# CHANGES IN EQUITY COMPENSATION PLANS: EVIDENCE FROM THE U.S. CAPITAL MARKETS

Rogelio J. Cardona, University of Puerto Rico-Río Piedras

# ABSTRACT

The Financial Accounting Standards Board and the United States Congress enacted new legislation and regulations in 2002 requiring corporations to recognize stock option grants as an expense (voluntarily) on their financial statements. In 2004 option, expensing became mandatory. This paper describes the different changes made by a sample of U.S. public corporations to their Equity compensation plans after the mandatory expensing of stock options went into effect. The results suggest that firms seem to have reacted to the required option expensing by accelerating the vesting of their outstanding options with a contemporaneous reduction in the use of stock options as a compensation incentive. Executive (employee) compensation practices seem to have shifted from stock option grants to performance and restricted stock awards. An unexpected finding of this investigation was observing that besides employees and Board directors, non-IT firms are also granting equity compensation to non-employees such as vendors and consultants.

JEL: G38; J33; M41; M44

KEYWORDS: Equity compensation plans, stock options, performance stock, restricted stock

# **INTRODUCTION**

In 2002 Congress enacted legislation ("the Sarbanes-Oxley Act of 2002") and the Financial Accounting Standards Board (FASB) issued accounting standards that require Corporations, among other matters, to disclose more information on their financial statements related to executive compensation and to recognize stock option grants as an expense on their financial statements. Prior to 2002 firms did not have to recognize stock options as an expense. In December 2002 the FASB issued a new accounting standard (SFAS No. 148) explaining how firms should *voluntarily* record stock options as compensation expense. According to Reilly (2004), the underlying motivation behind the new standard was to achieve international convergence with International Accounting Standards Board (IASB) accounting standards.

Seethamraju and Zach (2004) observed that when the first group of firms started to announce (in 2002) their decision to voluntarily expense their stock options, they either reduced or eliminated the use of stock options, introduced new equity compensation plans or made specific changes to their stock option plans. Semerdzhian (2004) found that certain firms such as Dell, Yahoo and Citigroup, among others, started to limit the number of employees who can receive stock options. Carter, Lynch and Tuna (2007) observed an increase in the use of restricted stock and/or performance stock awards.

In March 2004, the FASB issued a draft of a new standard requiring the *mandatory* recognition of stock options as a compensation expense. The new standard (SFAS No. 123-R) was issued in final form in December 2004, but the Securities and Exchange Commission (SEC) postponed its implementation until the first quarter of 2006.

This investigation contributes to the literature by documenting the changes (i.e. shift) in the equity compensation plans of public corporations from stock options to other types of stock-based awards after the mandatory expensing of stock options went into effect. We perform a descriptive analysis of the changes made by a sample of U.S. public corporations to their equity compensation plans after they

started to comply with the mandatory expensing of stock options. To measure the type of changes made by the sampled firms in their equity compensation plans required manually collecting the information from the footnotes section of the firms' December 31, 2006 financial statements for calendar-year reporting firms or from the firms' 2007 fiscal year financial statements, e.g. 9-30-07.

The remainder of the paper is organized as follows. The next section describes the background literature related to the use of stock options as a compensation component and the controversy over the accounting standards for stock options. The following section presents the research questions related to the changes in equity compensations plans accompanied by the methodology used and the sample for the study. The next section presents the results obtained followed by our conclusions.

# LITERATURE REVIEW

Managers were once paid with salaries and bonuses only. However, as the business world grew more complex and companies became more sophisticated, stock option grants were added as an additional incentive to the compensation package received by managers. As noted by Chidambaran and Prabhala (2003), stock options have become an integral part of executive compensation since the beginning of the 1980's. In fact, in early 2000, unexercised stock options of U.S. executives were deemed to be worth tens of billions of dollars.

Core and Guay (2001) found that besides top managers, other employees that are not managers ("nonexecutive employees") are also receiving stock options. Yermack (2004) found that even outside Board directors at Fortune 500 firms receive options as part of their incentive compensation.

Stock option plans provide the participants the right to buy a specific number of the firm's shares at a predetermined price (exercise price) over a *vesting period*. The typical scenario is that over a three to five year period, the employees gradually acquire the right to exercise a pro-rata amount of the total option award.

