * CFO_t + b_3 * CFO_{t+1} + \varepsilon_t$$

We define earnings quality as the change in working capital through the sum of past, present, and future cash-flows from operations, with the estimation error represented by the residuals of the regression. The change in working capital and the proxy for CFO is cash-flow from Operations for cash-flow related to accruals, where $CFO_{t-1}$ is past cash-flows from operations, $CFO_t$ represents present cash-flows from operations and $CFO_{t+1}$ is future cash-flows from operations. Additionally, the residuals from the regression reflect the error term. The residual represents the portion of the change in working capital accruals not explained by lagged, current, and future cash-flows. The residuals from the regression reflect the accruals that are unrelated to cash-flow (Dechow & Dichev, 2002). Prior research demonstrates that the cash-flow component of earnings is more persistent than the accrual component (Fairfield, Whisenant, & Yohn, 2003; Sloan, 1996). Previous studies indicate that non-current accruals are given a lower weight in determining annual management compensation than cash-flows from operations and current accruals (Kumar, Ghicas, & Pastena, 1993). Therefore, we use cash-flow from operations (CFO) as the dependent variable to test earnings quality.

The error term equals the residuals of the regression with the change in working capital as the change of working capital from previous year to current year. The regression produces residuals for each case, which in turn serve as the error term. Additionally, the final regression including all the terms above, plus the estimation error, yields the earnings quality proxy. Table No. 1 defines all the variables in the regression model.

**Table No. 1: Dependent and Independent Variables**

| Variable | Definition |
|---|---|
| EQ | Equals the regression results of ÄWC = $b_0 + b_1$* $CFO_{t-1} + b_2$* $CFO_t + b_3$* $CFO_{t+1} + \varepsilon$. Where ε is the case wise residuals. |
| Salary | Salary of the CEO in dollars ($) divided by Total Compensation (TDC1). |
| Bonus | Bonus of the CEO in dollars ($) divided by Total Compensation (TDC1). |
| Stk_Opt | Value of Stock Awards-FAS 123(R) of the CEO in dollars ($) divided by Total Compensation (TDC1). |
| Other | All other compensation of the CEO in dollars ($) divided by TDC1. |
| %Stk Own | Percentage of Fair Value of Total Shares owned as reported of the CEO divided by the number of Common Shares Outstanding. |
| Lev | Financial leverage ratio of Total Long Term Debt divided by Total Assets. |
| ROE | Return on Equity is the annual stock market return on the shares of common stock. |
| High_Tec | An indicator variable set equal to 1 if firms belong to Drugs (SIC code 2833-836), Computer (3570-3577), Electronics (3620-3674), Programming (7370-7374), R&D Services (8731-8734), and 0 otherwise. |
| BODN | Natural log of 1 plus the number of members on the Board of Directors. |

## Sample

### Sample Selections

CEO compensation data is available from the Standard and Poor's ExecuComp Database. Company specific data such as firms' leverage position, total assets, return on equity, and implied option expense is accessed from the Company Financial and Director Compensation database and CompuStat. The Corporate Governance database provides access to the information on the number of BOD members. If CompuStat, ExecuComp and/or the corporate governance information for any company in the population is missing or incomplete then that company is not included in the sample and not replaced. Firms in this study operate within several different industries. Consistent with prior research (Durnev & Kim, 2005), firms with SIC codes 4900 (utilities) and firms with SIC codes ranging from 6000 - 6999 (financial services) were eliminated from the sample. These firms are in regulated industries and incur an added degree of monitoring that differentiates their corporate structure from those of other industries. Our study uses firm-year observations from 2001-2009. We omit the year 2005 as the effective date of SFAS 123 (R) is June 15, 2005, for publicly traded companies as the data for this year might be distorted.

### Descriptive Statistics

Table No. 2 provides the descriptive statistics for the variables in this study including the minimum value, maximum value, mean, standard deviations, kurtosis, and skewness for the dependent variables. Additionally, Table No. 2 provides information on CEO compensation elements as deflated by Total Compensation (TDC1). CEO compensation data include salary, bonus, stock options, and other forms of compensation including percentage of stock ownership.

