

EXECUTIVE COMPENSATION: NYSE AND NASDAQ LISTED FIRMS

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Abstract

In this paper, we examine whether the determinants and forms of executive compensation for NYSE versus NASDAQ listed firms are the same during the period from 1992 to 2004. We also investigate whether the determinants and forms of executive compensation changed after the NASDAQ crash in 2000 and the Sarbanes-Oxley Act in 2002. Our results reveal that the factors that explain executive compensation for NYSE and NASDAQ listed firms are generally different. We also find that executives are paid different forms of compensation for NYSE and NASDAQ listed firms and that the forms of compensation change after the NASDAQ crash but essentially after the Sarbanes-Oxley act in 2002.

Keywords: executive compensation; compensation determinants; NYSE; NASDAQ

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I. Introduction

Beginning late 80s and early 90s, the world has witnessed the demise of centrally controlled socialist economies and rise of free market capitalist system. Privatization of state controlled enterprises, removal of barriers of international trade, free flow of information, capital and labor, and advances of technology have indeed created a small global integrated global village producing an unparalleled global economic growth. As a consequence of growth of global economy, we have also witnessed a significant increase in the market value of companies all over the world. Global growth, market integration, new opportunities, and increased corporate profitability have intensified the search and competition for executive talent across the world. Firms now compete for highly qualified executives globally hoping that their knowledge would be instrumental in increasing the share value of the firms that they would manage.

In this changing global economic and corporate environment firms, particularly new economy firms, started paying their executives based on performances, essentially with stock options. With stock options at their disposal, executives found an added motivation to increase the value of the stock to raise their chances of exercising their options later and hence increasing their wealth.

However, in the year 2000, the NASDAQ crash slowed this economic growth and also some financial scandals came to the forefront, along with the bankruptcy of companies such as Enron and WorldCom, resulting from fraudulent accounting

practices and executive self-dealings. Management, in some widely publicized cases, distorted the accounting data to manipulate the stock price in order to enhance personal compensation by exercising options. In order to solve the problems associated with these scandals, the Sarbanes-Oxley Act of 2002 was created in the USA. It introduced sweeping changes in governance, reporting, and disclosure requirements of public firms with the intent of improving accuracy, reliability and timeliness of the information provided to investors.

Interest in research in executive compensation is recent but growing. In this paper, we extend the executive compensation research to the NYSE versus NASDAQ listed firms. We focus our attention on the following questions: Are the total values and the factors that explain executive compensation for the NYSE versus NASDAQ listed firms the same? Is the compensation composition given to these executives different? What happens to the compensation composition and the values after the NASDAQ crash in 2000 and the Sarbanes-Oxley Act in 2002? We analyze data from the years 1992 to 2004.

Our results reveal that executives from NYSE receive, on average, more than the other executives and the differences in total compensation values are statistically significant. We also find that the forms of compensation for NYSE versus NASDAQ listed firms are different. In other words, the percentage that each compensation component represents in total compensation is different in these sub-samples and this structure changes in all the cases, essentially after the Sarbanes-Oxley Act. Our results also reveal that the factors that explain CEO and Directors'

compensation on the NYSE and NASDAQ are generally different, and when some factors are the same, the coefficients are statistically different.

The paper proceeds as follows: Section II describes the literature review and research questions. Section III discusses the data, sample selection and statistics. Section IV presents research design, section V the empirical results and section VI the conclusions.

II. Literature review and research questions

The literature review reveals there is only one study similar and related to our topic. Firth, Lohen, Ropstad and Sjo (1996) focusing on Norwegian Stock Exchange listed firms explore the determinants of Chief Executive Officers (CEO) compensation. They find a modest positive relationship between CEO compensation and the average wage level of the company and a strong positive relationship between CEO compensation and firm size.

Not directly related to the problem of executive compensation and listed firms, but as a parallel investigation, there are a small number of recent studies associated with firms listed on the NYSE, NASDAQ and AMEX that may bear important implications for the findings and conclusions of our study. For example, Sapp and Yan (2000) find that some of the small firms listed on NASDAQ are changing to AMEX because the transaction costs are smaller at AMEX (NASDAQ as a competitive multi-dealer system and AMEX like NYSE a monopoly specialist system) and when they change generally their liquidity improves.

Also Chung, Ness and Ness (1999, 2001) and Bacidore and Lipson (2001), find evidence that transaction costs on NASDAQ are higher than on the NYSE and due to this, some NASDAQ firms are also changing to the NYSE to reduce costs. Lipson (2001) investigates the effect of opening and closing procedures on the NYSE and NASDAQ by examining firms that moved from the NASDAQ to the NYSE and find evidence that opening trades on the NYSE are about 20 percent less costly than NASDAQ and these savings on the NYSE opening increase with the size of the firms. If NASDAQ and NYSE have different transaction cost structures and the firms that are listed there have different characteristics we expect that the factors that explain executive compensation would also be different. NASDAQ listed firms are essentially technological firms with low levels of cash flows (Murphy, 2003) and also NASDAQ transaction costs are generally higher than those of the NYSE. These fundamental differences can also affect what the company can pay to its executives. Another point that we analyze is associated with the impact of the NASDAQ crash (2000) and the enactment of Sarbanes Oxley Act (2002) on executive compensation. So far, we know that the NASDAQ crash caused a reduction in

compensation values, but what happened to the components of compensation packages? Do they still have the same proportion of salary, bonus, stock options, restricted stocks or LTIP2 in terms of total compensation as before the NASDAQ crash? And also was there a significant change in forms and weights of compensation after the Sarbanes-Oxley Act in 2002?

Effectively, after the NASDAQ crash, there were a series of financial scandals associated with the bankruptcy of some of large American companies, based on fraudulent accounting practices and executives' self-dealing. The Sarbanes-Oxley Act of 2002 was established precisely on July 30th to solve this problem. It introduced sweeping changes in governance, reporting, and disclosure requirements of public firms with the intent of improving accuracy, reliability, and timeliness of the information provided to investors. This Act contains provisions which have a significant impact on the benefits and compensation of public company executives. The major changes in this area include the following provisions: to prohibit publicly-traded companies from making or arranging loans for their directors and executive officers; to expedite Securities and Exchange Commission (SEC) reporting to insider traders; to prohibit corporate directors and executive officers from trading employers' securities during planned blackout periods with respect to those securities and to require an employee retirement Income Security Act to cover individual account plans to provide a 30-day notice of blackout periods. After the Sarbanes-Oxley Act, each of the major US stock markets, the NYSE, the NASDAQ, and the AMEX adopted new listing standards in an effort to strengthen the corporate governance practices of listed companies, associated with director independence, audit committees, compensation committees, nominating committees, stock option plans, certification, directors/officers and disclosure and foreign issuers. If a group of new rules of corporate governance were adopted by the NYSE and NASDAQ we expect that the way in which companies pay their executives will change after these important changes.

III. Data, sample selection and statistics

A. Data and sample selection

Data is from the Execucomp database, which collects information about the five highest-paid executives

2 Generally, executive compensation is composed of two more components: "other annual compensation" and "all other compensations". The first case includes the types of compensation not included in salary and bonus and in the second case, all other forms of compensation not included in the other categories. We don't analyze these two forms of compensation because they are residual components and also because they include a large diversity of compensation products.

from 1500 firms listed on the S&P 500 Index, S&P Mid Cap Index, and S&P Small Cap Index.

We use Unbalanced Panel Data Analysis. The sample consists of 73,683 observations of compensation, related to the 5 highest-paid executives from S&P 1500 firms between the years 1992 and 2004. This sample is built excluding all executives whose sum of salary and bonus, and also total compensation, was equal to zero. We include only longer period compensation (and delete the shorter period compensation) of executives who receive more than one compensation in the same year. There are a few instances where an executive switched the job and received two different compensations in the same year. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, with 1982 as base of 100, we adjust the monetary variables to the price level of the year 2004. To select between NYSE, NASDAQ firms we use the variable EXCHANGE from Execucomp, which classifies NYS as NYSE firms, NAS as NASDAQ listed firms. Based on Chen and Hung (2006) we make the differentiation between CEO and Directors' compensations because, generally, the average compensation value of CEOs is higher than that of Directors, and also the factors that explain their compensation can also be different.

B. Statistics

In this section we examine the question whether the executives from firms listed on the NYSE and NASDAQ are paid differently in terms of total value and the compensation components and whether these items (total compensation value and components) change after the NASDAQ crash in 2000 and after the introduction of Sarbanes-Oxley Act (SO) in 2002. We present the basic statistics in two steps. In the first step we analyze the evolution of total compensation through all the observations of executive compensation between 1992 and 2004 for all top five executives and then for CEOs and Directors. In second step we analyze the percentage that each executive compensation component represents, in terms of total compensation, year by year. In this way we can see the most important executive compensation components and changes, if any, year by year. We also compare values and component of executive compensation between 2000 and 2001 (before and after NASDAQ crash) and 2002 and 2003 (before and after SO) to observe if the NASDAQ crash and enactment of SO act had any impact on executive compensation.

Table 1 presents Independent-Samples T-test to compare the means of executive compensation components and Levene's test for equality of variances between the two sub-samples of NYSE and NASDAQ listed firms for the period of 1992 to 2004. The null hypothesis that population means are equal; the alternative hypothesis is that means are different.

Table 1. Average total compensation between 1992 and 2004 adjusted for inflation

In this table we describe the total average compensation, between 1992 and 2004, first for all the Top Five Executives and then for CEOs and Directors. Data is from the ExecuComp database. Mean average and mean differences are in thousands of dollars.