Restricted stock grants provide managers with a specific number of shares with the limitation or restriction that they cannot sell them during a particular blackout period. Long-term performance plans award the recipient cash, equity, or a combination thereof, if certain predetermined performance measures, e.g. sales, ROI or EPS growth, are met on an annual basis. A problem (known as an "agency problem") arises when the Board or its Compensation Committee enter into what the author calls "sub optimal" compensation contracts. An example of the latter would be setting low performance targets that are easy to attain. Kole (1997) found that the decision to grant equity as part of a manager's compensation could be predicted by certain financial characteristics of the firm such as a company's tangible assets and intangible assets, and to a lesser extent by the size of the firm or by the presence of the founding family on the firm's Board. However, the Board's judgment plays a very significant role in granting incentives. This discretion or "flexibility" could result in an "expropriation of shareholder wealth". The author found that this type of Board flexibility would be more likely to be observed in large size firms, in firms that have larger differences among the different segments of the business, i.e., increased firm diversification, and firms that were more research-oriented.

On the other hand, Barron and Waddell (2003) found that as executives move up the corporate ladder, i.e. promoted, within the same firm, compensation becomes more incentive based, and incentive pay becomes more equity based. Another possibility is that executive incentive pay might reflect differences in abilities or degrees of risk aversion, i.e. senior executives have more abilities and are less risk averse. The authors also found a tradeoff between various types of equity-based compensation, in particular restricted stock grants versus stock options. Stock options encouraged increased effort at the expense of introducing a bias in the project acceptance decision. At higher levels of management, there is relatively

less equity compensation in the form of stock options, compared to lower ranking managers. The authors interpreted this finding as meaning that the negative, i.e. adverse, effect of stock options on project selection criteria is more important at higher executive ranks.

Core and Larcker (2002) found an improvement in operating performance at firms that require their top managers ("executive officers") to increase (to a predetermined minimum level) their ownership of company stock, either with restricted stock, or through stock options. The authors measured performance by excess accounting returns and excess stock price returns. After the firms adopted a "target ownership plan", managers increased their stock ownership levels. The authors' interpretation of their findings was that prior to the adoption of the target ownership plan, the firm had agency problems. To improve incentives and governance measures, the Board "forced" the adoption of a stock ownership plan for its top executives. After the adoption of this stock ownership plan, there was an improvement in the firms' performance.

## CONGRESS AND THE FASB REACT TO THE STOCK OPTIONS CONTROVERSY

The well-publicized cases of corporate greed and malfeasance (*Enron*, WorldCom, among others) prompted the US Congress to act swiftly by enacting the Sarbanes-Oxley Act of 2002 (formally known as the "Public Company Accounting Reform and Investor Protection Act of 2002", but hereafter referred to as "SOX"), to scrutinize what a public corporation and their independent auditors can and cannot do. Although the aforementioned corporate failures were caused by different reasons, Sundaram and Inkpen (2004) state that the widespread use of stock options to compensate corporate managers helped fuel the different corporate failures observed during 2001 and 2002. The reason for this widespread belief is attributed to the "unrestrained granting of stock options" to compensate corporate managers during the Internet bubble frenzy of the 1990's.

According to Gordon (2003), the problems at Enron were exacerbated by its "high-powered stock-based compensation structure". A report prepared in February 2003 by Towers Perrin, a human resources consulting firm hired by a Congressional Committee to investigate Enron, found that the Company's stock compensation for its highest executives in 2000 represented 66% for Kenneth Lay and 75% for Jeffrey Skilling. Gordon (2003) also found that Enron's stock-based compensation arrangements for its managers included performance-based accelerated vesting. Since managers usually exercise options upon vesting, and with the potential to receive additional options based on performance, Enron managers had a "pathological" concern over the fluctuations in the Company's stock price. This environment increased the pressure on senior managers to "manipulate financial results" to obtain increased current earnings that would agree with the expectations held by the firm's institutional investors, thereby resulting in an increase in the Company's stock price.

After the United States Congress approved SOX, it also started to pressure the FASB to require the companies to expense its stock options. Several academic and business leaders (Merton Miller, Warren Buffet, and Alan Greenspan, among others) expressed their inconformity with not reflecting stock options as an expense on a firm's financial statements.

