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Asian-American Executive Compensation in the Fortune 500

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# Asian-American Executive Compensation in the Fortune 500

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## Abstract

I study executive compensation in a sample of Fortune 500 executives, to determine whether Asian American executives were compensated less than their peers in 2019. The regression model controlled for two measures of company size (total revenues and number of employees), stock price performance and industry fixed effects; at a 95% level, I find a statistically insignificant salary gap between Asians as a group and non-Asian executives. For East Asian executives, however, I find a large and statistically significant log salary gap relative to non-Asians of over 50 percent (53.6 log points). This indicates that, in 2019, East Asian top executives in the Fortune 500 were paid substantially less than non-Asians who were managing companies of similar size and profitability in the same industry. A larger sample would be needed to improve the precision of the estimates.

## Introduction

While we think about discrimination as an issue from decades past, discrimination and its effects are a large topic in today's society. This practice can take many forms, such as housing discrimination, educational discrimination, and workplace discrimination. Because different taboos are attached to different types of people, people consciously and unconsciously do things to treat people differently in order to match their preconceptions.

Additionally, pay in the corporate workplace can differ depending on people's individual roles; a manager will typically have more responsibility and higher pay than an associate level worker. Consequently, there are two main issues that can affect someone's take home pay: the first one is how willing companies are willing to promote an employee to a coveted management

position, the second one is whether or not the people who are in those positions are paid the same across the board.

This paper focuses on the second issue of consistency in executive pay. Because most existing research focuses on pay gaps between African-Americans, Hispanics, and females, for my paper, focus is placed on the equality of Asian Americans in the Fortune 500. The main question this paper addresses is whether Asian-Americans at an executive level are paid the same or less as the rest of the labor market at the same level.

This question does not take into account whether or not Asian-Americans are able to attain executive positions as easily as their peers; there is still controversy around whether there is a “bamboo ceiling” for Asian people, coined from the popular “glass ceiling,” which talks about how it is difficult for women to be promoted up the ranks of corporate America to top executive levels. Mundy (2014) states that Asian-Americans are seen less prominently in the upper echelons of top management and executive positions, even though they are strong independent workers, due to their being seen as “less assertive” and their associations with having a lack of leadership qualities.

The data in this paper consists of top executives in the top 200 companies of the Fortune 500 companies in the USA. The three highest paid executives are picked; this data is disclosed by law in each company’s 10-K. Regressions are done to find differences in pay between Asian-American executives and the rest of the market, controlling for company size through revenues and employees, company success through change in stock price, and for industry level-factors using industry fixed effects.

The initial hypothesis set forth was that Asian-Americans are paid less due to discriminatory factors in the workplace, and due to similar factors to the bamboo ceiling mentioned above. There is a negative but insignificant correlation between being Asian-American and having higher compensation.

While most regressions in this paper are insignificant at a five percent level, all of the regressions run had a negative correlation between executive compensation and being Asian-American. With a stronger regression with better control variables, one might be able to prove the correlation between being an Asian-American executive and not being paid as much compared to other executives.

### Literature Review

Some of the papers mentioned below talk about the profitability of companies that take diversity initiatives and the diversity and representation of corporate boards in America. The papers that talked about executive compensation provided background on how studies on compensation were done and validated and augmented my research methods. The question this paper was centered around regarding Asian American compensation was still unanswered as of the time of writing this paper.

The first paper of significance was Adler (2001), which was written for the European Project on Equal Pay. The paper studied the correlation between promoting women into the executive suite and profitability. The paper concluded that Fortune 500 companies with the best record of promoting women to high positions are between 18 to 69 percent more profitable than the median Fortune 500 firms in their respective industries. The data they had was largely self

collected among 215 Fortune 500 companies over the span of 19 years. This paper showed the different considerations used to solve for correlation; the point system used in this study showed the thought process on how to weight promotions over time. For example, Adler weighed promotions to executive positions in earlier years higher than promotions in later years, which made sense because it was less common to have women executives in those earlier years.