Year		N	Mean Average	Means t-Test	
				Mean Difference	Significance
PANEL A: Top Five Executives					
1992 to 2004	NYSE	5 4778	2661.39	632.10	*
	NASDAQ	1 8668	2029.29		
PANEL B: CEOs					
1992 to 2004	NYSE	9 305	5781.90	1770.82	*
	NASDAQ	3 085	4011.09		
PANEL C: DIRECTORS					
1992 to 2004	NYSE	19 865	4446.18	1422.74	*
	NASDAQ	65 24	3023.34		

(*) Mean difference is statistically significant at: (*) 1% level, (**) 5% level, (***) 10% level

From table 1 we can see that the average compensation of five highest paid NYSE executives is far higher than the average total compensation of five highest paid NASDAQ executives, and these

differences are statistically significant. Both CEOs and directors of the NYSE listed firms receive, on average, much more than the CEOs and directors of

NASDAQ listed firms. Mean differences in compensation values are generally significant.

Table 2 presents the average total compensation of executives of NYSE, and NASDAQ listed firms, and the Independent-Samples T-test to compare the means of executive compensation components and Levene's test for equality of variances between the two sub-samples of NYSE and NASDAQ listed

firms, each year for the period of 1992 to 2004. Yearly analysis gives us a better comparison because single average value based on thirteen yearly observations could be influenced by outlier years. The null hypothesis will be that all population means are equal; the alternative hypothesis is that at least one of the means is different.

Table 2. Yearly Inflation adjusted total compensation trends of NYSE and NASDAQ listed firms between 1992 and 2004

Our sample includes data from the five most well paid executives associated with firms listed on the S&P500, S&P Mid Cap and S&P Small Cap during the period from 1992 to 2004. All the data are from the ExecuComp database. Total compensation is the sum of salary, bonus, stock options, restricted stocks, long term incentive plans (LTIP), other annual compensation and all other compensation. To differentiate between executives from NYSE, NASDAQ, we used the EXCHANGE variable from the ExecuComp database that has the following codes: NYS for NYSE firms and NAS for NASDAQ firms. Mean average and mean differences are in thousands of dollars.

Year	Nyse (1)		Nasdaq(2)		Mean Difference (1) and (2)
	N	Mean	N	Mean	
1992	4	2.584,865	53	1.249,570	1.335,295 *
1993	2	1.865,280	445	1.091,859	773,421 *
1994	3	1.717,387	686	1.127,851	589,536 *
1995	3	1.783,652	777	1.334,982	448,670 *
1996	3	2.177,596	820	1.605,229	572,367 *
1997	3	2.805,092	960	1.853,349	951,743 *
1998	3	3.218,114	119	2.174,102	1.044,012 **
1999	4	3.317,494	151	2.960,016	357,478
2000	4	3.978,887	171	3.352,551	626,336 **
2001	4	3.535,659	170	3.080,971	454,688 ***
2002	4	3.079,657	178	2.100,072	979,585 *
2003	4	2.812,288	194	1.764,695	1.047,593 *
2004	4	3.088,7350	206	2.001,634	1.087,101 *

(*) Mean difference is significant at: (*) 1% level, (**) 5% level and (***) 10% level.

From table 2 we can see that executives from the NYSE receive, on average, more than executives from NASDAQ each year during the sample period.

In table 3 we describe the percentage that each executive compensation component represents in terms of total compensation for NYSE and NASDAQ firms year by year between 1992 and 2004. In the row for year 2001 and 2003 we describe if the differences of the values from year 2001 and 2000 (NASDAQ crash effect) and 2003 to 2002 (Sarbanes Oxley Act Effect) are statistically significant.

Table 3. Yearly percentages of each compensation component of NYSE and NASDAQ listed firms (1992-2004)

This table presents the percentages that each compensation component represents in terms of total compensation by year for Top Five executives, CEOs and Directors. Salary is the executive salary for the year. Bonus is the dollar value of bonus (cash and non-cash) earned by the executive officer during the fiscal years. Stock options are the aggregate value of stock options granted to the executive during the fiscal year as valued using S & P Black-Scholes methodology. Restricted stocks are the value of restricted stock granted during the year (determined as of the date of the grant). LTIP is the amount paid out to the

executive under the company's long-term incentive plan. We also report in year 2001 and 2003 rows if the changes between year 2000 to 2001 (NASDAQ crash) and between 2002 to 2003 (Sarbanes Oxley Act) are statistically significant.

Panel A: Top Five (% of total compensation)

Year	Salary		Bonus		Stock Options		Restricted Stocks		LTIP	
	NYS	NAS	NYS	NAS	NYS	NAS	NYS	NAS	NYS	NAS
1992	48.69	50.36	19.42	17.76	18.31	24.81	4.58	2.13	4.04	1.19
1993	46.51	48.81	21.41	20.25	17.78	24.64	4.61	1.28	3.92	1.10
1994	43.86	47.34	21.81	20.21	21.31	25.37	4.22	2.19	3.82	0.86
1995	42.95	47.75	22.70	19.46	19.54	25.56	4.71	1.72	4.44	0.09
1996	39.95	44.01	22.38	18.30	23.26	29.82	4.95	2.32	4.38	0.97
1997	36.83	42.47	21.90	17.78	25.83	32.98	5.54	2.07	4.60	0.70
1998	36.07	41.28	19.82	16.04	23.26	29.82	5.68	1.65	4.22	0.50
1999	34.10	37.81	20.02	15.87	32.31	40.67	4.86	1.78	3.59	0.30
2000	32.46	35.78	19.80	16.41	33.25	42.17	5.60	1.98	3.56	0.30
2001	33.63*	36.46*	17.20*	11.87*	35.47*	45.32*	6.03*	2.21*	2.52*	0.40*
2002	33.87	38.74	19.59	14.30	31.08	40.63	7.14	2.34	2.83	0.40
2003	34.65	39.05	20.92*	16.70*	25.32*	35.99*	9.74*	3.55*	3.47*	0.80*
2004	30.48	35.63	23.59	18.15	23.96	36.46	13.32	5.07	4.02	0.71

Panel B: CEOs (% of total compensation)

Year	Salary		Bonus		Stock Options		Restricted Stocks		LTIP	
	NYS	NAS	NYS	NAS	NYS	NAS	NYS	NAS	NYS	NAS
1992	36.39	55.29	22.78	12.54	22.89	21.83	6.41	0.68	6.42	5.95
1993	37.64	49.22	23.31	19.42	23.07	17.80	4.62	4.06	5.01	4.45
1994	33.85	43.80	23.22	21.16	28.44	23.10	4.51	4.39	5.14	2.99
1995	31.82	42.46	24.21	23.06	26.76	21.42	5.75	4.99	5.91	3.67
1996	28.59	38.82	22.52	24.13	31.89	23.88	5.96	3.90	5.91	3.99
1997	24.16	36.09	21.93	22.33	36.40	26.05	6.70	5.16	6.04	4.30
1998	23.24	35.02	20.22	20.12	40.27	32.35	5.90	4.49	5.36	3.39
1999	20.33	31.81	19.35	20.57	46.09	35.90	4.94	3.76	4.31	3.10
2000	18.43	30.16	17.93	20.35	47.24	36.92	7.28	4.23	4.19	2.48
2001	18.63	32.12	14.86*	15.40*	51.80**	39.99	7.09	5.52*	3.38*	1.57*
2002	20.03	28.90	17.15	18.97	45.98	38.48	7.90	6.67	4.44	1.78
2003	18.83	30.18	21.68*	21.02**	36.93*	31.08*	11.88*	9.16*	5.56*	2.61*
2004	16.39	27.09	22.99	24.09	36.52	29.73	14.32	11.04	4.79	3.64

Panel C: Directors (% of total compensation)

Year	Salary		Bonus		Stock Options		Restricted Stocks		LTIP	
	NYS	NAS	NYS	NAS	NYS	NAS	NYS	NAS	NY	NAS
1992	38.98	52.87	21.41	16.58	22.86	16.58	5.35	3.72	5.12	2.52
1993	38.23	49.52	23.22	16.58	22.86	16.58	5.34	3.99	4.63	3.56
1994	35.62	45.44	23.27	21.24	25.98	21.24	5.15	4.34	5.15	2.56
1995	33.59	44.98	23.29	19.59	25.58	19.59	5.91	4.52	5.61	3.08
1996	30.53	40.94	22.41	21.01	30.47	21.01	5.94		5.47	2.93
1997	26.17	38.95	21.86	23.67	34.62	23.67	6.74	4.76	5.35	2.83
1998	5.40	7.89	0.41	0.41	7.29	0.41	5.82	4.36	.47	2.59
1999	2.99	4.70	0.23	3.93	2.37	3.93	5.38	3.25	.97	2.72
2000	0.75	3.15	8.63	4.23	4.06	4.23	6.90	4.31	.35	1.72
2001	20.73	35.49	16.15*	35.95*	48.53*	35.95	6.47**	5.26*	3.09*	1.35*
2002	21.29	31.57	18.80	36.40	42.08	36.40	8.15	5.96	4.41	1.58
2003	21.10*	33.55*	21.80*	29.74*	35.05*	29.74*	11.56*	7.97*	1.64*	1.86*
2004	18.79	28.84	23.03	28.10	34.25	28.19	14.08	10.56	4.50	2.95

Significant at: (*) 1% level, (**) 5% level and (***) 10% level

From table 3 we see that salary, in all the cases, is the most important executive compensation component of top five executives until 1998. Between 1999 and 2001, stock options become the most important component of executive compensation for NYSE and NASDAQ listed firms.

