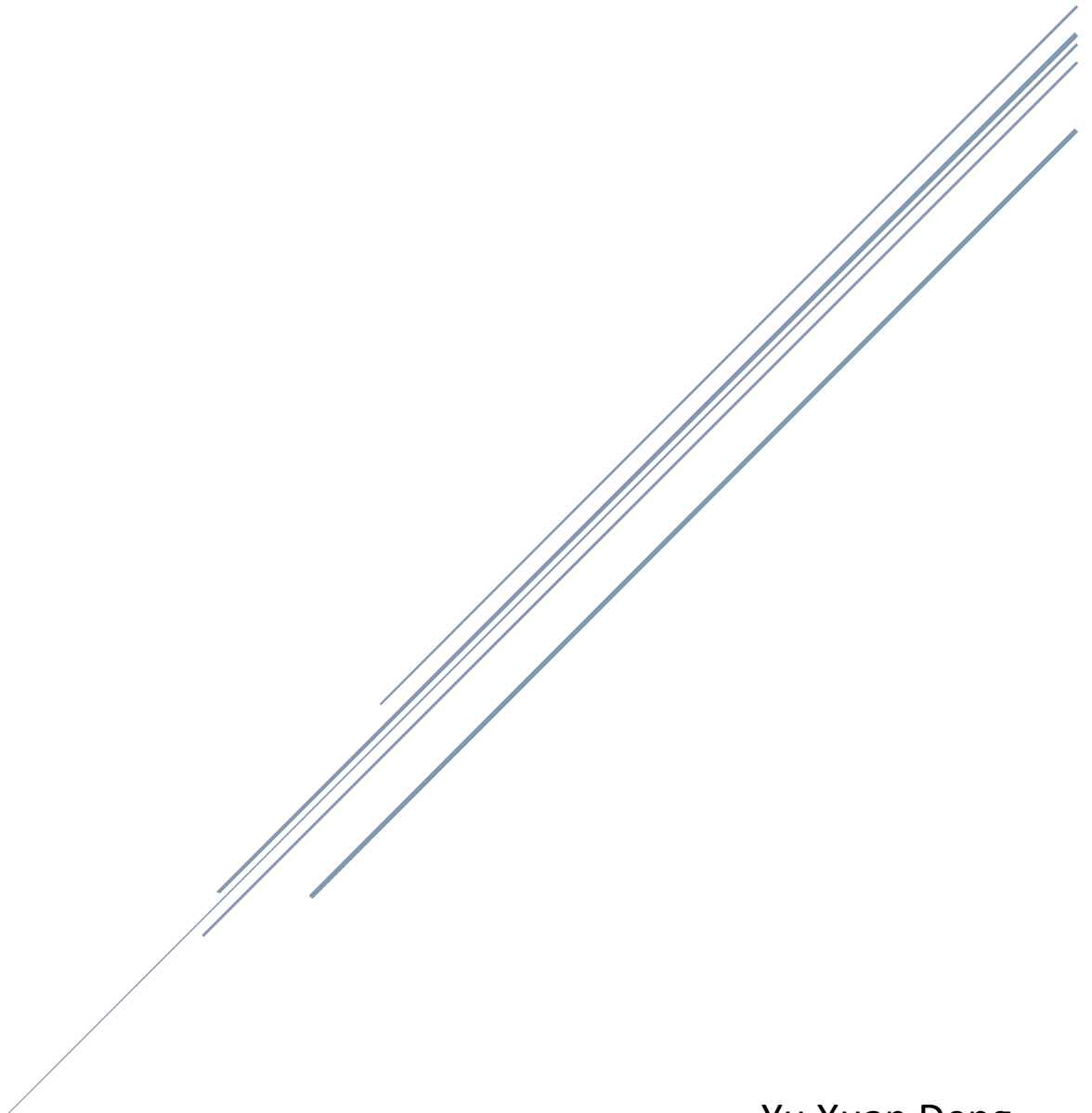# TOPIC PROPOSAL

ECON 494

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Motivation

The purpose of this topic proposal is primarily to explore research papers from reputable journals then draw conclusions and insights to form potential research topics for my thesis. Initially I explored topics regarding the COVID-19 pandemic and it's effects on the economy. However, I soon realized it was difficult, nearly impossible to draw reasonable conclusions based on COVID-19 since the number of confounders and other influencing factors cannot be feasibly accounted for given my level of knowledge and timeframe of three months.