The second paper that was influential to the design of this thesis was Peterson et al (2007). This study looked into how likely black executives were to join different corporate board committees compared to white executives. This paper showed the limitations in collecting Fortune 500 data. Firstly, companies tend to enter and exit the “Fortune 500” rankings a lot. If one was to compare the number of Asians in Fortune 500 executive positions over time, they would have a panel that may not include all of the same cross sectional units over a span of 20 years; as a result, the regressions run for this paper will use cross-sectional units from fairly recent years. (In fact, the majority of the units will probably be drastically different due to mergers, acquisitions, and changes in rankings over time.) For example, if there are variables that aren't public information, such as race, they would have to be collected through a survey method, which typically has low response rates. Because of the lack of data, one would have limited ability to make inferences because of a lack of reliable and consistent data. One could try to remedy this by using data that *Forbes* themselves collected, or data that is readily available through first or secondary sources on the internet like LinkedIn or the 10-K proxy statements of companies. This paper ended up using a dummy variable based on the executive's name and appearance as its independent variable that indicated whether or not an executive was Asian or not Asian.

The third influential paper studied is Cooke and Glass (2013), which studies which women racial/ethnic minorities are promoted to CEO positions. This paper, which studies transitions in the Fortune 500 over the last 15 years,” supports two sociology theories: the “savior effect” and the “glass cliff theory.” The savior effect says that if a company with a minority CEO is performing poorly, CEOs are more likely to be replaced by white men. The “glass cliff theory” says that when firms are struggling, the firm is likely to appoint occupational minorities (white women and women and men of color). The data for this project is collected from websites such as businessweek.com, people.forbes.com, businessweek.com, and company websites. The percentage of women and minorities in management by industry was collected using the EEOC’s website (Equal Employment Opportunity Commission). Ticker symbols, SIC codes, and financial measures came from CRSP (Center for Research in Security Prices) in database searches. This paper helped bring to light the issues with putting together a self-collected data set, and the process in putting together the data myself through secondary sources such as LinkedIn, government websites, and Fortune 500 data available over the internet.

Another paper that talked about regression variables was Ueng et al. (2000). The paper talked about the effect of firm size (measured by the amount firm assets) on CEO compensation. For firms that are small, firm size was the main determinant of compensation. A “small firm” was defined as a firm with less than 250 million dollars in assets and “large firm” as a firm with more than 300 million dollars in assets. The authors looked into select variables to determine executive compensation: CEO influence over the board, measured by a dummy indicating whether a CEO was also the chairman of the board or not the chairman of the board; firm performance, measured by the firm’s five-year average ROA and market to book ratio; firm size,

measured by the log of the book value of the firm's assets; and firm's growth rate, measured by the growth rate of the sale. The results from this paper showed that CEO influence over the board, firm size, and firm performance significantly affects CEO pay for large firms. From this paper gave an example of which variables were best to include as control variables. The control variables included were firm performance variables and firm sizing variables, at the suggestion of Peter Kuhn.

The last paper examined was Ciscel (1974). My main takeaway from this paper was that "salary plus bonus provided a statistically much better measure of executive salary than the measure including the present value of all payments" (Ciscel). This paper studied the effects of after tax profits, sales revenue, and total book value of assets net of depreciation at the beginning of the year on salary plus bonuses of senior officers. This paper used the method of taking total salary reported by the 10-K proxy statements because it was the most accessible data to study and was the closest measure in studies done by this paper, and by the papers mentioned in Ciscel's literature review.

Overall, the above papers broadened my knowledge of how studies of executive compensation were done in the academic world; this included relevant control variables, factors of interest, and data collection methods. This literature review broadened my background in both the economics and sociological research findings of executive compensation.

### Theoretical Discussion

Generally, people associate the labor market with people providing services for money. The more value people can provide to the market, the more they are offered by employers.



Economist Gary Becker called the value intrinsically attributable to people “human capital.” These forms of capital in the workforce come in the form of good habits, skills, health, and values that people accumulate over time. These traits are accumulated through education, training and wealth, with each investment into human capital in education leading to a large increase in lifetime accumulated wealth.