Examining the impact of NASDAQ crash on the compensation of the top five executives, we find that NASDAQ listed firms exhibit a decrease in the value that bonus represents in total compensation from 16.41% in 2000 to 11.87% in 2001, and this decrease is compensated with a small increase in terms of stock options (42.17% in 2000 and 45.32% in 2001) and

restricted stocks (1.98% in 2000 to 2.31% in 2001). NYSE listed firms practically maintain the same composition of compensation for the top five executive sub-sample.

To evaluate the impact of the Sarbanes-Oxley Act in 2002 on executive compensation, we compare the results for 2002 to 2003 and observe that NYSE and NASDAQ executives are paid with fewer stock options but with more restricted stocks and bonuses. We also see that, in the case of the NYSE and NASDAQ, the importance of restricted stocks in total compensation increases in the later years.

Results for panel B show that for NYSE listed firms, salary is the most important compensation component between 1992 and 1995 and after that, stock options are the most important component of CEO compensation. Essentially in the later years, bonus also becomes an important component of CEO compensation.

In the case of NASDAQ listed firms, the most important compensation component is also salary but after 1996 stock options have practically achieved similar level of importance.

If we analyze the impact of the NASDAQ crash on CEO compensation, comparing the change in percentage that each compensation component represents in terms of total compensation between the year 2000 and 2001, we see that NYSE executives receive more stock options and less bonus, and NASDAQ executives receive more stock options, more salary and less bonus.

In terms of the impact of Sarbanes Oxley Act, comparing results for 2002 and 2003, we see that NYSE executives receive fewer stock options and more bonus and restricted stocks. NASDAQ executives also receive fewer stock options and more bonus, salary and essentially restricted stocks.

If we compare the compensation components between CEOs and Directors, we see that directors receive more salary than CEOs. NASDAQ listed firms reveal that bonus is a more important component of compensation for directors than for CEOs but in the case of the NYSE this difference is small. In all the cases CEOs receive more stock options than Directors. The use of restricted stock becomes an important component after the Sarbanes Oxley Act in 2002 for NYSE and NASDAQ listed firms.

IV. Research Design

We first examine the determinants of executive compensation. We believe that that if firms listed on the NYSE are significantly different from firms listed on NASDAQ, the factors that explain the executive compensation in these two groups may also be different. In this section we make this analysis.

We used Unbalanced Panel Data analysis and the Fixed Effect Regression Model, also called within estimator or Least of Square Dummy Variable (LSDV). The dependent variables are LN (Total

Compensation) and LN (Short Term Compensation) and LN (Option Ratio).

The dependent variable **LN (Total Compensation)** is the natural logarithm of the sum of salary, bonus, stock options, restricted stocks, LTIP, other annual compensation and all other compensation, **LN (Short term Compensation)** is the natural logarithm of the sum of salary and bonus. The other dependent variable is the option ratio **LN (option ratio)**, which is the natural logarithm of stock options granted to the executive divided by the total compensation.

Based on Fama and French (1997) we control for industry effect inserting the 48 industry classifications dummies. We also control for time effect inserting one dummy for each year between 1993 and 2004. We expect that time will have a positive effect on explaining executive compensation during the analyzed period.

Based on Lauterbach and Scheiber (2002) 3 and Cheng and Hung (2006), we also separate the analysis for CEOs and Directors because these two groups can have different characteristics in terms of compensation.

The model that we use is:

$$LN(Compensation) = \beta_0 + \beta_1 * FirmSize\ Component + \beta_2 * LN(Not\ Exercised\ Ratio) + \beta_3 * LN(BS\ Volatility) + \beta_4 * LN(Nummtgs) + \beta_5 * LN(Tenure) + \beta_6 * TrsStr + \beta_7 * SalesSlis + \beta_8 * Pdirpens + \beta * Years\ Dummies(1993...2004) + \beta * Industry\ Dummies + f + \varepsilon$$

LN (Compensation) can assume the values of LN(total compensation), LN(Option ratio) or LN(Cash compensation) and f is the fixed effect.

A. Independent Variables

To explain the factors that affect the executive compensation of the NYSE and the NASDAQ listed firms we use a group of financial and governance variables.

A.1- Financial Variables

Firm size has been reported as one of the most important variables to explain executive compensation. To measure the impact of firm size on executive compensation, researchers generally use the variables Assets, Market Value or firm Sales with our without natural logarithm. But which of these variables is best to measure the impact of firm size on executive compensation? There is no empirical answer to this question. Researchers use only one of these variables, at the expense of other variables, to capture the size effect which they believe will produce the results most consistent with their research design. Each of the size variables has an impact on executive compensation but these variables are highly

3 This analysis was made with 166 American Banks between 1993 and 1996.

correlated, and cannot be introduced at the same time to explain executive compensation in the regression model, we therefore introduce a new technique by using the **Principal Component Analysis** to extract a factor that contains information from the three variables and resolve this old problem in executive compensation research.

The factor that measures firm size will be composed of the following variables:

$$Y_1 = a_{11}LN(\text{Sales}) + a_{12}LN(\text{Assets}) + a_{13}LN(\text{Market Value})$$

Essentially, Principal Component Analysis solves the problem of a number of variables that are highly correlated and can not be introduced at the same time in a model. In this way, from table 4 we can see that variables LN (Sales), LN (Assets), LN (Market Value) are highly correlated and from Kaiser-Meyer-Olkin and Bartlett's test that this correlation is higher and statistically significant.

Table 4. Statistics from Principal Component Analysis

Panel A: Correlation Matrix (a)

		LN (Market Value)	LN (Assets)	LN (Sales)
Correlation	LN (Market Value)	1	0.820	0.796
	LN (Assets)	0.820	1	0.845
	LN (Sales)	0.796	0.845	1

Panel B: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.640	88.010	88.010	2.640	88.010	88.010
2	0.208	6.936	94.946			
3	0.152	5.054	100.000			

Panel C: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0,763*
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Significant at 1% level

From table 4 we can see that there is only one factor with Initial Total Eigenvalues superior to 1 that explains 88.01% of the total variance and the vector is:

Firm Size Component = 0.929* LN (Market Value) + 0.947* LN (Assets) + 0.938* LN (Sales)

We expect that firm size component will have a positive relationship with all three executive compensation dependent variables. Authors like Noguera and Highfield (2007) also report that because larger firms have more complex operations and will be more difficult to monitor therefore the use of incentives based compensation is practiced more in large firms than in small firms. We thus expect a stronger relationship between dependent variable and firm size in the case of NYSE listed firms which are essentially large firms.

We also use the variable LN (Not Exercised ratio), which is the natural logarithm of the number of unexercised options that the executive hold at the end of the year that were vested, divided by the aggregate

number of stock options/stock appreciation rights granted. We expect a negative relationship between this ratio and the executive total compensation and the volume of stock options granted, but a positive relationship with short term cash compensation. If executives can not exercise their options, the company will probably have to give additional compensation, essentially in cash, to increase their motivation. We also expect that this relationship will be higher in NASDAQ listed firms because, as (Murphy (2003), Anderson, Banker and Ravidran (1998), and Stathopoulos, Espenlaub and Walker (2004)) note, new economy executives are compensated more with stock options. They will lose most of their compensation if the exercise price remains below the market price. So to protect them against this risk the executives are rewarded with more stock options.

To analyze the relationship between the firm risk and the executives' total compensation, option ratio and short term compensation, we also use the variable LN (BS VOLATILITY), which is the natural

logarithm of the standard deviation volatility calculated over 60 months with Black and Scholes' methodology. We expect a positive relationship between the two dependent variables (total compensation and option ratio) with firm risk and a negative relationship with short term compensation. If the volatility is high, the firm's stock price will also be high and companies will probably prefer to compensate their executives with more stock options. In this way, firms will probably reduce compensation based on cash compensation (short term compensation) and increase compensation based on stock options. We also expect that the relationship between stock return volatility and option ratio will be higher for NASDAQ listed firms because, as discussed above, executives from new technology firms are more compensated with stock options.

TRS1YR, one year total return to shareholders including the monthly reinvestment of dividends, is also used in our investigation to analyze the impact of shareholders' return on executive compensation. If shareholders receive a high return on their investments in the company, they don't need to give more stock options to executives to align executives' interests with the owners' interest to reduce the agency cost. Based on this, we expect a negative relationship between option ratio, total compensation and the one year shareholders' return and a small positive relationship with cash compensation in the sense that companies will probably give some money to compensate executives' efforts, but they don't need to give more stock options to motivate them.

We also test the effect of firm growth on executive compensation. The variable that we use to test this effect is the 5-year least squares annual growth rate of sales (SALE5LS). We expect, as Ryan and Wiggins (2001), that executives would receive higher incentive pay in firms with higher growth opportunities.

In this investigation, we also control, like Barron and Waddel (2003) and Grinstein and Hribar (2004), for the time effect on executive compensation in the sense that some of compensation changes can be associated merely to time effect. To control for time we create a dummy variable for each year between 1993 and 2004 assuming the value of 1 if the compensation is from the year and 0 if not. We believe that time will have strong effect to explain executive compensation in all the cases. In boom years we expect a higher compensation and in recessionary years we expect a lower compensation. Moreover, during technology boom years we expect an increase in compensation.

To control for industry effect on executive compensation, and based on Fama and French (1997) industry classifications we also create, for each industry, a dummy that assumes the value of 1 when the executive is associated with a specific industry sector and 0 when the executive is not associated with that specific sector. We also believe that some

industries pay more to their executives than others therefore creating industry specific effects.