Thus, I wanted to explore other topics of interest related in the financial field. One subject matter has always intrigued me. It's regarding compensation. Ever since I learned about different forms of compensation in COEC 491, I wondered how it affects the actions of a CEO. I assumed CEOs, as compared to janitors, have a different decision-making process in general, so was curious as to whether base compensation of a CEO would have an unexpected result on productivity or performance given the majority of a CEO's compensation are performance based. Furthermore, the complicated payment structure and incentive scheme of a CEO perhaps influences productivity itself. Given the wide range of potential topics regarding CEO compensation, I hope to narrow down the scope of CEO compensation, narrow down the field, and also narrow down the data so my thesis is viable for this term.

The general direction is that I want to use cross sectional data comparing public comparable firms and their CEO's compensation to their respective returns. This way I can find a correlation or trend and perhaps make a conclusion that is applicable in certain contexts. Perhaps narrowing the geographic location to a specific country would be useful.

Literature Review

Currently, there are a wide range of existing literature on CEO pay and firm performance. However, there is no general agreement on whether performance based compensation will necessarily lead to a higher performing firm. Context specific data and information are all factors that affect the results such as structure of CEO pay, culture, industry, and period of time. (Abowd, 1990; Benmelech et al., 2010; Frydman & Jenter, 2010).

Despite the relatively weak, or even negative, correlation between CEO compensation and company performance (Balafas & Florackis, 2013), CEO's of Standard and Poors (S&P) 500 compensation has been rising since the late 1990s (Bereskin & Cicero, 2012). The counter intuitive result is rather intriguing given the disincentive for shareholders to raise CEO's compensation in face of little added value, and the significant monetary costs associated. One proposed explanation to this this counterintuitive result is that market forces beyond shareholders' control directly affect the compensation of CEOs (Kaplan, 2008). The other proposed explanation is the managerial power theory where compensation is higher for CEOs with more power over the pay setting process (Essen et al., 2015). The third view is that CEO compensation may be based on measures that are only observable to the two parties, and the unexplained variation in compensation that are unrelated to economic variables are explained by the future firm returns (Hayes & Shaefer, 2000).

The most promising research on CEO compensation and firm performance looks at evidence from the London Stock Exchange. Balafas & Florackis (2013) finds that "CEO incentive pay is negatively associated with short-term subsequent returns. Interestingly, firms that pay

their CEOs at the bottom of the incentive-pay distribution earn positive abnormal returns and, also, significantly outperform those at the top of the incentive-pay distribution." This paper's finding is also consistent with the research conducted on the US market by Cooper et al. (2016).

For the purposes of this thesis, I will be focusing on the base salary of CEOs and the future firm returns of public high-tech industries in the US since current literature focuses mostly on performance-based compensation. Given the high volatility of high tech industries it would be interesting to see whether tech CEOs' base salary has an effect on firm returns.

Data

The data I will be using for this paper will be obtained from two sources. Compustat Execucomp Database to obtain CEO compensation data in 2018, and Yahoo finance for the firm's returns data from the same time. I will specifically be looking at the firms listed in the NASDAQ. Joining the two datasets on Ticker, I would be able to run regressions on the relationship between CEO salary and the firm's return.

Some key columns I will include from the Compustat Execucomp Database are Ticker, Company Name, Executive Name, Annual Salary, Present CEO. Key columns of the Yahoo finance will include Ticker, price, returns, alpha (CAPM), beta. I have chosen 2018 as the dataset year because I want to avoid pandemic effects.

In my regression I will group companies by sales to effectively make comparisons. Specifically, I will group them into low medium high sales. Then, I want to include the top, middle, and bottom performing firms in each group. This way I can make valid comparisons.

Question and Methods

To measure the firm's return, I will be using risk adjusted returns available on Yahoo finance. Furthermore, I will also include the alpha of CAPM to evaluate whether there are unexpected excessive returns of a particular firm. After the necessary data are gathered, I hope to conduct a cross sectional analysis on CEO base salaries and the effects on returns. As mentioned before, the firms will be grouped by sales and performance when conducting the analysis.

There are limitations to my proposed method. I'm unsure whether there could be selection effects since I didn't collect the sample through a random process. Thus, I hesitate to use the average performing group as a control. Similarly, no experiment was conducted so any findings and results would be purely correlation; it would be difficult to prove a cause-and-effect relationship. Since I am only using US tech firm data, then the results would only apply to tech firms in the US.

Another question I am still considering is what confounders and controls I should use in my regression equation. Some considerations are CEO ethnicity, gender, level of education, and age group. I believe this would ultimately be limited by the availability of data. Other firm related controls could be age of firm, and financial standing. However, it would be difficult to define what is a healthy financial standing of a particular firm in a particular industry, so I will decide later the cost and benefit of including this control. The largest limitation of this paper would be availability of data, timeframe, and my research ability.

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