The Association Between U.S. Technology Company's Performance and Non-employee Director's Compensation Policy

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Abstract. Directors’ compensation policies are one of the strategies that the firm's management team and shareholders have of great concern over. Some research shows that policies have a specific association with the individual company’s performance. However, this still lacks a unified explanation. Therefore, the research theme of this paper is the relationship between non-employee directors’ compensation policies and the firm’s performance. This study examined the data public by SEC and PayScale and focused on four U.S technology companies: Meta (Facebook), Twitter, Splunk, and Akamai. The study compares the impact of different compensation policies on these four companies operating capacity, revenue capacity, and stock price. After researched the performance of these four technology companies, the result showed that compensation policy for non-employee directors may have a particular impact on a firm's revenue and its stock price, but the study also showed the impact is not significant because the correlation is a failure in some years for these four companies.

Keywords: Quantitative research; Pattern; Net profit; Stock award; Cash retainer.

1. Introduction

Compensation policy plays a vital role in the development of a modern company, compensation plan usually separates by two broad categories, employee that help operating the business (including CEO and other directors…); and non-employee that in the board (independent board member, director, chair…). There are tons of research showing that a good incentive-based compensation for firm’s executive director is benefit for the company’s growth and performance [1], so this paper is focusing researching on how the non-employee director’s compensation policy of U.S. technology companies is associating with the company’s performance [2]. The four companies the paper will focus on are Meta, Twitter, Splunk and Akamai. The research is using the data that public by SEC from 2017 to 2022, five-year period. And due to the companies, that focusing on are technology companies, the research is also using data and index from NASDAQ, which shows the individual firms stock markets performance over the years.

2. Data and method

2.1 Method

We will first select four companies (including 2-3 different types of companies) as research objects because considering the practicality of this article, this article will cover as many types of companies as possible and collect relevant data on them. We will use quantitative research for the method and Securities and Exchange Commission’s website is where we collect the data. The main area we will focus on is the directors’ compensation and executives’ compensation in a different company. When we collected, the relevant data on these companies’ compensation policies that are related to the firm size and development, we will compare the companies’ size and stock prices with different
components in the compensation package such as cash awards, stock awards, option awards, and others. For each component, we will analyze the data relevance based on a quantitative study.

As a start, make different tables in Excel to compare the compensation data with the firm size and stock prices related to the topic. The chart in Excel will help us to find out the pattern and details of different company compensation systems and their size and stock price through comparison. Because of the limitation on the firms’ amount, the data may not be available for all kinds of companies. The conclusion is about which components in the compensation system has a critical effect on the companies’ size and the stock price.

2.2 Data

The SEC regulates all investment companies, advisors, over-the-counter dealers, economists, market makers, and all institutions and individuals operating in the investment field. SEC Form DEF 14A also called the PROXY STATEMENT PURSUANT TO SECTION 14(a) OF THE SECURITIES EXCHANGE ACT OF 1934[3]. In the SEC's DEF14A form, it’s submitted to the SEC when a definitive proxy statement is provided to shareholders. The data in this table clearly shows details about when shareholder meetings are held for non-employee directors as well as for executives, with details about the compensation and how they change over time [4]. For example, some companies have a compensation structure within the cash + initial stock award + annual stock award. Also include, the committees' fees are set for them. Also, the SEC requires companies to submit detailed executive compensation policies with how these plans are implemented and how they are incentivized to do their jobs. When they receive these compensation plans, the data reflects how the company is in a state.

The SEC primarily provides a breakdown of the compensation of the company's officers and non-employee directors. In addition, we extract the annual financial statements of four companies (Twitter, Meta, Akamai and Splunk) from the NASDAQ stock exchange and analyze them in detail, including their total revenue, net income and the ratio change from 2017-2021. Therefore, in this research report, we focus on these two platforms, extract essential data for detailed analysis, and observe the changes in the company's stock price and the company's future development for the establishment of compensation plans.

3. Results and discussion

The results from the combined analysis of SEC Form DEF14A and NASDAQ Composite Index data indicate that corporate compensation policies have an impact on the net profit of the company.