In December 2002 the FASB reacted to its critics by issuing a new accounting standard FASB Statement No. 148 ("Accounting for Stock-Based Compensation-Transition and Disclosure"). This new standard amended SFAS No. 123, and provided firms with alternative methods for a *voluntary* change to the "fair value" method of accounting for stock options. According to the FASB, this was the *preferable* method of accounting for stock-based compensation. SFAS No. 148 also required disclosures in both the annual and interim financial statements of the effect of the stock options on the financial statements, and even required a specific way as to how to present the information to be disclosed on the financial statements.

The effective date for SFAS No. 148 was for fiscal years ending after December 15, 2002, i.e. for companies with a December 31 year-end, the Standard would apply starting January 1, 2003.

The FASB asserted that the underlying motivation behind SFAS No. 148 was to achieve international convergence with the global capital markets. International publicly traded companies that do not present their financial statements in accordance with US GAAP must adhere to the GAAP established by its counterpart, the IASB, and in November 2002, the IASB issued an exposure draft for public comment, wherein they required that companies recognize stock options as an expense.

On October 29, 2003, the FASB announced that by 2005 they would start requiring all firms to expense their stock options. On February 19, 2004, the IASB issued its International Financial Reporting Standard No. 2 ("Share-based Payment) requiring all international companies to expense their stock options beginning on or after January 1, 2005.

On March 31, 2004, the FASB announced the release of an exposure draft of its proposed new standard, but on October 13, 2004, it delayed the effective date of its proposed new standard. On December 16, 2004, the FASB announced it had issued its final statement as SFAS No. 123-R ("Share-Based Payment"), where the R stands for "Revised". This new Statement replaced SFAS No. 123 and superseded APB Opinion 25. The FASB decided that the effective date for the new Standard would apply to interim or annual periods beginning after June 15, 2005, instead of the original effective date of January 1, 2005.

However, the SEC received feedback from public companies, industry groups and CPA firms that suggested that the adoption of the new Standard in mid-year, in particular for calendar year-end entities, would generate additional implementation costs and comparability problems for analysts and investors. As a result, on March 29, 2005, the SEC issued Staff Accounting Bulletin No. 107, hereafter SAB 107 and on April 15, 2005, it issued a ruling described as "Amendment to Rule 4-01 (a) of Regulation S-X Regarding The Compliance Date For Statement Of Financial Accounting Standards No. 123 (Revised 2004), *Share-Based Payment.*" SAB 107 consists of various clarifications in the form of questions and answers related to the implementation of SFAS 123-R. The amendment to Regulation S-X delayed the implementation date of SFAS 123-R for public companies until their next fiscal year that begins after June 15, 2005. The effect of this change for calendar year-end companies was that they would not be required to implement this new standard until the first quarter of 2006. However, companies were allowed to adopt the Standard earlier if possible.

# **RESEARCH QUESTIONS, DESIGN, AND METHODOLOGY**

The purpose of this paper is to describe the nature of the changes made to Equity compensation plans by a sample of firms after adopting SFAS 123-R [currently known as FASB ASC Topic 718 - Stock Compensation] that requires the expensing of stock options. Seethamraju and Zach (2004), hereafter referred to as S-Z, observed that in 2002 when the first group of firms started to announce their decision to voluntarily expense their stock options ("the Announcing firms"), they either reduced or eliminated the use of stock options, or they changed their compensation plans. S-Z described the changes made to compensation plans as the "introduction of new plans or specific changes to options compensation." Semerdzhian (2004) found that certain firms such as Dell, Yahoo and Citigroup, among others, started to limit the number of employees who can receive options. Carter, Lynch and Tuna (2007) observed an increase in the use of restricted stock and/or performance stock awards.

Weisbenner (2001, 2004) and Carter, Lynch and Tuna (2007) have predicted that mandatory option expensing will cause firms to stop awarding new option grants and replace (options) with shares of restricted stock that vest over time. This leads to the following research questions.

RQ1: How many of the Announcing firms will report significant changes in their Equity compensation plans after the implementation of the new accounting standard (SFAS No. 123-R) requiring the expensing of stock options?

RQ2: What type of significant changes will be made by the Announcing firms to their Equity compensation plans?

RQ3: How many of the Matching firms will report significant changes in their Equity compensation plans after the implementation of the new accounting standard (SFAS No. 123-R) requiring the expensing of stock options?

RQ4: What type of significant changes will be made by the Matching firms to their Equity compensation plans?

