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Executive Minority Employment and Compensation Gap in the S&P500: Is Compensation Disparity More Prevalent in Certain Industries?

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EXECUTIVE MINORITY EMPLOYMENT AND COMPENSATION GAP IN THE S&P500: IS COMPENSATION DISPARITY MORE PREVALENT IN CERTAIN INDUSTRIES?

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Abstract

Minorities hold a significantly smaller percentage of executive positions in companies within the S&P500. However, whether these minorities are under compensated relative to their non-minority counterparts has not been previously investigated. Using Compustat data, this paper documents the differences in compensation between minorities and non-minorities as a whole, minority and non-minority CEOs, and the differences in compensation for minorities and non-minorities within industries. I show that there is no minority/white wage gap overall, and in some cases, minorities earn a premium compared to non-minorities.

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1. Introduction

Despite policies such as the Civil Rights Act of 1964 and the Equal Employment Opportunity Commission, the unfortunate fact remains that minorities still face employment and wage gaps in the United States. Further, these discrepancies carry into executive positions within Standard & Poor's 500 (S&P 500) index, some of the most sought after jobs in America. What is particularly disheartening is that S&P500 is comprised of 500 widely help large-cap U.S. stocks from various industries, and minorities are underrepresented in these companies. Minorities hold a paltry percentage of these executive positions compared to non-minorities.[1][2]

As the percentage of minorities holding executive positions in companies within the S&P 500 grows, an investigation of whether there is a narrowing of the wage discrepancy to coincide with the increased, albeit extremely minimal, entrance of more minorities is necessary. The fact that the minorities in these positions are so highly qualified may cause wage convergence between minorities and non-minorities. As such, I seek to answer if minorities earn less than their non-minority counterparts and whether this differential is more pronounced among CEOs relative to non-CEOs within the S&P 500 as a whole. Further, I explore whether minorities earn less than their non-minority counterparts within industries. Investigating the S&P 500 may serve to tell minorities which industries they should seek to work in.

[1] Minority employment rate in S&P 500 companies was 5.9% in 2008 and 6.0% in 2009.

[2] An executive is defined as a minority if they are black, Hispanic, Asian, and Pacific Islander.

In summary, when examining the minority/white wage gap across industries, I find that minorities do not earn more than their non-minority counterparts when no controls are included in the analysis. However, minority CEOs earn a premium of over $2.7 million annually in total compensation compared to non-minority CEOs, but these results does not hold when the natural log of compensation is used. Further, I find that when the analysis is contingent on the Mining industry, minorities within six Standard Industrial Classification (SIC) industries earn less relative to their non-minority counterparts.

The remainder of the paper is as follows. Section 2 will provide a review of relevant literature and research. Section 3 describes the data. Section 4 discusses the estimation strategy and presents the results. Section 5 concludes.

2. Literature Review

Minority workers face discrepancies in both employment and wages relative to white workers, and these discrepancies are relevant in every socio-economic class (see for example, Antecol and Bedard 2004; Black, Haviland, Sanders and Taylor 2001; Sundstrom 2007). Despite efforts to quell these differences with legislation, the issues of the minority/white unemployment gap and wage gap exist. Answers as to why these differences persist continues to be investigated. This paper integrates three major strands of literature: minority/white unemployment gap, minority/white wage gap, and minority/white executive gap in employment and wages.

2.1 Minority/White Unemployment Gap

The importance of the minority/white unemployment gap does not lie in the simple percentage difference between whites and minorities. Its very existence lends itself to a larger question: why does an unemployment gap between minorities and whites exist to begin with? Sundstrom (2007) finds that although the substantial and persistent gap between the unemployment rates of black and white males first became apparent in aggregate statistics covering the 1940s and 1950s, disaggregation exposes the fact that the gap had already materialized in urban areas before 1940 in the United States. Prior to 1940 there was a minimal difference between the unemployment rates of black and white men. The racial unemployment gap relevant to today emerged during the 'Great Migration'.[3] Similarly, Fairlie and Sundstorm (1992) find that the roots of the current racial unemployment gap stem from the 1940s and 1950s when regional shifts in the

[3] The 'Great Migration' occurred in the 1940s and 1950s when many blacks moved from the rural South to urban areas in the North.

economy reduced the demand for labor in the South relative to other areas and led black, male workers to move to the urban areas of the North, where unemployment tended to be higher. The gap created by this shift proves to be a continual feature of regional labor markets within the United States. While these studies help to answer questions with regard to the black/white unemployment gap, they do not deal with other minorities.