**Table No. 2: Descriptive Statistics**

| Variable | n | Minimum | *Maximum* | *Mean* | *StdDeviation* | Kurtosis | Skewness |
|---|---|---|---|---|---|---|---|
| Eq | 8231 | 0.00001 | 22.162 | 0.12327 | 0.39749 | 1351.74 | 29.510 |
| Salary | 8231 | 0.00000 | 2.0681 | 0.26091 | 0.19073 | 3.505 | 1.644 |
| Bonus | 8231 | 0.00000 | 1.0000 | 0.09149 | 0.13285 | 3.979 | 1.802 |
| Stk_Opt | 8231 | 0.00000 | 4.9204 | 0.13319 | 0.22823 | 42.253 | 3.839 |
| Other | 8231 | 0.00000 | 1.0000 | 0.04549 | 0.09696 | 34.102 | 5.311 |
| %Stk Own | 8209 | 0.00000 | 99.853 | 12.341 | 19.076 | 4.364 | 2.123 |
| Lev | 8231 | 0.00000 | 3.3873 | 0.18104 | 0.18273 | 21.807 | 2.540 |
| ROE | 8231 | -3942.51 | 1726.79 | 2.8804 | 117.561 | 608.413 | -19.259 |
| High_Tec | 8231 | 0 | 1 | 0.26 | 0.438 | -0.789 | 1.100 |
| BODN | 8230 | 0.0000 | 2.3026 | 0.66654 | 0.565736 | -1.094 | 0.182 |

The sample of 8,231 data points consisting of CEO compensation and company data reveals a mean of 12.3% for earnings quality for all firms in the sample. The mean salary for CEOs in the study is 26.1% of Total Compensation (TDC1) with an average bonus of 9.1%. CEO stock options as a percentage of Total CEO Compensation (TDC1) represent 13.3% percent. Stock options comprise 13.3 % of the Total CEO Compensation.

**Univariate Tests**

Table No. 3 reports the correlation matrix between all variables in the empirical analysis. Correlation coefficients will range from a value of -1.0 (a perfect negative relationship) to +1.0 (a perfect positive relationship). A value of 0.0 indicated no linear relationship. The Pearson Correlation Matrix table (Table No. 3) shows the correlation between the independent variables in the study. The Pearson correlations in Table No. 3 show the relationships between variables were consistent with those of Dechow and Dichev (2002). As shown in Table No. 3, the correlations between earnings quality and the control variables are in line with existing theories. A Pearson's correlation between +/-0.25 and +/-0.75 is considered to have a moderate degree of correlation (Norusis, 2010). None of the reported correlations is >0.50, so multicollinearity is not an issue.

**Table No. 3: Pearson Correlation Matrix for H1 Variables**

| Variable | Eq | Salary | Bonus | Stk_Opt | Other | %Stk Own | Lev | ROE | High_Tec | BODN |
|---|---|---|---|---|---|---|---|---|---|---|
| Eq | 1.000 | | | | | | | | | |
| Salary | 0.113 | 1.000 | | | | | | | | |
| Bonus | -0.008 | -0.047 | 1.000 | | | | | | | |
| Stk_Opt | -0.044 | -0.079 | -0.267 | 1.000 | | | | | | |
| Other | 0.009 | 0.016 | -0.073 | -0.007 | 1.000 | | | | | |
| %Stk Own | 0.003 | -0.201 | 0.175 | -0.340 | -0.087 | 1.000 | | | | |
| Lev | -0.026 | -0.045 | 0.012 | 0.035 | 0.039 | -0.022 | 1.000 | | | |
| ROE | -0.086 | -0.061 | 0.054 | 0.006 | -0.010 | 0.005 | -0.037 | 1.000 | | |
| High_Tec | 0.177 | -0.049 | -0.095 | -0.062 | -0.064 | 0.052 | -0.163 | -0.056 | 1.000 | |
| BODN | -0.071 | -0.094 | 0.051 | -0.004 | -0.014 | -0.062 | -0.026 | 0.056 | -0.050 | 1.000 |

Table No. 3 also shows that the correlation coefficient between most variables was low at 0.200 or below. The correlation between BODN and %StkOwn displays low correlation and small relationship of -0.026. Results indicate a low negative correlation, meaning the two variables vary inversely.