This investigation considers that significant changes in a firm's Equity compensation plan include, but are not necessarily limited to: a change in the type of employees eligible to receive stock option grants, changing the criteria to become eligible to receive stock options, e.g. performance-based, replacing stock options for some other type of stock award, changing the option valuation model, reducing the number of options granted each year, changing the type of shares received (restricted or unrestricted) pursuant to each firm's equity compensation plan, among others.

# **RESEARCH DATA AND METHODOLOGY**

The equity compensation data for the Announcing firms was manually obtained from their annual (10-K) reports and/or their proxy statements, if available. The expected type of changes to a firm's Equity compensation plan include a change in the type of employees eligible to receive stock option grants, changing the criteria to become eligible to receive stock options, e.g. performance-based, replacing stock options for some other type of stock award, changing the option valuation model, and acceleration of vesting, among others. After reading the Stock option plans footnote on the financial statements of the Announcing and the Matching firms, the firms that reported changes were then subdivided depending on the type of change reported to ascertain the nature and frequency of such changes.

To measure whether the Announcing or the Non-Announcing (Matching) firms made any changes to their stock option plans required manually collecting the data from the 2006 Annual Proxy statements (SEC Schedule 14A) and the footnotes section of their annual audited financial statements (SEC 10-K Report). The year 2006 is used for calendar year-reporting firms because the SEC established that the first quarter of 2006 (March 31) would be the first required reporting period to present the expensing of its stock options. For companies whose fiscal year-end is not a calendar year, the investigation uses the firm's 2007 fiscal year (10-K) report, e.g. 9-30-07. In addition, on July 26, 2006, the SEC also established additional required disclosure requirements related to executive compensation. The additional disclosures will help explain to the users of financial statements the changes made by firms to their stock option plans and possibly suggest reasons for the shift in their approach to employee (executive) compensation.

# SAMPLE SELECTION

The firms included in this investigation were selected from a list originally compiled by Bear Stearns as of February 12, 2004 and provided by Mr. Brett J. Harsen of Mellon Human Resources and Investor Solutions (Available upon request). Said list identified the 483 firms (with their related Ticker symbols) that were expensing their stock options or had announced that they would expense their stock options as of that date. The firms that were expensing or had announced they were going to expense options as of February 12, 2004, are the "Announcing firms". The firms that were not expensing or had not announced

they were going to expense options as of February 12, 2004, are known as the "Non-Announcing" or Matching firms and are included in another sample (the "Control" group).

Using the same approach adopted by Elayan, Pukthuanthong and Roll (2004), hereafter referred to as E-P-R, each Announcing firm is matched with a "Control" group firm that had employee stock option plans, is in the same industry (two-digit SIC codes), shares the same fiscal year-end, have similar size (comparable Sales) and profitability levels. The latter variable is measured with the same approach used by E-P-R (2004), i.e. with the ratio of EBITDA to Sales (hereafter, the "ES ratio").

The Announcing firms were initially subdivided and grouped based on their announcement dates and the year of adoption of the fair value (expensing) method of accounting for options using December 15, 2002, the effective date for SFAS No. 148 (*Voluntary* recognition of stock option expensing) as the cutoff date. The 11 firms that were expensing options prior to January 1, 2002 were excluded from the study because the exact announcement date was available for only one of those firms. Firms that had subsequently merged with or were acquired by another firm, or were non-US companies were also excluded. Other firms were also excluded due to their privatization (stockholder buyout), and one firm (SonomaWest Holdings, Inc-SWHI) was excluded because its common stock was delisted from the NASDAQ Small Cap Market on August 10, 2005. When the remaining 303 firms were located in the CRSP data files by their ticker symbols, from January 1, 2001 to June 30, 2005, a file with 253 firms was obtained. The 50 missing firms were due to firms that ceased to exist during the 2001-2005 period because of mergers or privatization, among other reasons.

Another file was created for the remaining 253 firms based on a subsequent inquiry in the CRSP files with the following daily information: Company's Permanent Name (PERMNO), Date of calculation of stock return (DATE), Company's Ticker Symbol (TICKER), Stock return with Dividends (RET), Value-weighted return with Dividends (VWRET), and Equal-weighted return with Dividends (EWRET). This search produced 225 firms, which implies that there were 28 firms with missing data in CRSP.