A.2-Governance Variables

In the past few years we have witnessed a significant number of studies that have analyzed the relationship between board activity, board composition and executive compensation. Authors like Ryan Jr and Wiggins III (2004) find that CEO compensation is related to the power and influence that s/he has on the board, and firms with external directors on the board pay more compensation based on stock options and restricted stocks. Also, Anderson and Bizjak (2003) analyze whether board's independence promotes shareholders' interests and if the presence of the CEO on the Compensation Committee is related to opportunistic behaviour.

To analyze this relationship between board activity and executive compensation we use the variable LN (NUMMTGS), which is the natural logarithm of the number of board meetings held during the indicated fiscal year, and the dummy variable INTERLOCK, which assumes the value one when it is "true" that the executive serves on another board and zero if not.

We expect the number of board meetings to be negatively related to executive compensation because more control reduces the ability to increase compensation and it aligns the interests of shareholders and executives. Davidson III, Pilger and Szakmary (1998) and Ryan and Wiggins (2001) also conclude that more monitoring power can reduce the need to provide CEOs with incentive compensation.

Like Core, Holthausen and Larker (1999) and Hallock (1997), we expect that if executives are interlocked, they can influence their personal compensation in positive terms.

The number of years that an executive is CEO (LN (TENURE)) has also been documented as an important variable in explaining executive compensation. Authors like Chidambaram and Prabhala (2003), Ryan Jr and Wiggins III (2004), Murphy (1986) and Barro and Barro (1990) use this variable. Like Ryan and Wiggins, (2001), Conyon and He (2004) and Kang, Kumar and Lee (2004), we expect that CEO entrenchment due to tenure would lead to higher cash compensation and lower incentive compensation (stock options).

Finally we use the dummy variables PDIRPENS, which assume the value equal to 1 when it is "TRUE" that the company pays to a director pension/retirement plan. We expect that if the company has a director pension plan, it may have the ability to pay less to its executives.

V. Empirical results

A. Summary statistics

In table 5 we describe the statistics of key financial and corporate governance variables that can help us to

understand the differences between companies listed on the NYSE and NASDAQ.

Table 5. Statistics from regression variables

The table displays some statistics from firms that belong to NYSE and NASDAQ listed firms. Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (BS Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; Trs1tr is the one year total return to shareholders, including the monthly reinvestment of dividends; Sale5ls is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when the named officer is involved in a relationship requiring disclosure in the "Compensation Committee Interlocks and Insider Participation" section of the proxy and 0 when not. Values are in thousands of dollars.

	NYSE					NASDAQ				
		in.	ax.	ean	td. Dev.		in.	ax.	ean	td. Dev.
Firm Size Component	384	0.94	5.97	2.75	.06	815	0.24	1.86	8.96	.70
LN (Not Exercised Ratio)	384	7.13	4.80	.82	.20	815	10.10	.92	.81	.34
LN(Bs Volatility)	384	2.17	.89	1.14	.38	815	1.90	.26	0.70	.44
LN(Nummtgs)	384	.00	.61	.93	.36	815		.09	.83	.39
LN (Tenure)	384	5.90	.06	.09	.90	815	2.05	.78	.18	.91
Trs1tr	384	95.32	90.39	8.74	4.25	815	94.01	4828.6	1.56	75.82
Sales5ls	384	37.67	51.13	1.94	6.56	815	36.35	03.16	6.83	7.12
Pdirpens	384			.20	.40	815			.03	.17
Pinterlock	384			.05	.22	815			.05	.22

We can see that, NYSE firms are, on average, bigger than NASDAQ firms. The average number of executive stock options vested (but not exercised) and also the average numbers of executives interlocked are practically the same in both situations. NASDAQ

listed firms generate a higher return to shareholders and the sale increases than NYSE firms. NYSE firms pay more to executive pension plans than NASDAQ listed firms.

B. Determinants of executive compensation for NYSE and NASDAQ listed firms

In this section we test the hypotheses that there are differences in forms and determinants of executive compensation for firms listed on the NYSE and NASDAQ. As we see from the table above, these two groups of companies have different characteristics; therefore, we believe that the factors that explain executive compensation in these two groups can also be different. To determine what factors influence executive total compensation, option ratio and short term compensation (the three dependent variables), we use Unbalanced Panel Data and Least Squares Dummy Variable Regression (LSDV). In all the regressions, Standard errors are corrected using period Seemingly Unrelated Regression (SUR) – Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995). We also check whether correlation between independent variables is significant based on the Pearson correlation test and find that the correlation between the variables is small.

As a first step we investigate whether the listing place (exchange) and the job title of the executive influences the compensation. If listing exchange (Nadaq versus NYSE firms) and job title (CEOs

versus directors) are significant variables then we will have an in-depth analysis of executive compensation for NYSE versus NASDAQ listed firms and also for CEO versus Directors. We run a fixed effect regression on each of the three dependent variables using all the explanatory variables stated above, including year and industry dummy variables, and on the top of that we add two dummy variables-“exchange” (1 if executive is from NASDAQ listed firm otherwise zero) and “status” (1 if the executive is Director otherwise zero). Regression results show that both variables are significant. Based on above finding, we proceed with our analysis and run separate fixed effect regressions on NYSE CEOs, Nasdaq CEOs, NYSE Directors, and Nasdaq Directors in order to identify the determinants of executive compensation. These regressions will show us whether the factors that explain the compensation of CEOs and Directors are the same for NYSE versus Nasdaq listed firms. Results are presented on tables 6 through 10. We further extended our analysis in tables 11 and 12 (shown in appendix) and perform the tests of equality of coefficients for regressions on Nasdaq CEO’s versus NYSE CEO’s and Nasdaq Directors versus NYSE Directors. That is we examine whether the factor intensity on executive compensation is same for Nasdaq versus NYSE sub-samples for CEOs and Directors.

Table 6. Fixed Effect Regression Analysis of Compensation Determinants

Data is from the ExecuComp database from 1992 to 2004. We used Unbalanced Panel Data - Fixed Effect Regression Analysis. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, and based on the 1982 base of 100, we adjust to inflation the monetary variables reporting the values to the year 2004. Dependent variables are LN (Total Compensation), LN (Short Term Compensation) and LN (Option Ratio). LN (Total Compensation) is the natural logarithm of total executive compensation. LN (Short Term Compensation) is the natural logarithm of Salary and Bonus. LN (Option Ratio) is the natural logarithm of the value of options granted to the executive divided by total compensation. The independent variables are: Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (Bs Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; TRS1TR is the one year total return to shareholders, including the monthly reinvestment of dividends; SALES5LS is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when executive is at same time in two boards and 0 when not. Nasdaq is a dummy that assumes the value of 1 when executive is in a firm listed on NASDAQ and 0 when not. Pexecdir is a dummy that assumes the value of 1 when executive is directors and 0 when not. We also control for time effect in terms of executive compensation using a dummy for each year between 1993 and 2004 and for industry effect using the Fama and French (1997) 48 industry classifications.

	LN(Total Compensation)	t statistics	LN(Option Ratio)	t statistics	LN(Short Term Compensation)	t statistics
Constant	1,429*	3,312	-2,72*	-6,263	2,890*	6,522
Firm Size Component	0,172*	30,587	0,032*	5,513	0,105*	19,971
LN (Not Exercised Ratio)	-0,240*	-51,573	-0,302*	-62,794	-0,002	-0,496
LN(Bs Volatility)	0,184*	5,510	0,333*	9,725	-0,123*	-3,933
LN(Nummtgs)	-0,008	-0,446	-0,029	-1,578	-0,105*	-6,251
LN (Tenure)	1,039*	5,316	0,504**	2,557	0,689*	3,412

Trs1yr	-0,000001	-0,042	-0,0001*	-3,604	0,0001*	4,527
Sales5ls	0,002*	4,747	0,001*	2,579	0,0004	1,481
Pdirpens	-0,164*	-7,087	-0,047**	-1,965	-0,067*	-3,072
Interlock	0,098*	3,146	0,094*	2,935	0,038	1,326
Year1993	0,065*	2,635	0,031	1,027	0,043*	2,210
Year1994	0,276*	10,337	0,231*	7,783	0,140*	6,679
Year1995	0,289*	10,409	0,161*	5,266	0,129*	5,699
Year1996	0,428*	14,787	0,342*	11,064	0,167*	7,088
Year1997	0,532*	17,728	0,346*	10,806	0,208*	8,277
Year1998	0,586*	19,268	0,427*	13,378	0,265*	10,206
Year1999	0,728*	22,971	0,528*	16,135	0,308*	11,154
Year2000	0,808*	23,548	0,458*	12,816	0,368*	12,385
Year2001	0,876*	25,256	0,603*	16,753	0,281*	8,888
Year2002	0,949*	27,137	0,579*	15,826	0,436*	13,778
Year2003	0,921*	25,044	0,513*	13,385	0,479*	14,535
Year2004	1,105*	28,990	0,573*	14,398	0,586*	17,049
NASDAQ Dummy	0,435	1,599	0,372	1,328	-0,775*	-3,052
Pexedir Dummy	0,410*	1,925	0,049*	2,244	0,370*	18,632
Apparel Dummy	-0,562	-1,311	0,335	0,761	-0,870**	-2,092
Business Dummy	-0,988**	-2,200	-0,016	-0,035	-0,844***	-1,891
Candy Dummy	-0,304	-0,612	0,462	0,790	-0,408	-1,075
Computer Dummy	1,070**	2,031	2,237*	4,103	0,547	1,060
Construction Dummy	0,333	1,160	-0,317	-1,053	0,287	1,047
Consumer Dummy	1,163**	2,242	-0,511	-0,927	0,738***	1,722
Medical Dummy	0,578	1,596	0,474	1,173	0,466	1,477
Trading Dummy	-0,650	-1,409	0,192	0,417	0,913***	1,890
Wholesales Dummy	-2,467*	-4,920	-1,579*	-3,081	-0,840	-1,635
N	12225		12225		12225	
Adjusted R-square	84,00%		68,05%		76,30%	

*Significant at 1% level, ** significant at 5% level, *** significant at 10%.