This paper centers around differences in payment between Asian-Americans and non-Asian Americans in the Fortune 500. In a perfectly efficient workforce, the best person for the job will typically be hired and given the most compensation. However, when discriminatory practices happen in the workforce, the labor market is not perfectly efficient. This paper will examine whether compensation packages given to Asian-American executives are less than those given to their white counterparts. This theoretical discussion will highlight the reasons for economic workforce discrimination and the consequences of it; it will also discuss a more general theory of human capital.

Discrimination can result result from the both conscious and unconscious decision-making. Kuhn (2018), identifies four different conscious decisions that recruiters use in decision making. The first type of conscious decisions are tastes and preferences. If human resources and recruiters have preferences or distastes for certain groups of people, they will typically hire and give more compensation to people who are in their preferred groups and overlook groups of people who are in the “out group.” Even if the HR department doesn’t have their own inherent biases, the firm’s customers and employees may have their own preferences. These choices will affect who gets hired because if a company doesn’t take these preferences

into account, the company may lose profits in the short run. For example, if a company's employees were biased against people from other countries, hiring these people could lead to unrest and lost profits in the company's workforce. A third possibility is that companies might have unbiased employer beliefs about the relative productivities of different groups: women may be hired more for assembly line work because on average, they actually have better fine motor skills than men do. Finally, these beliefs may actually be biased, and employers may actually be overestimating or underestimating the abilities of different groups. Women are actually qualified for different jobs than the job market believes them to have them assigned to. Therefore, inaccurate perceptions will have employers making hiring decisions that aren't necessarily aligned with the best interests of the firm.

On top of conscious biases that affect hiring decisions, there are also unconscious hiring biases that affect recruiting decisions. A method called the Implicit Association Test (IAT) was developed to test for these unconscious biases between broad categories. It was shown that we categorize concepts together that feel the most "natural" to us; for example, the participants of the test were more likely to associate men with careers and women with housecare. These implicit biases can enter the workplace through hiring decisions and compensation decisions. Studies show that recruiters who have the strongest unconscious biases are the ones not aware of them.

Bias in the workforce can lead to undesirable consequences for firms that harbor it. At their roots, biases that are acted upon lead to inefficiencies in the job market. Given these inefficiencies, recruiters who take biases into account when hiring will likely hire a less-qualified

workforce than recruiters who don't hire based on biases. Firms who engage in these kinds of practices will likely be pushed out of competitive markets, which means markets naturally eliminate certain forms of discrimination. The exception to this theory would be firms that indulge in customer or co-worker biases. In this case, firms who participate in these biases may have higher, rather than lower profits; consequently, this presents the company's leaders with a dilemma on whether or not they should do the moral thing or try to maximize their profits.

Statistical (unbiased) discrimination, may be a cost effective way to place people in positions where they will generally fit the best; however, use of this type of discrimination may discourage workers to learn skills as they realize that their placement is fixed from the start. In this case, workers will have little incentive to grow and improve inside the company, leading to stagnation of company growth. Finally, discrimination can put undue pressure or anxiety onto people who are discriminated against; studies such as Steele and Aronson's (1995) showed that African-Americans were less likely to perform well on cognitive tests if they were asked to indicate their race before taking a test.

In my case, for Asian-American executives, a pay gap can stem from any of the factors mentioned above and can lead to similarly mentioned adverse effects. In addition, differences in executive pay may be attributable to productivity and firm size rather than education; the pay structure and recruiting of executives are not dependent on differences in education, for the most part. Pay gaps can have adverse effects on incentivization of people in the workforce, leading to issues in economic efficiency. This paper will study whether or not such a pay gap exists.

### Empirical Strategy

The main question tested in writing this paper was whether or not there was a negative correlation between executive compensation and an Asian-American identity as of recent years. My original prediction was that there was one because of the aforementioned “bamboo ceiling” theory and the viewing of Asian-Americans in the workforce as different, albeit being a model minority. In order to test this, a regression analysis is run on the data set to control the effects of variables like firm size and profitability.