**Regression Analysis**

Our hypothesis postulates that the association between earnings quality will be stronger (weaker) when firms have larger (smaller) number of BOD members when stock options are expensed as part of CEO Compensation.

Hypothesis

$$EQ_t = \alpha + b_{0+} b_1 Salary_t + b_2 Bonus + b_3 Stk\_Opt_t + b_4 Other_t + b_5 \%Stk\ Own_t + b_6 Lev + b_7 ROE_t + b_8 High\_Tec_t + b_9 BODN_t + + \varepsilon_t$$

The above regression equation is at $time_{t,}$ where $b_0$ is the intercept, and $b_1$ to $_{b9}$ are the coefficients for each variable.

**Table No. 4: Coefficients of Regression H1 BOD Number**

| Variable | BOD Number & Interaction | | | |
|---|---|---|---|---|
| | **Coefficient** | **t-value** | **Significance** | |
| Constant | 0.034 | 2.483 | 0.013 | *** |
| Salary | 0.239 | 10.163 | 0.000 | *** |
| Bonus | 0.046 | 1.360 | 0.174 | |
| Stk_Opt | -0.029 | -1.400 | 0.162 | |
| Other | 0.077 | 1.723 | 0.085 | * |
| %Stk Own | 0.000 | 0.631 | 0.528 | |
| Lev | 0.011 | 0.455 | 0.649 | |
| ROE | 0.000 | -6.145 | 0.000 | *** |
| High_Tec | 0.162 | 16.164 | 0.000 | *** |
| BODN | -0.034 | -4.402 | 0.000 | *** |
| R | | | 0.233 | |
| $R^2$ | | | 0.054 | |
| F | | | 52.476 | *** |
| Significance | | | 0.000 | |

*Note.* $^{*}p < 0.10$., $^{**}p < 0.05$; *** p <0.01

Table No. 4 reflects an R square of 0.054, measuring the total variation of 5.4% of the value of earnings quality explained by the independent variables in the study. Since this percentage is low, it suggests that earnings quality is not dependent on these control variables. In addition, the correlation coefficient for these variables is r = 0.233. In the ANOVA analysis, the F statistic of 52.476 is greater than the critical value. Given that the significance level (0.000) is less than alpha (0.01), we reject the hypothesis.

A regression analysis of earnings quality as the dependent variable and independent variables shows Salary, Other, ROE, High_Tec, and BODN to be statistically significant. The control variables Bonus, Stk_Opt, %Stk Own and Lev are not statistically significant. Therefore, the evidence supports the hypothesis; that is, there exists a stronger association between expensing of stock options of CEO compensation and earnings quality with a large number of BOD members. Our findings thus support the hypothesis stating that the association between expensing stock options and earnings quality will be stronger (weaker) when firms have larger (smaller) number of BOD members.

The results of this study supports Brown and Lee's (2006) work of aligning the BODs interest with that of the owners noting that the CEOs are shareholders. Findings of this investigation also support the results of Xie et al., (2003) with regards to larger BOD members being more effective in controlling earnings management. In addition, our findings are consistent with the theory that larger BODs allow representation of broader areas of expertise and adequate resources to perform the necessary monitoring and advisory functions. The results of our study augment the work of Cyert et al., (2002) suggesting a stronger relationship with earnings quality when firms have a larger number of BOD members. To the degree that this relationship exists, board members should focus their efforts on monitoring the CEO actions and establishing compensation to incentivize the CEO to mitigate any potential agency conflicts.

## Conclusion

This research finds that evidence exists for the bonding effect and moderating effect of BOD governance. The results support the hypothesis and indicates that no single variable has an advantage over the other variables in predicting earnings quality. The finding of our study demonstrates that the size of the BOD members does moderate the relationship of expensing stock options and earnings quality. Larger BODs provide a stronger association between earnings quality and the expensing of stock options as part of the CEO compensation.