Note 1: Standard errors are corrected using period Seemingly Unrelated Regression (SUR)– Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995).

Table 7. Fixed Effect Regression Analysis of the Determinants of the CEO Compensation for NYSE Listed Firms

Data is from the ExecuComp database from 1992 to 2004. We used Unbalanced Panel Data - Fixed Effect Regression Analysis. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, with 1992 as base of 100, we adjust the monetary variables to the price level of the year 2004. Dependent variables are LN (total compensation) LN (Short Term Compensation) and LN (Option Ratio). LN (Total Compensation) is the natural logarithm of total executive compensation. LN (Short Term Compensation) is the natural logarithm of Salary and Bonus. LN (Option Ratio) is the natural logarithm of the value of options granted to the executive divided by total compensation. The independent variables are: Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (Bs Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; TRS1TR is the one year total return to shareholders, including the monthly reinvestment of dividends; SALES5LS is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when executive is at same time in two boards and 0 when not. We also control for time effect in terms of executive compensation using a dummy for each year between 1993 and 2004 and for industry effect using the Fama and French (1997) 48 industry classifications.

	LN(Total Compensation)	t statistics	LN(Option Ratio)	t statistics	LN(Short Term Compensation)	t statistics
Constant	0.346	0.524	-2.099	-2.897	4.578*	7.225
Firm Size Component	0.165*	19.770	0.010	1.087	0.124*	18.165
LN (Not Exercised Ratio)	-0.220*	-35.360	-0.344*	-47.105	0.002	0.325
LN(Bs Volatility)	0.190*	4.374	0.188*	3.733	-0.123*	-3.508

LN(Nummtgs)	0.002	0.097	-0.037	-1.363	-0.071*	-3.461
LN (Tenure)	1.633*	6.058	0.379	1.289	-0.147	-0.559
Trs1yr	0.00004	0.293	-0.002*	-10.267	0.001*	13.136
Ssles5ls	0.001***	1.921	0.003*	3.897	-0.0002	-0.277
Pdirpens	-0.103*	-3.633	-0.079**	-2.455	-0.042***	-1.881
Interlock	0.083**	2.254	0.142*	3.274	-0.001	-0.022
Year1993	0.117*	2.937	-0.002	-0.039	0.058**	2.045
Year1994	0.351*	8.539	0.202*	3.367	0.152*	5.137
Year1995	0.362*	8.664	0.148**	2.426	0.091*	2.936
Year1996	0.512*	11.766	0.293*	4.766	0.136*	4.215
Year1997	0.609*	13.430	0.316*	5.011	0.158*	4.738
Year1998	0.663*	14.548	0.411*	6.441	0.239*	6.963
Year1999	0.800*	17.210	0.543*	8.436	0.298*	8.361
Year2000	0.827*	16.864	0.496*	7.337	0.308*	8.151
Year2001	0.899*	17.939	0.628*	9.236	0.245*	6.068
Year2002	0.989*	19.466	0.611*	8.874	0.399*	9.899
Year2003	0.987*	18.803	0.600*	8.452	0.368*	8.988
Year2004	1.151*	21.427	0.611*	8.434	0.496*	11.773
Apparel Dummy	-0.168	-0.446	0,008	0,431	-0.589***	-1.916
Business Dummy	-1.547	-3.443	0,255	0,515	-0,186	-0,471
Candy Dummy	-0.577	-1.420	0,413	0,615	-0.541***	-1.912
Computer Dummy	2.719*	4.417	1.711**	2.492	-1.206**	-2.142
Construct Dummy	1.380*	3.889	-0.541	-1,332	-0,310	-1,002
Medical Dummy	0,061	0,170	0,270	0,601	0,479***	1,684
N		6124		6124		6124
Adjusted R-square		86.35%		68.36%		81.77%

*Significant at 1% level, ** significant at 5% level *** significant at 10%

Note 1: Standard errors are corrected using period Seemingly Unrelated Regression (SUR)– Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995)

Table 8. Fixed Effect Regression Analysis of the Determinants of the CEOs Compensation for NASDAQ listed firms

Data is from the ExecuComp database from 1992 to 2004. We used Unbalanced Panel Data - Fixed Effect Regression Analysis. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, with 1992 as base of 100, we adjust the monetary variables to the price level of the year 2004. Dependent variables are LN (Total Compensation), LN (Short Term Compensation) and LN (Option Ratio). LN (Total Compensation) is the natural logarithm of total executive compensation. LN (Short Term Compensation) is the natural logarithm of Salary and Bonus. LN (Option Ratio) is the natural logarithm of the value of options granted to the executive divided by total compensation. The independent variables are: Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (Bs Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; TRS1TR is the one year total return to shareholders, including the monthly reinvestment of dividends; SALES5LS is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when executive is at same time in two boards and 0 when not. We also control for time effect in terms of executive compensation using a dummy for each year between 1993 and 2004 and for industry effect using the Fama and French (1997) 48 industry classifications.

	LN(Total)	t statistics	LN(Option Ratio)	t statistics	LN(Short Term Compensation)	t statistics
Constant	1.786*	2.658	-2.927*	-4.624	4.481*	5.926
Firm Size Component	0.248*	19.816	0.035*	2.889	0.116*	9.394
LN (Not Exercised Ratio)	-0.295*	-23.322	-0.281*	-21.437	0.011	0.896
LN(Bs Volatility)	0.100	0.948	0.223**	2.092	-0.424*	-3.913
LN(Nummtgs)	-0.011	-0.270	-0.047	-1.168	-0.046	-1.130
LN (Tenure)	0.609**	2.213	0.598**	2.323	-0.102	-0.325
Trs1yr	-0.00003	-1.604	-0.00002	-1.125	0.00003	1.584

Sales5ls	0.0002	0.397	-0.00008	-0.146	-0.001	-1.107
Pdirpens	-0.072	-0.428	-0.127	-0.696	-0.028	-0.170
Interlock	0.098	1.455	0.031	0.471	0.129*	1.971
Year1993	0.036	0.258	0.380**	2.527	-0.047	-0.510
Year1994	0.193	1.382	0.392*	2.654	0.051	0.553
Year1995	0.012	0.084	0.326**	2.192	-0.015	-0.143
Year1996	0.122	0.835	0.394**	2.451	-0.077	-0.763
Year1997	0.139	0.955	0.415*	2.755	-0.027	-0.272
Year1998	0.148	1.012	0.492*	3.257	0.020	0.195
Year1999	0.287**	1.914	0.576*	3.740	-0.004	-0.039
Year2000	0.358**	2.342	0.584*	3.737	0.091	0.811
Year2001	0.360**	2.333	0.661*	4.183	-0.062	-0.536
Year2002	0.334**	2.181	0.647*	4.077	0.025	0.220
Year2003	0.220	1.419	0.570*	3.563	0.048	0.408
Year2004	0.391**	2.495	0.640*	3.971	0.132	1.098
N		1877		1877		1877
Adjusted R-Square		85.43%		74.42%		67.96%

(*) Significant at 1% level, (**) significant at 5% level, (***) significant at 10%

Note 1: Standard errors are corrected using period Seemingly Unrelated Regression (SUR)– Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995)

Table 9. Fixed Effect Regression Analysis of Determinants of Directors Compensation for NYSE listed firms

Data is from the ExecuComp database from 1992 to 2004. We used Unbalanced Panel Data - Fixed Effect Regression Analysis. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, with 1992 as base of 100, we adjust the monetary variables to the price level of the year 2004. Dependent variables are LN (Total Compensation), LN (Short Term Compensation) and LN (Option Ratio). LN (Total Compensation) is the natural logarithm of total executive compensation. LN (Short Term Compensation) is the natural logarithm of Salary and Bonus. LN (Option Ratio) is the natural logarithm of the value of options granted to the executive divided by total compensation. The independent variables are: Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (Bs Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; TRS1TR is the one year total return to shareholders, including the monthly reinvestment of dividends; SALES5LS is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when executive is at same time in two boards and 0 when not. We also control for time effect in terms of executive compensation using a dummy for each year between 1993 and 2004 and for industry effect using the Fama and French (1997) 48 industry classifications.