![Figure 1. Total Compensation Policy of Four Companies](image)
The growth rate of non-employee directors’ compensation plans have the significant variation from company to company. Also, the strength of the relationship between compensation and performance measures depends in part on the relative informativeness of the performance measures [5]. Therefore, the performance measures can clearly represented by the profit that the company acquire. From 2015 to 2021, Twitter's total compensation growth rate is 117%, Akamai's growth rate is -1%, Meta's growth rate is 193%, and Splunk's growth rate is 89%. This shows that Meta has the largest increase in compensation for non-employee directors. These sample data is representative of the size and direction of the four companies, and can be effectively combined with the net income data of the four companies. At the same time, the table 1 above shows that these four companies have the similar structures on the compensation plans. All of them follow a standard formula which is the cash+stock awards+other optional awards.

This study derives the net corporate income of the four companies from the statistical data in the NASDAQ Composite Index for the five years from 2017 to 2021. Using the 2017 data as a base, the increase in the data is scaled to provide a clearer comparison of the impact of the company's compensation plan on the company's net income.

### Table 1. Net Profit Statement and Ratio

<table>
<thead>
<tr>
<th>Net Profit Statement (units: billion dollars)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>-0.108</td>
<td>1.206</td>
<td>1.466</td>
<td>-1.136</td>
<td>-0.221</td>
</tr>
<tr>
<td>Splunk</td>
<td>-0.259</td>
<td>-0.276</td>
<td>-0.337</td>
<td>-0.908</td>
<td>-1.339</td>
</tr>
<tr>
<td>Meta</td>
<td>15.92</td>
<td>22.111</td>
<td>18.485</td>
<td>29.146</td>
<td>39.37</td>
</tr>
<tr>
<td>Akamai</td>
<td>0.218</td>
<td>0.298</td>
<td>0.478</td>
<td>0.557</td>
<td>0.652</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Net Profit Ratio (%)</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twitter</td>
<td>0%</td>
<td>1215.64%</td>
<td>21.57%</td>
<td>-177.48%</td>
<td>80.85%</td>
</tr>
<tr>
<td>Splunk</td>
<td>0%</td>
<td>-6.36%</td>
<td>-22.17%</td>
<td>-169.70%</td>
<td>-47.48%</td>
</tr>
<tr>
<td>Meta</td>
<td>0%</td>
<td>17.18%</td>
<td>-8.33%</td>
<td>57.67%</td>
<td>35.08%</td>
</tr>
<tr>
<td>Akamai</td>
<td>0%</td>
<td>36.67%</td>
<td>60.21%</td>
<td>16.53%</td>
<td>16.98%</td>
</tr>
</tbody>
</table>

### Figure 2. Detail Profit Statement of Twitter and Meta

The statistics show that as the company's non-employee director compensation fluctuates, the net profit of each company is also changing to some extent. For the four companies, director compensation has a small increase between 2017-2018. the net profit of Twitter in 2018 was up by a staggering 1,215.64%, from this data we can see that the small increase in compensation effectively improves the company’s earnings and generate significant profits in the following year. This argument can also be verified by the growth of Meta's net profit and the fluctuation of the company's net profit margin. 2017 to 2019, Meta's total revenue and profit showed a positive growth pattern, and the modest increase in compensation incentives in 2018 led Meta to a net profit of $22.111 billion in 2018, an increase of 17.18% year-on-year, while 2019 showed a negative growth of about the
argument can also be verified by the growth of Meta's net profit and the fluctuation of the company's net profit margin. 2017 to 2019, Meta's total revenue and profit showed a positive growth pattern, and the moderate increase in compensation incentives in 2018 made Meta's net profit in 2018 to be $22.111 billion, an increase of 17.18% year-on-year, but in 2019 it showed a negative growth of by approximately 25%, while total compensation for the year was reduced by approximately $1 million.

The table 3 results show that there is a large gap between the compensation profile and the net profit of both Twitter and Meta from 2019 to 2020, thus suggesting a scenario in which the change in directors' compensation affects the increase or decrease in the net profit of the company.

In 2019, Twitter's net profit reaches $1.466 billion, As a result, directors received high compensation in 2020, amounting to $5.5 million, and high compensation incentives for directors can cause dissatisfaction among employees and people about the company's operations and can lead to a negative impact on the company's operations in terms of employees [6]. Also, the high compensation policy will lead to high operating costs and a decline in net profit. As a result, in the 2020 earnings report, Twitter's net profit margin declined 177.48% year-over-year, with a net profit of -$1.136 billion.