Our study reveals additional research questions. For example, how additional corporate governance measures such as the presence of an audit committee, or compensation committee, or the strength of internal controls affect earnings quality? Alternative measures such as director independence, rotation of chairperson, or the frequency of BOD meetings might provide more evidence as to the relationship between CEO stock options and earnings quality.

Our study makes significant contributions to prior research on the connection between earnings quality, BOD size, and stock options expensing as part of CEO compensation. Further, our study contributes to the literature in the area of executive compensation by examining stock options expensing as part of the CEO compensation and its relationship to earnings quality with BOD size serving as a mitigating factor. Finally, our research suggests that many further research possibilities exist regarding the nature of CEO compensation and its relationship to earnings quality and BOD size.

## References

Aboody, D., Barth, M.E., & Ron, K. (2004). SFAS no. 123 stock-based compensation expense and equity market values. *The Accounting Review, 79*(2), 251-275. doi: *10.2308/accr.2004.79.2.251.*

Andersen, R.C., Mansi, S.A., & Reeb, D.M. (2004). Board characterisitics, accounting reporting integrity, and the cost of debt. *Journal of Accounting & Economics, 37*(3), 315-342. doi: *10.1016/j.jacceco.2004.01.004.*

Attaway, M.C. (2000). A study of the relationship between company performance and CEO compensation. *American Business Review, 18*(1), 77-85. Retrieved from: Retrieved from *http://proquest.umi.com.ezproxylocal.library.nova.edu/pqdweb?did=47952627&Fmt=7&clientId=17038&RQT=309&VName=PQD.*

Brown, L., & Lee, Y. (2006). The impact of SFAS 123R on changes in option-based compensation. *SSRN Working Paper Series*.

Brown, L.D., & Caylor, M.L. (2004). Corporate governance and firm performance. Retrieved from *http://ezproxylocal.library.nova.edu/login?url=http://search.proquest.com/docview/189920102?accountid=6579.*

Butler, S., & Newman, N. (1989). Agency control mechanisms, effectiveness and decision making in an executive's final year with a firm. *Journal of Institutional and Theoritical Economics, 145*, 451-464.

Comiskey, E., & Mulford, C.W. (2000). Guide to financial reporting and analysis. New York, NY: John Wiley & Sons.

Core, J.E., Holthausen, R.W., & Larcker, D.F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics, 51*(3), 371-406. doi: *10.1016/s0304-405x(98)00058-0.*

Cyert, R.M., Kang, S.H., & Kumar, P. (2002). Corporate governance, takeovers, and top-management compensation: Theory and evidence. *Management Science,, 48*(4), 21.

Dechow, P.M., & Dichev, I.D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review, 77*, 35. Retrieved from *http://proquest.umi.com.ezproxylocal.library.nova.edu/pqdweb?did=1144790491&Fmt=7&clientId=17038&RQT=309&VName=PQD.*

Durnev, A., & Kim, E.H. (2005). To steal or not to steal: Firm attributes, legal environment, and valuation. *Journal of Finance, 60*(3), 1461-1493. doi: *10.1111/j.1540-6261.2005.00767.x.*

Erickson, M., Hanlon, M., & Maydew, E.L. (2006). Is there a link between executive equity incentives and accounting fraud? *Journal of Accounting Research, 44*(1), 113-143.

Fairfield, P.M., Whisenant, S., & Yohn, T.L. (2003). The differential persistence of accruals and cash flows for future operating income versus future profitability. *Review of Accounting Studies, 8*(2-3), 221-243. doi: *10.2139/ssrn.320060.*

FASB. (1995). Statement of financial accounting standards no. 123 accounting for stock-based compensation. Retrieved from *http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175820923312&blobheader=application%2Fpdf.*

FASB. (2004). Statement of financial accounting standards no. 123 (Revised) share-based payment. Retrieved from *http://www.fasb.org/cs/BlobServer?blobcol=urldata&blobtable=MungoBlobs&blobkey=id&blobwhere=1175823287357&blobheader=application%2Fpdf.*