	LN(Total Compensation)	t statistics	LN(Option Ratio)	t statistics	LN(Short Term Compensation)	t statistics
Constant	1.253	0.827	-0.483	-0.307	0.437	0.265
Firm Size Component	0.144*	18.820	0.026*	3.117	0.099*	13.391
LN (Not Exercised Ratio)	-0.228*	-40.640	-0.333*	-54.353	-0.007	-1.285
LN(Bs Volatility)	0.168*	4.200	0.297*	6.952	-0.138*	-3.638
LN(Nummtgs)	-0.008	-0.351	-0.052**	-2.192	-0.115*	-5.516
LN (Tenure)	1.475**	2.196	-0.408	-0.586	1.872**	2.553
Trs1yr	0.0003**	2.185	-0.001*	-11.749	0.002*	14.304
Sales5ls	0.003*	4.831	0.002**	3.178	0.002*	2.605
Pdirpens	-0.111*	-4.356	-0.059	-2.156	-0.054**	-2.195
Interlock	0.093*	2.631	0.129*	3.359	-0.007	-0.218
Year1993	0.062**	2.171	0.009	0.242	0.048**	2.105
Year1994	0.282*	9.111	0.209*	5.929	0.161*	6.629
Year1995	0.310*	9.775	0.175*	4.750	0.115*	4.408
Year1996	0.482*	14.252	0.352*	9.548	0.189*	6.755

Year1997	0.606*	17.099	0.396*	10.100	0.206*	6.873
Year1998	0.669*	18.720	0.438*	11.096	0.302*	9.477
Year1999	0.806*	21.711	0.560*	14.068	0.354*	10.750
Year2000	0.871*	21.844	0.497*	11.603	0.389	10.852
Year2001	0.973*	23.855	0.620*	14.092	0.346*	8.964
Year2002	1.077*	25.895	0.588*	13.042	0.539*	13.989
Year2003	1.081*	25.054	0.592*	12.542	0.530*	13.481
Year2004	1.268*	28.436	0.610*	12.467	0.671*	16.439
Apparel Dummy	-0.352	-0.067	-0.379	-0.649	-0.077	-0.131
Business Dummy	-1.474***	-1.719	1.045	1,174	-2.207**	-2.402
Candy Dummy	-0.035	-0.067	-0.049	-0.073	-2,207	-2,402
Computer Dummy	2.033	1.567	0,513	0,379	2.796**	1.989
Construct Dummy	0.896	1.252	-1,237	-1,619	1.259***	1.674
Medical Dummy	0,083	0.168	0,685	1,182	-0,047	-0,114
Consumer Dummy	1.330**	2.287	-0,929	-1,455	1.314**	2.524
Fabricat Dummy	2.444*	4.298	1.217**	2.065	1.268**	2.118
Trading Dummy	-0,152	-0.168	-1,03	-1,102	2.435**	2.695
N		8281		8281		8281
Adjusted R-Square		84.16%		66.57%		74.67%

*Significant at 1% level, ** significant at 5% level, *** significant at 10%

Note 1: Standard errors are corrected using period Seemingly Unrelated Regression (SUR) – Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995)

Table 10. Fixed Effect Regression Analysis of the Determinants Directors Compensation for NASDAQ listed firms

Data is from the ExecuComp database from 1992 to 2004. We used Unbalanced Panel Data - Fixed Effect Regression Analysis. Using the Consumer Price Index (CPI), compiled by the Bureau of Labor Statistics, with 1992 as base of 100, we adjust the monetary variables to the price level of the year 2004. Dependent variables are LN (Total Compensation), LN (Short Term Compensation) and LN (Option Ratio). LN (Total Compensation) is the natural logarithm of total executive compensation. LN (Short Term Compensation) is the natural logarithm of Salary and Bonus. LN (Option Ratio) is the natural logarithm of the value of options granted to the executive divided by total compensation. The independent variables are: Firm Size Component is a factor extracted from Principal Component Analysis, composed of information from variables LN (Assets), LN (Market Value) and LN (Sales), which are used to analyze firm size. LN (Not Exercised Ratio) is the natural logarithm of the number of unexercised options that the executive held at year end that were vested, divided by the aggregate number of stock options/stock appreciation rights granted; LN (Bs Volatility) is the natural logarithm of standard deviation volatility calculated over 60 days with the Black Scholes method; LN (Nummtgs) is the natural logarithm of the number of board meetings held during the indicated fiscal year. LN (Tenure) is the natural logarithm of the number of years as CEO; TRS1TR is the one year total return to shareholders, including the monthly reinvestment of dividends; SALES5LS is the 5-year least squares annual growth rate of sales. Pdirpens is a dummy that assumes the value equal to 1 when it is true and zero when not. Pinterlock is a dummy that assumes the value of 1 when executive is at same time in two boards and 0 when not. We also control for time effect in terms of executive compensation using a dummy for each year between 1993 and 2004 and for industry effect using the Fama and French (1997) 48 industry classifications.

	LN(Total Compensation)	t statistics	LN(Option Ratio)	t statistics	LN(Short Term Compensation)	t statistics
Constant	1.295**	2.054	-2.760*	-5.708	3.487*	4.952
Firm Size Component	0.246*	21.748	0.043*	4.162	0.124*	11.724
LN (Not Exercised Ratio)	-0.274*	-26.534	-0.256*	-29.042	0.028*	2.861
LN(Bs Volatility)	0.210**	2.426	0.319*	4.601	-0.219*	-2.644
LN(Nummtgs)	-0.020	-0.528	-0.018	-0.540	-0.077**	-2.181
LN (Tenure)	0.818*	3.034	0.566*	2.732	0.254	0.840
Trs1yr	-0.00001	-0.572	-0.00002	-1.395	0.0001**	2.645
Sales5ls	0.0004	0.949	0.00004	1.053	0.0003	-0.793
Pdirpens	0.015	0.112	-0.001	-0.013	0.103	0.843
Interlock	0.083	1.281	-0.003	-0.057	0.102***	1.704
Year1993	0.062	0.801	0.143**	1.815	0.030	0.589

Year1994	0.260*	3.168	0.155**	2.030	0.150*	2.670
Year1995	0.147**	1.660	0.130**	1.687	0.127***	1.946
Year1996	0.222*	2.527	0.240*	3.132	0.042	0.705
Year1997	0.264*	2.958	0.201*	2.612	0.079	1.216
Year1998	0.267*	2.924	0.272*	3.504	0.144**	2.297
Year1999	0.383*	4.039	0.341*	4.217	0.122***	1.715
Year2000	0.440*	4.340	0.323*	3.837	0.188**	2.474
Year2001	0.441*	4.311	0.453*	5.262	0.042	0.539
Year2002	0.459*	4.500	0.423*	4.925	0.172**	2.180
Year2003	0.289*	2.747	0.350*	3.954	0.149***	1.785
Year2004	0.484*	4.470	0.430*	4.732	0.248*	2.856
N		2543		2543		2543
Adjusted R-Square		82.68%		72.46%		66.17%

*Significant at 1% level, ** significant at 5% level, *** significant at 10%

Note 1: Standard errors are corrected using period Seemingly Unrelated Regression (SUR)– Panel Corrected Standard Errors (PCSE): correction for both period heteroskedasticity and general correlation of observations within a given cross section (Beck and Katz, 1995)

C- Analysis of the results

As we expected, the above results show that executive compensation for NYSE versus NASDAQ listed firms is explained by different factors. We also analyze in tables 11 and 12 if the factor intensity (coefficients of the regressions of the CEOs and Directors of NYSE and NASDAQ listed firms) is same. We find that in all the cases the values of the coefficients are significantly different.

Prior research has shown that the firm size is one of the most important variables in explaining executive compensation. From tables 7 and 8, we can see that the size variable is significant in explaining variation in executive total compensation; however, it has a stronger impact in case of NASDAQ listed firms than the NYSE listed firms. Firm size has a positive influence on option ratio for CEOs in the case of NASDAQ listed firms, meaning that size influences the number of stock options granted to NASDAQ executives. This relationship is not statistically significant for the NYSE. The firm's size also influences positively the CEO's short term executive compensation (salary and bonus).

In the case of Directors, all three executive compensation dependent variables are positively related to the size of the firm but the directors' compensation for NASDAQ listed firms is more sensitive to firm size than for the NYSE listed firms.

Not exercised ratio, which represents the number of options not exercised but vested, is negatively related to CEOs' total compensation and option ratio both for NYSE and NASDAQ listed firms and, as we expected, it is positively related to short term CEO compensation in both cases, meaning that when executives have stock options they can not exercise, the firms give them additional compensation, in cash, to increase executive motivation. In the case of Directors, we also find a negative relationship between total compensation and option ratio and a positive relationship between short term compensation and option ratio, but this relationship is

only significant, in last case, in NASDAQ listed firms, meaning that Directors from these firms can not exercise the stock options that they have and; therefore, firms give more cash compensation to increase their motivation.

The stock return volatility influences total compensation positively with the exception of CEOs from NASDAQ where the relationship is not statistically significant. The option ratio has also a positive and significant relationship with firm stock return volatility. The results are congruent with Yermack (1995) and Bryan and Hwang's (2000) findings. We also find a negative relationship between cash compensation and stock return volatility like Core, Holthausen and Larker (1999). In the case of Directors, we find a positive relationship between total compensation, option ratio and firm stock return volatility and a negative relationship with short term compensation in both cases, meaning that when volatility increases, firms prefer to give more stock options to the executive and less cash compensation. These relationships are stronger in the case of NASDAQ than for the NYSE.

Noguera and Highfield (2007) are of the view that the board of directors is the central internal mechanism of corporate governance in place at any corporation. Some authors include the size of the board, others the composition of the boards or the influence of the CEO on the board as an explanatory variable of executive compensation. Davidson III, Pilger and Szakmary (1998) use the number of board meetings and find that it is negatively related to executive compensation because more control reduces the ability to increase compensation and thus align the interests of shareholders and executives. Also, Ryan and Wiggins (2001) conclude that more monitoring power can reduce the need to provide CEOs with more incentive compensation. Our results are congruent with previous findings in the case of NYSE CEO short term compensation and NYSE and NASDAQ Directors in the case of option ratio and short term compensation.