The next step was to obtain the group of Matching "eligible" firms from the Compustat files by selecting all firms for the period January 1, 2001 through June 30, 2005 with the Company's Permanent Name (PERMNO). The criteria for selecting a similar matched firm was based on the following attributes: firms that have employee stock options plans, are in the same industry (Two digit SIC code), have the same fiscal year-end, and share similar Sales levels and Profitability levels, the latter defined similar to E-P-R (2004) as the EBITDA/Sales ratio. Compustat Data Item 398 (Implied Option Expense) and Data Item 399 (Stock Compensation Expense) were used as the variables that identified whether a Matching firm had an outstanding stock option plan. Any firm that did not have a reported value for any of these two variables was discarded for matching purposes.

The merged file of firms was divided in deciles (groups of ten) based on sales to identify the possible firms that could be matched with each Announcing firm in the sample. The file was divided again in those groups based on the ES ratio resulting in 148 perfectly matched firms. The iterative process was repeated, first by changing the selection method to with replacement, then dividing the remaining firms in three groups with the complete Index, and then repeating the selection process removing the month of the firms' fiscal year-end from the Index. To reduce the number of Announcing firms without a similar Matching firm, the selection criteria was liberalized to allow a Matching firm to be associated with more than one Announcing firm, and then paired considering the proximity of their sales levels and their ES ratio (EBITDA to Sales). At the completion of these iterations eight Announcing firms for which no Matching firm were found were discarded from the investigation. The basic sample for the Study consisted of 183 Announcing firms (see Panel A of Table 1).

### Table 1: Construction of the Sample for the Study

Initial sample of Announcing firms	303
Firms not found in CRSP	(50)
Firms not found in Compustat	(28)
Firms with missing values in Compustat	(34)
Announcing firms for which no Matching	
firm was found	(8)
Number of Announcing firms in the sample with	
a corresponding Matching firm	183

This panel shows the number of Announcing firms in the initial basic sample with a corresponding matching firm. The Announcing firms were obtained from a list prepared by Bear Stearns that identified the firms that were expensing or had announced they were going to expense voluntarily their stock options as of February 12, 2004.

Panel B: Adjusted Sample of the Announcing Firms	
Initial basic sample of Announcing firms with Matching firms (see Panel A) Announcing firms that merged or were privatized	183 <u>(17)</u>
Adjusted sample of Announcing firms for analysis of changes in the firms' stock option plans	<u>166</u>

Panel B shows the Adjusted sample of Announcing firms in the study. The number of firms was reduced due to mergers or buyouts that occurred between 2004 (year of inclusion in the original sample-see Panel A) and 2006 (year of the evaluation of the changes in the firms' equity compensation plans).

nitial basic sample of Matching firms with	
Announcing firms (see Panel A)	183
Firms that were matched with more than one	
Announcing firm	(33)
Firms that merged or were privatized	_(4)

Panel C shows the Adjusted sample of Matching firms in the study. The initial sample of Matching firms (see Panel A) was subsequently adjusted to prevent a Matching firm to be associated or paired with more than one Announcing firm, and for mergers or buyouts that occurred between 2004 (the year of inclusion in the original sample-see Panel A) and 2006 (year of the evaluation of the changes in the firms' equity compensation plans).

# RESULTS

We manually collected the information for the changes made to the Announcing and Matching firms' Equity compensation plans after January 1, 2006 from the footnotes section of the annual financial statements of their 10-K Reports. The year 2006 is used for calendar year-reporting firms because the SEC established that the first quarter of 2006 (March 31) would be the first required reporting period to present the expensing of its stock options. For companies whose fiscal year-end is not a calendar year, the investigation uses the firm's 2007 fiscal year (10-K) report, e.g. 9-30-07.

As noted on Table 2, 28 of the 166 Announcing firms (17%) have only one Equity Compensation plans, whereas 83% (138) of the Announcing firms have more than one Plan. The 146 Matching firms are segregated in three main groups, 22 firms (15%) have no Plan, 25 firms (17%) have only one Plan, and 99 firms (68%) have more than one Plan. The mean (median) number of Equity Compensation Plans for the Announcing firms is 2.83(2.00), and for the Matching firms is 2.66 (2.00), respectively.

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	Firms with no		Firms with only	Firms with More Than one	Number of Equity Compensation	
	n	Equity Plan	one Equity Plan	Equity Plan	Plans per Firm	
Announcing	166	-	28	138	<u>Mean</u> 2.83	<u>Median</u> 2.00
Matching	146	22	25	99	2.66	2.00

#### Table 2: Number of Equity Compensation Plans in the Sampled Firms

n = Number of Firms This table shows the number of Equity Compensation Plans in the sampled Announcing and Matching firms. The column identified as "n" shows the number of Announcing and Matching firms included in the sample study. The second column shows the number of firms with no Equity Compensation plan. The third column shows the number of firms with only one Equity Compensation plan. The fourth column shows the number of firms with more than one Equity Compensation plan. The last column shows the mean and median number of Equity Compensation plans per type of firm.