Given a preference towards recent data, there were no ready made data sets that available to test. Because of this, most of my variables needed to be collected by hand or pre-collected. As a base sample set, I used the first 200 companies in the Fortune 500 as of 2019. I then gathered name and compensation information on three executives in each of the first 200 companies in the Fortune 500: the CEO, the CFO, and the COO. In the case that one of the three weren’t accessible, I used the closest possible executive position to substitute for them (Executive VP, Senior VP, President, etc). Because all public companies are required to file salary information on their five top earning executives, the salary and name data were very accessible online, albeit very time consuming to collect.

For my independent variable, I collected all the names of the executives in my sample set and compared them with pictures and biography from the internet. If one of the names matched with a traditionally Asian name, which I cross-referenced online, and the face looked Asian or a biography confirmed it, I would list them as “1” in my dummy Asian variable.

For the dependent variable, I decided the best way to measure compensation would be to use the method of compensation reporting that was required by the SEC. This way, the

compensation measures could be standardized across the public companies in my sample. I decided to use a natural log measure in order to get the data in terms of relative sense rather than an absolute sense.

I decided that I should use company-specific control variables rather than executive-specific ones. Most executives are compensated based on company size and company performance, so I decided to use variables that would accurately control for those factors. All else being equal, executives who work in larger companies will make more money than executives who work in smaller companies typically, and companies that perform better will have executives who are paid better. I also used a fixed-effect variable to control for industry, because I wanted to control for the possibility that some industries like tech might have higher paid executives than other industries. Because executives are almost exclusively late in their careers, I decided not to include an education variable because education level has little bearing in how executives are picked and compensated. For each of these control variables, I decided to use the log of the actual variable itself (except for the industry specific one because it was a categorical variable).

For the regression analysis, I used a regression table where I started with just my compensation variable regressed on race, then gradually added more and more control variables to see how and to what extent these different measures affected the Asian-American and non-Asian-American wage differential.

I decided to further expand into more in-depth heterogeneity analysis, where I decided to break down the Asian-American variable into South-Asian American and East-Asian American.

I also decided to test if there was a larger penalty for being Asian in a larger firm rather than a smaller firm, so I created a new variable that multiplied the Asian control variable with the # of employees and the firm revenues, respectively and added them to the regression.

### Data description

My data for this project was solely taken from publicly available internet sources. This data included the salaries of top executives in the top 200 Fortune 500 companies, a dummy variable on whether or not they were Asian, company revenues in billions, number of employees in thousands, and a fixed factor effect for industry variables. Because the data could vary widely and become difficult to interpret, for some of the variables such as billions in revenue and thousands of employees I decided to change them into a logarithmic form so I could interpret this in percentages rather than raw numbers.

In theory, the data I chose to use for my project would be strong measures and control variables to prove whether or not there was discrimination. Because I am trying to prove whether or not Asian-American executives have lower pay than non-Asian American executives, I chose an appropriate independent and dependent variable for this project (Asian dummy variable and compensation variable). I chose to use full compensation including bonuses and stock options because it seemed to be the most consistent, given that the SEC requires each company to present the same standards of compensation numbers for comparability. A potential shortcoming for compensation data would be if companies chose to be more conservative in their reporting than the SEC requires; this may lead to incompatibilities between the data in question.

For the executives picked in this study, I picked the executives who had the title of CEO, CFO, and COO in each company's 10-K. Each company is required to disclose the compensation of their five highest-paid executives. In the chance that the COO or CFO were not in the top five highest paid executives, I would pick a substitute based on whoever had the highest salary or whoever had a role most similar to these executives (ie. Executive Vice President of Finance or Executive Vice President of Operations).

Originally, I wanted to have a more specific race variable that encompassed all races to be able to get a deeper understanding about how compensation differed across races other Asian Americans (for example, how Asian American executive compensation varied across black, white, and Hispanic ethnicities). Unfortunately, race data was not easily accessible across the internet. I used a few different sources to determine the ethnicities of some of these executives. These sources included their names, pictures from LinkedIn, and online biographies. Because I was cross-referencing these sources, some of these sources did not corroborate. For example, some Hispanic-sounding names would be grouped together with a Caucasian-looking pictures; also, some people whose pictures indicated they were black had very white-sounding names. Also, there were a lot of different races to take into account that weren't necessarily any of the main categories, such as Brazilian-American, Pakistani-American, and Iranian-American executives. For this reason, the cleanest and most accurate method was to use an Asian dummy variable, rather than a race variable. Determining who was Asian or Asian-American vs. not Asian and Asian-American was much more clearly distinguishable – if the name did not

distinguish who was Asian, the picture generally did, and it was typical for someone with an Asian-sounding last name to have an Asian-looking face.