Through the analysis of Twitter, the research found that dramatic increases in compensation amounts can cause the company to incur high operating costs and negatively impact the company's net profit. However, the table 3 above shows that Meta has a certain variability for Twitter, and this variability is reflected in the year 2020, where Meta also has a sharp increase in compensation and reaches $8 million in 2020, but the company's net profit increases by $1.1 billion compared to 2019, with a net profit margin of 65%. However, the high payroll will also impact net profit growth from 2020 to 2021. Meta's net profit margin declines by 22% year-over-year between 2020 and 2021, which supports the above argument that high compensation will impact the company's net profit.

![Figure 3. Detail Profit Statement of Splunk and Akamai](image)

It can see from the bar chart above and the fluctuations in net profit margin that Splunk's profit margin decreased by 6.36% between 2017 and 2018, while Splunk's total compensation decreased by 19.4% during this time period, for a total decrease of $700,000. This is the amount of compensation incentive that the directors do not want to hold, and therefore the net profit and net column margin of the company continues to decline between 2019 and 2020. 2020 the company wants to stimulate the company's directors to contribute effectively to the company through high compensation incentives, but because the increase in compensation is so large, the cost of expenses increases sharply, so that the net profit amplitude growth rate reaches the maximum of these years for -169.70%. In 2022, when the total amount of the compensation plan is appropriately reduced, the company's net profit growth rate increases by 120% year-on-year. Therefore, it can be seen that a significant adjustment of the level of remuneration incentives is not good for the company's growth. Properly increasing the incentives for the company's directors can better boost the company's revenue and net profit. At the same time, we can look at Akamai's compensation and net income graphs to see that Akamai is in a profitable position from 2017 to 2021, and that the company's five-year compensation plan is in a relatively balanced state, which is indicative of a good compensation environment. The small change in total compensation reflects the conclusion reached by all three companies that appropriate compensation incentive increases can boost growth and revenue. For example, from 2018 to 2019, the company's net profit growth rate was 60%, up 44% year-over-year. At the same time, we note
that the compensation plan has the highest total compensation in the last five years for 2019, but this is not a sharp rise, but a small one. Therefore, this is a good validation of the above conclusion.

(ii). The relationship between employees and shareholders’ stock awards and the company’s stock price.

The more a company’s fraction of stock awards can have the more its stock price and firm size can be. Because the stock award is very flexible, it can bind the shareholders’ benefit with the company. When the stock price of the company increase, shareholders’ income will be more. Then they will use their force to help the company be better and better [7]. If the company gives too much cash retainer to the shareholders, these shareholders may not use their force to help the company, because even if the stock price decreases a lot, it will not affect shareholders’ income. Their income is stable. In the long term, shareholders’ ignoring is bad for the company’s development. For example, in Meta Company, the non-employee director’s fraction of stock award is 88.2%, now its stock price is $175. In Splunk, the directors’ fraction of the stock award is 84.37%, and its stock price is $98. And for Twitter, its directors’ fraction of the stock award is 82% and the stock price of it is the stock price is 40. For these three companies, their fraction of stock award is Meta greater than Splunk greater than Twitter, and we can see that their stock price also follows this trend which is Meta is more expensive than Splunk is more expensive than Twitter. Thus, we can prove that the more a company’s fraction of stock awards can have the more its stock price can be through this example.

(iii). The relationship between employees’ and shareholders’ stock cash retainer and their stock price.

The cash retainer can motivate employees and shareholders in the company. When the cash retainer is higher, the employee's and directors’ stable income will be high. It will make employees and directors all want to stay in the company and work to gain this income. Then they will work harder and avoid quit from the company. Finally, when the employees and directors in the company are all working hard, the stock price will increase. While the stock price is increasing, the company needs more people to do the work for them. Finally, the firm size will increase. For example, in the Meta Company, its cash retainer for the director is $75000 per year and its stock price now is very expensive $175. Also, Twitter’s cash compensation per year is $50000 and its stock price now is $40. When we compare these two companies, Meta’s stock price is much higher than Twitter’s because Meta Company’s cash retainer is higher than Twitter. For the firm size, Meta now has about 77.8k people and Twitter has about 7.5k people in the company. Compare the two companies’ firm sizes Meta is also bigger than Twitter. Therefore, we can see that cash retainer is related to the company’s stock price and its firm size.