Table 3 presents the number of observed changes in the Equity Compensation Plans for both groups of firms. There were 69 Announcing firms (42%) that did not make any change and 97 firms (58%) that made one or more changes. Four firms that made four different changes to their compensation plans. The Matching firms behaved similarly, where 79 firms (54%) made no change to their compensation plans and 67 firms (46%) made one or more changes. Two Matching firms that made four different changes to their compensation plans for the rompensation plans. The mean (median) number of changes in Equity Compensation Plans for the Announcing firms is 1.024 (1.000), and for the Matching firms is 0.781 (0.00), respectively.

Table 3: Descriptive Statistics for the Observed Changes in the Equity Compensation Plans of the Sampled Firms

	N	Firms with No Changes	Firms with One or More Changes	Maximum Number of Changes in One Firm	Number of Changes in Equity Compensation Plans Per Firm	
					Mean	<u>Median</u>
Announcing	166	69	97	4	1.024	1.000
				(4 firms)		
Matching	146	79	67	4	0.781	0
				(2 firms)		

n = Number of Firms This table shows the number of changes observed in the Equity Compensation Plans of the sampled Announcing and Matching firms. The column identified as "n" shows the number of Announcing and Matching firms included in the sample study. The second column shows the number of firms with no changes in their Equity Compensation plan. The third column shows the number of firms with one or more changes in their Equity Compensation plans. The fourth column shows the maximum number of changes in each type of firm. The last column shows the mean and median number of changes in Equity Compensation plans per type of firm.

Table 4 presents the classification of the different changes made by the 166 Announcing firms to their Equity Compensation plans. Fifteen firms changed their option valuation model, 15 firms accelerated the vesting of their options (perhaps to avoid having to expense said options), 52 firms replaced their options for some other type of stock awards, and there were 56 firms with changes classified as "Other changes".

As previously noted on Table 3, 58% of the Announcing firms (97) made more than one change in their Equity Compensation plans. As a result, the total changes reflected on Table 4 add up to more than 100%. The "Other changes" category include changes in the exercise price, change in the way volatility

of the firm's stock option was measured, change in the term of the option, and the decision to not grant options for one or two years, among others. An unexpected finding in this study was that several of the non-IT Announcing firms awarded equity compensation grants to non-employees (consultants and vendors).

Table 5 presents the changes observed in the 146 Matching firms (and the explanation for why the number of firms is different from the Announcing firms). Sixty-seven matching firms (46%) made more than one change in their Equity Compensation plans (See Table 3). The observed changes in the Equity Compensation Plans were as follows: 10 firms changed their option valuation model, 12 firms accelerated the vesting of their options, 19 firms replaced their options for some other type of stock awards, and there were 46 firms with changes classified as "Other changes". Because some of the Matching firms had more than one change, the total changes also add up to more than 100%. Some of the changes classified as "Other" include changes in the exercise price, change in the way the volatility of the firm's stock option was measured, change in the term of the option, and the decision to not grant options for one or two years, among others.

Table 4: Changes Observed in the Equity Compensation Plans of the Announcing Firms after January 1, 2006

Analysis of changes made by the Announcing firms:	
Changes in their option valuation model	15
Changes in their Vesting requirements	1
Accelerated the vesting of options	15
Increased option grants to Directors and Employees	5
Decreased option grants awarded to Directors and	
Employees	3
Replaced stock options with other stock awards	52
Other changes	56
Total changes (**)	147

This table presents the different changes observed in the Equity Compensation plans of the Announcing firms. Since the SEC postponed the implementation of mandatory option expensing until the first quarter of 2006, the information for the observed changes was obtained from the footnotes section of the 2006 audited financial statements for calendar-year reporting firms or the fiscal 2007audited financial statements for fiscal-year firms.\*\* Total changes add up to more than the original adjusted sample size of the Announcing firms because some firms made more than one change to their stock option plans.