The companies chosen were companies from the top 200 of each of the Fortune 500 companies listed in 2019 (found on fortune.com), excluding mutual fund companies, which didn't have a corporate structure that had easily accessible executive pay, and private companies, which allocated executive compensation in a different fashion than public companies did.

Another potential shortcoming with my data was missing executive compensation data. All salaries were found on the 10-Ks posted by each company; all 10-K data are standardized by the SEC, making the data available very reliable. Because some companies – most notably mutual fund companies – don't have a typical executive compensation structure, it is difficult to contest that some of the data may have omitted variable bias or missing data bias. If Asians were more or less likely to be in these financial industries and these industries pay more, the compensation of Asian data can be biased higher or lower. There were twenty-two different industries represented in my study, from Chemicals to Financial Services; some industries were overrepresented, some were vastly underrepresented. To compensate for this shortcoming, I control for the industry as well through a fixed-effect variable on industry. Through this fixed-effect industry variable, I am able to compare the effect of being Asian regardless of industry representation.

One shortcoming that could be argued about finding this data would be how subjective the judgement calls for ethnicity could be. People who were Asian-American but looked Caucasian and had Caucasian last names could very well be Asian, and people who had Asian



last names and looked Asian could be white. While this dilemma was difficult to account for, hiring generally works in that people who looked Asian and had Asian last names were functionally Asian-American – at least that would be how human resources and the board of directors would see them. To figure out whether someone was Asian or not, I would look at the subject's name and Google a picture of their face to determine whether someone could be seen as “Asian” based on these traits.

For my control variables, the search for changes in stock price was straightforward, as all historical opening and closing stock prices were available on the internet, found on Yahoo Finance. I used a percent comparison of stock prices at the beginning of January 1st, 2019 to January 1st, 2020 as a variable to proxy for firm performance. Executive compensation is generally based on firm performance; if the stock price is going up, that means either due to qualitative or quantitative characteristics, investors believe there to be increased future cash flows. This set of data was generally pretty reliable, as stock prices are objectively reported on Wall Street.

Other data collected included company revenues and number of employees. This data was taken off company 10-Ks and online data. Some of these companies have not posted financial statements yet, so I used third-party websites like Wikipedia and the company's unaudited website to get a company's most recent revenues and employee numbers. I got the most recent data, and most of the data was either from the year of January 1st, 2019 to January 1st, 2020, and some of the data was from data that was less recent due to the 10-K not being posted yet. Because revenues and employees in large companies do not typically fluctuate a lot

in a span of month to month, there was not a lot of concern on whether or not these differences would make a material difference. The weakness in this method would be if the composition of the company did change drastically from month to month, the data collected from less recent sources may not be as reliable as more recent data; however, there was little that could be done to remedy this issue. All data was collected in the year 2019 off company websites, financials, or third party data and cross referenced across different sources.

Getting more specific into the data, one initiative I took was a different heterogeneity analyses. The first analysis was with interaction variables; I studied whether or not being Asian was correlated with being in larger companies with more revenues and employees. By using interaction variables, it was more easily distinguishable if the Asian-American pay difference is significantly larger in small firms vs. large firms, or if they were being unfairly compensated because they were Asian, regardless of where they were placed. The other heterogeneity analysis run was analysis with South Asians and East Asians. By controlling for “finer” data, I uncovered a clearer picture on whether the compensation bias was larger in East Asian or South Asian executives.

A final disclaimer about my data is the reliability of my sources: data from the Internet is not necessarily going to be reliable data for items that aren't regulated by government entities like the SEC; for example, data on number of employees are not typically audited on financial statements as other measures such as revenues or stock prices. As a result, data on employee counts are typically found in disparate sources across different company websites or third party websites.