We also find that tenure strongly affects, in positive terms, CEO compensation for NYSE listed firms but only slightly affects NASDAQ firms. Only in the case of NASDAQ listed firms do we find that the option ratio is positively and significantly related to CEO tenure. Our results are not consistent with the results of Ryan and Wiggins (2001); Conyon and He (2004), who find that CEO entrenchment due to tenure would lead to higher cash compensation and lower incentive compensation (stock options). We only find consistent results in the case of Directors tenure in which case there is a strong positive relationship between tenure and total and short term compensation for NYSE listed firms. In the case of NASDAQ listed firms, option ratio is positively related to tenure but the results are not congruent with the previous findings that executives will prefer a more certain compensation (cash compensation) over less uncertain compensation (stock options).

The one year return to shareholders negatively affects CEO option ratio for NYSE listed firms, and positively affects the cash compensation that these CEOs receive. In the case of NASDAQ listed firms, the relationships are not statistically significant. As we expected, if shareholders are satisfied with the return of their investments, they don't need to give their executives more incentives based on stock options. We don't find a negative relationship between cash compensation and one year shareholders' return, meaning that NYSE companies compensate their CEOs with more cash compensation when they receive higher returns of investments. In the case of Directors, we find a positive relationship with total compensation and short term compensation for NYSE listed firms and a negative relationship with option ratio. In the case of NASDAQ listed firms, this relationship is only positive and statistically significant with cash compensation.

The sales increase in the last five years has a positive and statistically significant relationship but only with the CEO total compensation and option ratio for NYSE listed firms. The results are consistent with the findings of Ryan and Wiggins (2001) and Anderson et al., (2000), which show that executives receive higher incentive pay in firms with higher growth opportunities. These results though are inconsistent with the findings of Ghosh and Sirmans (2005) that find a negative relationship between executive total compensation and firm growth opportunities. In the case of NASDAQ listed firms, the relationship is not statistically significant. In the case of NYSE Directors, the sales increase in the last 5 years influences, in positive terms, all the dependent variables. NASDAQ director compensation is not affected by the sales increase in the last five years.

As we expected, the existence of firm pension plans influences, in negative terms, total compensation, option ratio and short term compensation, but only in the case of NYSE listed firms, meaning that if the firm has already put money in executives' pension plans, they are able to justify a

reduction in executive compensation during the year. In the case of Directors, only the total and short term compensation in NYSE listed firms are affected by the existence of Directors' pension plans in the company.

As we also expected, interlocked executives will receive more total compensation and stock options, but the results are only statistically significant for NYSE listed firms. The results are congruent with Core, Holthausen and Larcker (1999) and Hallock (1997), who find that interlocked executives can positively influence their personal compensation. In the case of Directors, we find a positive relationship with total compensation and option compensation for NYSE listed firms and a positive relationship with short term compensation for NASDAQ listed firms.

We also achieve interesting results in terms of the effect of the years on CEO and directors compensation. The year effect strongly explains the total executive compensation in NYSE listed firms for CEOs and directors but not for NASDAQ listed firms. Only after 1999 do we find a positive and statistically significant relationship in NASDAQ listed firms, but in smaller terms than NYSE listed firms. When we analyze the option ratio, we find that both groups of CEOs are always influenced by the effect of time, but the relationship is stronger for NYSE listed firms. In terms of short term compensation, this relationship is only positive and statistically significant for NYSE listed firms. In the case of Directors, the time effect strongly influences total compensation, option ratio and short term compensation for NYSE listed firms but the time effect has less significance for NASDAQ listed firms.

Finally, we also analyze the industry effect, using the 48 Fama and French (1997) industry classification and find that some of these dummies can also explain executive compensation. This is the case of Business, which has a negative relationship with CEO total compensation, and computer and construction, which have a positive relationship with total compensation. The computer industry also has a positive relationship with the NYSE CEO Option ratio. We also find a negative and statistically significant relationship with short term compensation and the apparel, candy and computer industry and a positive relationship in the medical industry.

In the case of Directors, we find a negative relationship with the business industry and total compensation for NYSE listed firms and a positive relationship between total compensation and the consumer and manufacturing industry, also for NYSE listed firms. In the case of option ratio, we find a positive relationship with the manufacturing industry also for NYSE and a negative relationship with the Business industry and cash compensation for NYSE. We also find a positive relationship between cash compensation and the computer, construction, consumer, manufacturing and trading industry for NYSE listed firms.

V. Conclusion

This is the first paper that analyzes whether executive compensation for the NYSE and NASDAQ4 listed firms is explained by the same factors. Using a one-way fixed effect regression in an unbalanced panel sample for the period of 1992 to 2004 we also investigate the trends in terms of executive compensation in NYSE and NASDAQ listed firms, the forms of the compensation and whether the forms and weights of compensation changed after the NASDAQ crash in 2000 and the Sarbanes-Oxley Act in 2002.

Our results reveal that executive compensation is influenced by different factors for NYSE and NASDAQ listed firm, and when some of the factors are the same, the intensity of the coefficients are different, and this difference is statistically significant.

We also verify that NYSE and NASDAQ CEO and Director Compensations are composed of different components. The percentage that salary represents in terms of total compensation in NYSE listed firms is higher for Directors than CEOs. Bonus is a more important compensation component for Directors than CEOs in NASDAQ listed firms, but in the case of NYSE firms, the difference is small. In all cases, CEOs receive more stock options than Directors. The used of restricted stock increases essentially in the last few years. We also find that after the NASDAQ Crash in 2000, and essentially after the Sarbanes Oxley Act in 2002, the forms and weights of CEO and Directors' compensation change for NYSE and NASDAQ listed firms.

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APPENDIX

Table 11. T test of equality of regressions coefficients – CEOs (NYSE versus NASDAQ)

Panel A: LN(Total Compensation)

LN(TOTAL COMPENSATION)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coef.	Std. Error	
Constant	6124	0,346	0,661	1877	1,786	0,672	*
Firm Size Component	6124	0,165	0,008	1877	0,248	0,013	*
LN (Not Exercised Ratio)	6124	-0,220	0,006	1877	-0,295	0,013	*
LN(Bs Volatility)	6124	0,190	0,043	1877	0,100	0,105	*
LN(Nummtgs)	6124	0,002	0,024	1877	-0,011	0,040	*
LN (Tenure)	6124	1,633	0,270	1877	0,609	0,275	*
Trs1yr	6124	0,00004	0,000	1877	0,00003	0,000	*
Sales5ls	6124	0,001	0,001	1877	0,0002	0,001	*
Pdirpens	6124	-0,103	0,028	1877	-0,072	0,168	*
Interlock	6124	0,083	0,037	1877	0,098	0,067	*
Year1993	6124	0,117	0,040	1877	0,036	0,140	*
Year1994	6124	0,351	0,041	1877	0,193	0,139	*
Year1995	6124	0,362	0,042	1877	0,012	0,145	*
Year1996	6124	0,512	0,043	1877	0,122	0,146	*
Year1997	6124	0,609	0,045	1877	0,139	0,145	*
Year1998	6124	0,663	0,046	1877	0,148	0,147	*
Year1999	6124	0,800	0,046	1877	0,287	0,150	*
Year2000	6124	0,827	0,049	1877	0,358	0,153	*
Year2001	6124	0,899	0,050	1877	0,360	0,154	*
Year2002	6124	0,989	0,051	1877	0,334	0,153	*
Year2003	6124	0,987	0,052	1877	0,220	0,155	*
Year2004	6124	1,151	0,054	1877	0,391	0,157	*
ApparelDummy	6124	-0,168	0,376				
BusinesDummy	6124	-1,547	0,449				
CandyDummy	6124	-0,570	0,406				
ComputerDummy	6124	2,719	0,616				
ConstructDummy	6124	1,380	0,355				
MedicalDummy	6124	0,061	0,357				

* Difference is statistically significant at 1% (*), 5% level (**), or 10% level (***)

PANEL B: Option Ratio

LN(OPTIO RATIO)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coef.	Std. Error	
Constant	6124	-2,099	0,724	1877	-2,927	0,633	*
Firm Size Component	6124	0,010	0,010	1877	0,035	0,012	*
LN (Not Exercised Ratio)	6124	-0,344	0,007	1877	-0,281	0,013	*
LN(Bs Volatility)	6124	0,188	0,050	1877	0,223	0,107	*
LN(Nummtgs)	6124	-0,037	0,027	1877	-0,047	0,040	*
LN (Tenure)	6124	0,379	0,294	1877	0,598	0,257	*
Trs1yr	6124	-0,002	0,0001	1877	-0,00002	0,00002	*
Sales5ls	6124	0,003	0,001	1877	-0,0001	0,001	*
Pdirpens	6124	-0,079	0,032	1877	-0,127	0,183	*
Interlock	6124	0,142	0,043	1877	0,031	0,066	*
Year1993	6124	-0,002	0,061	1877	0,380	0,150	*
Year1994	6124	0,202	0,060	1877	0,392	0,148	*
Year1995	6124	0,148	0,061	1877	0,326	0,149	*
Year1996	6124	0,293	0,061	1877	0,394	0,161	*
Year1997	6124	0,316	0,063	1877	0,415	0,151	*
Year1998	6124	0,411	0,064	1877	0,492	0,151	*
Year1999	6124	0,543	0,064	1877	0,576	0,154	*
Year2000	6124	0,496	0,068	1877	0,584	0,156	*
Year2001	6124	0,628	0,068	1877	0,661	0,158	*
Year2002	6124	0,611	0,069	1877	0,647	0,159	*
Year2003	6124	0,600	0,071	1877	0,570	0,160	*
Year2004	6124	0,611	0,072	1877	0,640	0,161	*
Apparel Dummy	6124	0,008	0,431				
Business Dummy	6124	0,255	0,515				
Candy Dummy	6124	0,413	0,615				
Computer Dummy	6124	1,711	0,687				
Construct Dummy	6124	-0,541	0,406				
Medical Dummy	6124	0,270	0,449				