Ferri, F., & Sandino, T. (2009). The impact of shareholder activism on financial reporting and compensation: The case of employee stock options expensing. *The Accounting Review, 84*(2), 433-466. doi: *10.2308/accr.2009.84.2.433.*

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2004). Costs of equity and earnings attributes. *The Accounting Review, 79*(4), 967-1010. doi: *10.2308/accr.2004.79.4.967.*

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics, 39*(2), 295-327. doi: *10.1016/j.jacceco.2004.06.003.*

Healy, P.M. (1985). The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics, 7*(1-3), 85-107. doi: *10.1016/0165-4101(85)90029-1.*

Heltzer, W. (2010). The impact of SFAS No. 123(R) on financial statement conservatism. *Advances in Accounting, 26*(2), 227-260. doi: *10.1016/j.adiac.2010.04.006.*

Hermalin, B.E., & Weisbach, M.S. (1991). The effects of board composition and direct incentives on firm performance. *Financial Management, 20*(4), 101.

Hermalin, B.E., & Weisbach, M.S. (2003). Boards of directors as an endogenously determined institution: A survey of the economic literature. *Economic Policy Review - Federal Reserve Bank of New York, 9*(1), 7-26. Retrieved from *http://ezproxylocal.library.nova.edu/login?url=http://search.proquest.com/docview/210395573?accountid=6579.*

Huang, H., Wang, Q., & Zhang, X. (2009). The effect of CEO ownership and shareholder rights on cost of equity capital. *Corporate Governance, 9*(3), 255-270. doi: *10.1108/14720700910964325.*

Kanagaretnam, K., Mathieu, R., & Ramanan, R. (2009). Stock option grants, current operating performance and deferral of earnings. *International Journal of Management, 26*(1), 26-32. Retrieved from *http://proquest.umi.com.ezproxylocal.library.nova.edu/pqdweb?did=1705193201&Fmt=7&clientId=17038&RQT=309&VName=PQD.*

Kumar, K.R., Ghicas, D., & Pastena, V.S. (1993). Earnings, cash flows and executive compensation: An exploratory analysis. *Managerial Finance, 19*(2), 55.

Laux, C., & Laux, V. (2009). Board committees, CEO compensation, and earnings management. *Accounting Review, 84*(3), 869-891. doi: *10.2308/accr.2009.84.3.869.*

Lin, C.C., Hua, C.Y., Lee, S.H., & Lee, W.C. (2011). The policy consequence of expensing stock-based compensation. *International Journal of Accounting and Information Management, 19*(1), 80-93. doi: *10.1108/18347641111105944.*

McIntyre, M.L., Murphy, S.A., & Mitchell, P. (2007). The top team: Examining board composition and firm performance. *Corporate Governance, 7*(5), 547. doi: *http://dx.doi.org/10.1108/14720700710827149.*

McNichols, M.F. (2002). Dicussion of the quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review, 77*, 61.

Norusis, M. (2010). PASW statistics 18 guide to data analysis. New Jersery: Prentice Hall.

Sloan, R. G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review, 71*(3), 289-315. Retrieved from *http://www.jstor.org/stable/248290.*

Watts, R.L., & Zimmerman, J.L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review, 53*(1), 112-134. Retrieved from: *http://www.jstor.org/stable/245729.*

Xie, B., Davidson, W.N., & DaDalt, P.J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance, 9*(3), 295-316. doi: *10.1016/s0929-1199(02)00006-8.*

Yang, Q. (2006). CEO equity compensation, external monitoring and earnings quality. (Ph.D. 3252564), Hong Kong Polytechnic University (Hong Kong), Hong Kong. Retrieved from *http://proquest.umi.com.ezproxylocal.library.nova.edu/pqdweb?did=1288646171&Fmt=7&clientId=17038&RQT=309&VName=PQD.*

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211. doi: *10.1016/0304-405x(95)00844-5.*

Young, B. (2011). Employee stock option exercise behavior and firms' claims about employee stock option expense. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3453523).