That being said, while there may be inaccuracies in a portion of my data due to third-party inaccuracies and lack of recent data, the data as a whole is generally accurate. While some industries are not accessible, I use fixed-effect industry variables to control for some missing data.

Table 1: Descriptive Statistics

	Salary	Revenue (Billions)	Employees (Thousands)
Average	\$10,028,957.9	54.94	114
Min	\$358,704	9.13	2
Max	\$108,931,643	514.4	2,200

Table 2: Composition of Asian Executives

	Asian	East Asian	South Asian
#	20	7	13
% Total (520)	3.8%	1.3%	2.5%
% of Asians	100%	35%	65%
Average Salary	\$7,978,647	\$4,327,755	\$9,944,512

## Results and Evidence

Table 3: Salary given Asian American with control variables

	1	2	3	4	5
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<b>Asian Dummy</b>	<b>-.2300082</b> <b>(0.182)</b>	<b>-.2571196</b> <b>(0.167)</b>	<b>-.2282912</b> <b>(0.165)</b>	<b>-.2284759</b> <b>(0.165)</b>	<b>-.2698969*</b> <b>(0.140)</b>
Log of billions of dollars in revenue		.3346978*** (0.045)	.2827268*** (0.047)	.282045*** (0.047)	.2343442*** (0.053)
Log of thousands of employees			.0840915*** (0.033)	.0844479** (0.033)	.1528258*** (0.049)
% change stock				-.0005009 (0.001)	-.0022213 (0.001)
Industry fixed effect					Yes
Observations	520	520	520	520	520

Note: Numbers in ( ) are robust standard errors

\*=,  $p < 0.1$ , \*\*= $p < 0.05$ , \*\*\*= $p < 0.01$

The first set of regression results in table three demonstrated how executive salaries were affected by being Asian American. For regression one, I ran a regression with no control variables; with each additional regression, I added an additional control variable.

Analyzing the first regression, there seemed to be a negative but insignificant result at a 95 percent level ( $p = .206$ ). As I added more variables like the log of the thousands of employees and the log of billions of revenues, the p-value of the Asian dummy gradually dropped below .206, demonstrating the increased strength of the regression with more control variables. Consistent with expectations, the control variables for billions of dollars in revenue and the thousands of employees had a strong, positive correlation with executive pay.

The percent change in stock price variable behaved contrary to expected; a greater increase in stock prices seemed to be insignificantly but negatively correlated with the amount of executive compensation. The hypothesis I had was not true in this study; it was expected that executives who made results come to fruition would be awarded accordingly through higher compensation packages. However, because the association between the percent change in stock and executive compensation was insignificant as well as negative, this unusual data occurrence could have been due to issues with the data collection or the fact that this year may have just been an anomaly for the markets. It is also possible that last year's stock price is too short-term of a measure of firm performance, and that executive compensation dictated by the board may not respond that quickly to these changes.

Including the industry fixed-effect variable in column five helped lower the p value to a significant result at the 10% level.

Given regression five, which included all the control variables firing on all cylinders, it seemed that there was a negative 27 percent difference in pay from Asian-American executives in the market, controlling for billions of dollar in revenue, thousand of employees, percent change in stock, and the industry fixed effect model. This result is significant at a ten percent level, but a little less than significant at a five percent level. Shortcomings to these results could include the small number of Asian-American executives within the five-hundred plus employees in my regression model. Further work with finding a model that would better correlate company success with executive compensation would help validate my final regression, as well as

including a larger sample size. To make finer and more nuanced distinctions in this regression, I employed a heterogeneity analysis to help discover more insights on my data.