The compensation of employees is a fragile issue that should be well balanced out. Even though firms such as Twitter and Meta may be making huge profits, the amount of money paid to the directors as compensation should reflect the company's overall compensation structure. If the directors are paid very high compensation incentives, then there is a huge possibility that it may lead to dissatisfaction among the employees. [8] In the long run, if there is no balance and consideration in the compensation structure, there will be a negative impact that will be felt in that the work rate of some of the employees may end up deteriorating, which may affect the firm’s performance in the long run. Such a compensation strategy will also increase the operation cost of the firm, and in the long run, the net profits will decline. From the text above, this is well exemplified by the case of Twitter. The company gave high compensation incentives to its directors in 2020 following a great performance in 2019, but the move increased the cost of operations for the firm in the 2020 financial year. Twitter's net profit margin declined 177.48% year-over-year, with a net profit of -$1.136 billion, and the reason for this was the increased cost of operations.

There is a need to be modest in the kind of compensation and compensation incentives given to the employees and directors to ensure that such decisions do not affect the net profits earned. The use of cash retainer may be key in keeping all the employees and shareholders satisfied and motivated since the high cash retainer will translate into stable and higher income. The ripple effect is that there will be a low employee turnover. The motivation will also encourage all the staff members to work
harder, and with time, the company will be able to make more profits. It is also clear that the move to have a bigger cash retainer will work in the favor of the company since it will enhance the chance of the company to grow and hire more people, as is the case with Meta, which has a higher cash retainer compared to Twitter and a result also have many more employees than those of Twitter.

This study finds that the compensation plan set by the firm for non-employee directors has a subtle effect on the size of the firm's size revenue and the price of its stock, and this effect varies depending on the size of the compensation plan set by the firm. However, there is a discrepancy between this and the popular perception of high salaries, and the impact of compensation policies on top directors goes beyond the high amounts of cash directly provided by the firm. The high amount of cash may be one of the influencing factors, but stock awards and the rest of the compensation awards determine in large part the future growth of the company and the volatility of the stock price.

This can be potentially explained by the following facts. First of all, this study concludes from the analysis of directors' remuneration in four companies that the remuneration policy generally consists of a formula of cash + stock awards + other awards, and that stock awards account for about 60% of total remuneration. Therefore, the amount of stock awards has a significant impact on the company's revenue; secondly, the company's total revenue and net profit determine the change of the company's size and the fluctuation of the stock price, and the company's total revenue ratio and net profit ratio will be significantly improved when the company gives the non-employee directors the maximum compensation within a reasonable range. Conversely, when a company grants a sharp increase in compensation in a given year, the company's revenue and profit ratios decline relatively.

4. Conclusion

This study first specifies the factors that comprise current corporate compensation policies and assesses the impact of these factors on corporate operations and growth by analyzing shareholder-signed proxies issued by companies on the SEC. This helps to eliminate the negative understanding of non-employee directors and executives for high compensation among grassroots employees as well as the public, which helps to fill the information discrepancy that exists between the two. This is because the majority of the public and employees in society currently have a partially negative view of the high salaries of company directors, which can lead to a lack of public support for the development of most companies. At the same time, this study can provide a valid reference value for new micro and small enterprises to develop a remuneration plan for the top management and how to better expand for the development of the company. Finally, because the study mainly faces the group of non-employee director's remuneration policy, it does not fully consider the impact of the company's top salary on the company. As mentioned in the literature of this study, the main body of company operation and management is the executive management of the company, such as CEO, CFO and so on. For a long time, corporate governance literature has believed that executive compensation scheme is one of the means to measure the talent and effort of executives, and often links executive compensation with corporate performance [9]. Non-employee directors have an impact on the revenue and profit of the company, board oversight can reduce the agency costs inherent in the separation of ownership and control, thereby improving corporate performance [10]. In case, the board of non-employee director and executive director have the close relationship. Therefore, in the future, the impact of the company's top compensation on the size and stock volatility of the company can be nuanced in the above research data and situations. This will facilitate a more in-depth study of the topic.

References