Table 5: Changes observed in the Equity Compensation Plans of the Matching firms after January 1, 2006

Initial adjusted sample of Matching firms Matching firms with no change to their option plans Matching firms with changes to their option plans	146 (79) 67
Analysis of changes made by the Matching firms:	
Changes in their option valuation model	10
Changes in their Vesting requirements	4
Accelerated the vesting of options	12
Increased grants of options to Directors and Employees	1
Decreased grants of options to Directors and Employees	1
Replaced stock options with other stock awards	19
Other changes	46
Total changes (**)	93

This table presents the different changes observed in the Equity Compensation plans of the Matching firms. Since the SEC postponed the implementation of mandatory option expensing until the first quarter of 2006, the information for the observed changes was obtained from the footnotes section of the 2006 audited financial statements for calendar-year reporting firms or the fiscal 2007audited financial statements for fiscal-year firms.\*\* Total changes add up to more than the original adjusted sample size of the Matching firms because some firms made more than one change to their stock option plans.

The changes observed in the Matching firms' stock option plans are similar in nature to the changes observed for the Announcing firms, with the only significant difference being the number of firms in each group. In terms of the prior expectations for this area of the investigation, the results obtained provided the answers to the research questions inquiring the nature of the significant changes made by the Announcing and Matching firms to their equity compensation plans. The Matching firms also mimicked the Announcing firms by awarding stock options to employees, Board directors and to non-employees (Vendors and Consultants) in non-IT firms.

The changes made by both groups of sampled firms to their Equity compensation plans seem to suggest that the firms are attempting to mitigate the possible adverse impact arising from the required expensing of their stock options and initiate a gradual change in their compensation practices to de-emphasize options in lieu of restricted shares and/or performance shares.

# CONCLUSION, LIMITATIONS AND POSSIBILITIES FOR FUTURE RESEARCH

The objective of this investigation is to describe the different changes made in the Equity compensation plans in a sample of U.S. public corporations after a new accounting standard requiring mandatory option expensing went into effect. The results obtained suggest that firms seem to have reacted to the required expensing with the acceleration of the vesting of its options and a contemporaneous reduced emphasis on stock options replaced by an increased emphasis on (restricted and performance) stock-based awards. An unexpected finding of this investigation was observing that besides employees and Board directors, non-IT firms are also granting equity compensation to other non-employees such as vendors and consultants. This investigation contributes to the existing literature by documenting the shift in firms' compensation practices from stock options to restricted and performance stock awards.

This investigation is characterized by several limitations that must be considered as part of the understanding and interpretation of its findings. The sampled firms examined were classified as either Announcing or Matching. The Announcing firms partially reflect self-selection bias because they decided to expense stock options, when other firms had not done likewise. The subsequent procedure to select a similar "matched" firm also reflects a selection bias inasmuch as only firms with certain attributes such as being in the same industry, having the same fiscal year-end, and sharing similar sales and profitability (EBITDA/Sales ratio) levels, among others, were eligible Matching firms. Firms that did not have a reported value for the Compustat variables 398 and 399 (Implied Option Expense and Stock Compensation Expense, respectively) were eliminated for matching purposes.

The changes observed in the Equity compensation plans were obtained from the information disclosed on the firm's financial statements, which present the aggregated information for all employees, Managers and Board Directors. The Standard & Poor's ExecuComp database was unavailable for this investigation, which would have provided additional compensation information for a firm's top five executive officers. An examination of the changes made in the Equity compensation plans of a group of firms would have been more complete if the total compensation information for the aforementioned senior managers had been included.

Executive (employee) compensation continues to attract research interest because of its dynamic nature. As markets change and firms react to these changes, executive (employee) compensation practices seem to have changed from the "usual" (cash and stock options) to the more elaborate ("restricted" stock and/or "performance" stock). The increased emphasis on tying compensation to performance is now more important than ever due to the awareness among shareholders of the importance of good corporate governance. This presents an opportunity for future investigation in the areas of Corporate Governance and Equity Compensation practices where executive pay packages seem to have promoted risky behavior among its senior management.

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Dr. Rogelio J. Cardona is an Assistant Professor of Accounting at the University of Puerto Rico-Rio Piedras. He can be contacted at School of Business Administration, Accounting Department, University of Puerto Rico, P.O. Box 23332, San Juan, PR 00931-3332. Tel. (787) 764-0000, Ext. 3330, 3326. E-mail: rjcardona@prtc.net, rcardona@uprrp.edu.