Table 4: Heterogeneity Analysis: Asian/Firm Size Interaction, East/South Asian Analysis

	Interaction Variable Analysis	East/South Asian Analysis
<b>Asian</b>	<b>-.6730536</b> <b>(0.584)</b>	
<b>East Asian</b>		<b>-.5362577**</b> <b>(.217)</b>
<b>South Asian</b>		<b>-.1200088</b> <b>(.167)</b>
Log of billions of dollars in revenue	.2313976*** (0.054)	.2348682*** (.052)
Log of thousands of employees	.1511709*** (.050)	.1488126*** (.048)
% change stock	-.0022227 (0.001)	-.0021911 (.001)
Asian/Revenue Interaction Variable	.0968577 (.205)	
Asian/Employee Interaction Variable	.0107995 (.163)	
Industry fixed effect	Yes	Yes
Observations	520	520

Note: Numbers in ( ) are robust standard errors

\*, p<0.1, \*\*=p<0.05, \*\*\*=p<0.01

For my heterogeneity analysis in table four, I decided to do two different tests to test for nuances in my data. The first test was a test distinguishing between East-Asian and South-Asian executives; the second test was a test with an interaction variable between being Asian and being at a company with more revenues, as well as an interaction variable between being Asian and being in a company with less employees.

For the first heterogeneity test, I took regression five from my regression results and subdivided the Asian variable into two distinct variables: an East-Asian variable and a South-Asian variable. I then ran the same regression, except instead of a single “Asian” variable, I had two distinct “sub-variables.” The results of this regression showed a greater effect for East-Asians rather than South Asians. At a five percent significance level, the South Asian variable was insignificant, but the East Asian variable was very significant. This implies that at a five percent level, being an East Asian executive was correlated with receiving lower compensation than other executives in my Fortune 500 sample.

For my second heterogeneity test, I looked at how being Asian could be correlated with being at a large company. To do this, I looked at my two “sizing” variables: the first variable I looked at was revenues, the second variable I looked at was employees. After running an interaction variable between these two variables, it seemed that being Asian did not correlate significantly with being at a large company; in other words, Asians were found at large and small companies about equally.

For the Asian-American heterogeneity test, there seems to be intriguing evidence that there may have been some differences between the different sub variables, but further research with more data needs to be done with more participants in order to say anything conclusively. There did not seem to be any significant evidence of Asians being in large companies.

My results showed a slight possibility that my hypothesis in the beginning of the study was correct – that being an Asian-American executive could be correlated with having lower compensation levels. Logically, the next step would be to try to confirm it through obtaining more data; this data could be more data across the Fortune 500 or data across different years.

### Conclusion

My research question was whether or not Asian-American executives were compensated equally to the rest of the labor market for executives in 2019. I controlled for firm revenue, the number of employees, the percent change in stock price, and for industry fixed effects. I also used a heterogeneity analysis to test for differences between East Asian Americans and South Asian Americans; additionally, I used another heterogeneity analysis to test for the possibility that Asian-Americans were more likely to be found in larger or smaller companies.

I found that being an Asian-American executive had an insignificant but negative correlation with executive pay levels. While all my regressions had the same general trend, the results were for the most part insignificant at the five-percent level; however, it seemed that being East-Asian Americans was correlated with less pay than South-Asian Americans. My results for East Asian executives were significant at a five percent level, while my results for



South Asian executives were insignificant at a five percent level. This shows that East Asians were actually paid less compared to how much executives were paid in the market.

While my findings were insignificant, because they all pointed towards the same direction of Asian-American executive compensation being lower than general compensation, there could be broader reaching implications with a stronger regression. With more measures of company success other than stock price increases like net income increases, there may be a stronger case for a more significant correlation in future research.

Future research would include more data in order to build a stronger regression. Most of the data gathered was centered around data regarding company characteristics. More data on executive characteristics may be prudent; characteristics such as executive gender, years of executive work in industry, and a measure of different responsibilities in companies may be helpful to look into given future research is done in this area.

Another logical step to follow would be to collect more data from different executives and different years. In this project, I looked at executives in the top two hundred companies in the Fortune 500 as of the year 2019. Given more data and time, one would want to look into the five highest paid executives in the whole set of the Fortune 500 in different years. Having more data would go a long way in making the results in my project more significant.

All in all, this project was a first step in understanding the impacts of Asian-American discrimination in the workforce and could serve as a call to action to future research in the area of personnel economics for Asian-Americans in corporate Fortune 500 structures.

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