Difference is statistically significant at 1%(*), 5% level (**) or 10% level(***)

PANEL C: LN(Short term Compensation)

LN(Short term Compensation)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coeff.	Std. Error	
Constant	6124	4.578	0,634	1877	4,481	0,756	*
Firm Size Component	6124	0,124	0,007	1877	0,116	0,012	*
LN (Not Exercised Ratio)	6124	0,002	0,005	1877	0,011	0,012	*
LN(Bs Volatility)	6124	-0,123	0,035	1877	-0,424	0,108	*
LN(Nummtgs)	6124	-0,071	0,021	1877	-0,046	0,041	*
LN (Tenure)	6124	-0,147	0,262	1877	-0,102	0,314	*
Trs1yr	6124	0,001	0	1877	0,000	0,000	*
Sales5ls	6124	-0,0002	0,001	1877	-0,001	0,001	*
Pdirpens	6124	-0,042	0,022	1877	-0,028	0,166	*
Interlock	6124	-0,001	0,031	1877	0,129	0,065	*
Year1993	6124	0,058	0,029	1877	-0,047	0,092	*

Year1994	6124	0,152	0,03	1877	0,051	0,093	*
Year1995	6124	0,091	0,031	1877	-0,015	0,103	*
Year1996	6124	0,136	0,032	1877	-0,077	0,100	*
Year1997	6124	0,158	0,033	1877	-0,027	0,101	*
Year1998	6124	0,239	0,034	1877	0,020	0,102	*
Year1999	6124	0,298	0,036	1877	-0,004	0,110	*
Year2000	6124	0,308	0,038	1877	0,091	0,112	*
Year2001	6124	0,245	0,04	1877	-0,062	0,115	*
Year2002	6124	0,399	0,04	1877	0,025	0,114	*
Year2003	6124	0,368	0,041	1877	0,048	0,118	*
Year2004	6124	0,496	0,042	1877	0,132	0,120	*
Apparel Dummy	6124	-0,588	0,307				
Business Dummy	6124						
Candy Dummy	6124	-0,541	0,283				
Computer Dummy	6124	-1,206	0,563				
Construct Dummy	6124						
Medical Dummy	6124	0,479	0,284				

Table 12. T test of equality of regressions coefficients – DIRECTORS

Panel A: LN(Total Compensation)

LN(total compensation)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coef.	Std. Error	
Constant	8281	1,253	1,515	2543	1,295	0,630	*
Firm Size Component	8281	0,144	0,008	2543	0,246	0,011	*
LN (Not Exercised Ratio)	8281	-0,228	0,006	2543	-0,274	0,010	*
LN(Bs Volatility)	8281	0,168	0,040	2543	0,210	0,087	*
LN(Nummtgs)	8281	-0,008	0,022	2543	-0,020	0,037	*
LN (Tenure)	8281	1,475	0,672	2543	0,818	0,270	*
Trsl1yr	8281	0,0003	0,0001	2543	-0,00001	0,00002	*
Sales5ls	8281	0,003	0,001	2543	0,0004	0,0004	*
Pdirpens	8281	-0,111	0,026	2543	0,015	0,135	*
Interlock	8281	0,093	0,035	2543	0,083	0,065	*
Year1993	8281	0,062	0,029	2543	0,062	0,078	*
Year1994	8281	0,282	0,031	2543	0,260	0,082	*
Year1995	8281	0,310	0,032	2543	0,147	0,089	*
Year1996	8281	0,482	0,034	2543	0,222	0,088	*
Year1997	8281	0,606	0,035	2543	0,264	0,089	*
Year1998	8281	0,669	0,036	2543	0,267	0,091	*
Year1999	8281	0,806	0,037	2543	0,383	0,095	*
Year2000	8281	0,871	0,040	2543	0,440	0,101	*
Year2001	8281	0,973	0,041	2543	0,441	0,102	*
Year2002	8281	1,077	0,042	2543	0,459	0,102	*
Year2003	8281	1,081	0,043	2543	0,289	0,105	*
Year2004	8281	1,268	0,045	2543	0,484	0,108	*
Apparel Dummy	8281	-0,352	0,568				
Business Dummy	8281	-1,474	0,858				
Candy Dummy	8281	-0,035	0,517				
Computer Dummy	8281	2,033	1,298				
Construct Dummy	8281	0,896	0,716				
Medical Dummy	8281	0,083	0,496				
Consumer Dummy	8281	1,330	0,581				

Fabricant Dummy	8281	2,444	0,569			
Trading Dummy	8281	-0,152	0,904			

* Difference is statistically significant at 1%(*), 5% level(**) or 10% level(***)

Panel B: Ln (Option Ratio)

LN(Option)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coef.	Std. Error	
Constant	8281	-0,483	1,571	2543	-2,760	0,483	*
Firm Size Component	8281	0,026	0,008	2543	0,043	0,009	*
LN (Not Exercised Ratio)	8281	-0,333	0,006	2543	-0,256	0,009	*
LN(Bs Volatility)	8281	0,297	0,043	2543	0,319	0,069	*
LN(Nummtgs)	8281	-0,052	0,024	2543	-0,018	0,033	*
LN (Tenure)	8281	-0,408	0,697	2543	0,566	0,207	*
Trs1yr	8281	-0,0015	0,0001	2543	-0,00002	0,00002	*
Sales5ls	8281	0,002	0,001	2543	0,0004	0,0003	*
Pdirpens	8281	-0,059	0,027	2543	-0,001	0,109	*
Interlock	8281	0,129	0,038	2543	-0,003	0,054	*
Year1993	8281	0,009	0,036	2543	0,143	0,079	*
Year1994	8281	0,209	0,035	2543	0,155	0,076	*
Year1995	8281	0,175	0,037	2543	0,130	0,077	*
Year1996	8281	0,352	0,037	2543	0,240	0,077	*
Year1997	8281	0,396	0,039	2543	0,201	0,077	*
Year1998	8281	0,438	0,039	2543	0,272	0,078	*
Year1999	8281	0,560	0,040	2543	0,341	0,081	*
Year2000	8281	0,497	0,044	2543	0,323	0,084	*
Year2001	8281	0,620	0,044	2543	0,453	0,086	*
Year2002	8281	0,588	0,045	2543	0,423	0,086	*
Year2003	8281	0,592	0,047	2543	0,350	0,089	*
Year2004	8281	0,610	0,049	2543	0,430	0,091	*
Apparel Dummy	8281	-0,379	0,585				
Business Dummy	8281	1,045	0,890				
Candy Dummy	8281	-0,049	0,666				
Computer Dummy	8281	0,513	1,356				
Construct Dummy	8281	-1,237	0,764				
Medical Dummy	8281	0,685	0,580				
Consumer Dummy	8281	-0,930	0,639				
Fabricant Dummy	8281	1,217	0,590				
Trading Dummy	8281	-1,030	0,935				

* Difference is statistically significant at 1%(*), 5% level(**) or 10% level(***)

PANEL C: LN(Short Term Compensation)

LN(Short Term Compensation)							t test
Dependent Variables	NYSE			NASDAQ			Sig.
	N	Coef.	Std. Error	N	Coef.	Std. Error	
Constant	8281	0,437	1,653	2543	3,487	0,704	*
Firm Size Component	8281	0,099	0,007	2543	0,124	0,011	*
LN (Not Exercised Ratio)	8281	-0,007	0,005	2543	0,028	0,010	*
LN(Bs Volatility)	8281	-0,138	0,038	2543	-0,219	0,083	*
LN(Nummtgs)	8281	-0,115	0,021	2543	-0,077	0,035	*
LN (Tenure)	8281	1,872	0,734	2543	0,254	0,302	*
Trs1yr	8281	0,002	0,000	2543	0,00005	0,00002	*

Sales5ls	8281	0,002	0,001	2543	-0,0003	0,0003	*
Pdirpens	8281	-0,054	0,024	2543	0,103	0,122	*
Interlock	8281	-0,007	0,033	2543	0,102	0,060	*
Year1993	8281	0,048	0,023	2543	0,030	0,051	*
Year1994	8281	0,161	0,024	2543	0,150	0,056	*
Year1995	8281	0,115	0,026	2543	0,127	0,065	*
Year1996	8281	0,189	0,028	2543	0,042	0,059	*
Year1997	8281	0,206	0,030	2543	0,079	0,065	*
Year1998	8281	0,302	0,032	2543	0,144	0,063	*
Year1999	8281	0,354	0,033	2543	0,122	0,071	*
Year2000	8281	0,389	0,036	2543	0,188	0,076	*
Year2001	8281	0,346	0,039	2543	0,042	0,079	*
Year2002	8281	0,539	0,039	2543	0,172	0,079	*
Year2003	8281	0,530	0,039	2543	0,149	0,083	*
Year2004	8281	0,671	0,041	2543	0,248	0,087	*
Apparel Dummy	8281	-0,077	0,592				
Business Dummy	8281	-2,207	0,919				
Candy Dummy	8281	-0,047	0,411				
Computer Dummy	8281	2,796	1,406				
Construct Dummy	8281	1,259	0,752				
Medical Dummy	8281	-0,355	0,448				
Consumer Dummy	8281	1,314	0,521				
Fabricant Dummy	8281	1,268	0,599				
Trading Dummy	8281	2,435	0,986				
* Difference is statistically significant at 1%(*), 5% level (**) or 10% level(***)							