Bernstein et al. (1985) present research on the minority/white unemployment in the United States for males and females. Since the mid-1950s, minorities in the United States have suffered far higher joblessness than whites. Lindley (2005) uses data from the Quarterly Labor Force Survey for 1992-95 and 2000-03 to study changes in both ethnic minority economic activity and unemployment. Over this time span the unemployment conditions improved between minorities and whites, however, Lindley finds only half of the difference can be attributed to observed characteristics. Consequently, this implies the existence of a large, unexplained discriminatory element for most minorities.

Fieldhouse (1999) contributes to the research on the minority/white unemployment gap for both genders with an examination of unemployment among ethnic minorities using the spatial mismatch theory.[4] Specifically, he explores the geography of minority ethnic unemployment to assess the significance of the geographical distribution of ethnic minorities in understanding unemployment differences. Despite the fact that there is a relationship between unemployment and the area's characteristics in which minorities live, it is not a result of the spatial mismatch of people and jobs. Selod and Zenou (2001) similarly delve into the spatial structure of minorities, in particular blacks.

[4] The spatial mismatch theory suggests employment opportunities for low-income minorities are located far away from places in which they live.

They find that the distance to jobs is crucial to the labor-market outcomes of ethnic minorities. Conversely, distance to jobs is less significant for whites because of their strong inherited advantage in terms of history.

It is undeniable from the literature that there is a minority/white unemployment gap. However, all the causes behind this gap have yet to be determined. Historical factors, such as the 'Great Migration', distance to jobs and concentrations of minorities in certain areas all affect the gap, but do not fully explain it. Further research needs to be done in order to account for large, unexplained discriminatory element that affects most minorities so we can understand the racial wage gap. Unfortunately, the minority/white unemployment gap is not the only gap between whites and minorities that cannot be fully explained.

2.2 Minority/White Wage Gap

An equally important issue involves the wage gap that exists between minorities and whites. Agesa and Monaco (2006) seek to discover the reason behind this gap with the use of industry-level data from the Current Population Survey (CPS) Outgoing Rotation Groups files from 1990 through 1996. They use this data to examine the relationship between skill level, market structure, and black employment. Agesa and Monaco (2006) find that racial wage gaps are smaller for low-skill workers than high-skill workers and that wage gaps cause a larger increase in black employment for the low-skill group. However, these findings may be caused by the highly elastic labor supply of low-skill workers.

Hirsh and Schumacher (1992) explore the extent to which the wages of black and white workers of both genders diverge with respect to the racial composition of labor market. They find that the racial composition of labor markets is an important determinant of wage rates. Specifically, the wages of both white and black workers decrease with respect to the of ratio black and white workers within industry-occupation-region cells. Additionally, the racial wage gap does not vary systematically with respect to racial density.

This research is furthered by Hirsh and Macpherson (2004) who investigate the variance of wages between white and black workers within the racial composition of jobs. They find a narrowing of skill level between white and black workers is essential to abate the strong negative correlation between wages and the racial composition of jobs. These results suggest that the differences in workers' skill level are the chief driving force behind the racial employment and wage disparity.

Antecol and Bedard (2004) take a unique approach in exploring the youth male black/white and Mexican/white wage gap by looking at differences in labor force attachment and utilizing actual experience rather than just potential experience. Their research draws three main conclusions. First, the combination of labor force attachment and education explain 44-50 percent and 55-56 percent of black/white and Mexican/white wage gaps, respectively. Secondly, labor force attachment and education explain less of the black/white wage gap than the Mexican/white wage gap. Lastly, labor force attachment explains more of the black/white wage gap than the Mexican/white wage gap, whereas the opposite is true of education.

Unlike Antecol and Bedard, the following study does not concentrate on young minorities. Black et al. (2001) estimate wage differentials among the highly educated with the use of nonparametric matching methods and detailed measures of field of study for university graduates. They find that the racial wage gap is a result of differences in premarket factors such as age, the level and types of education, and English fluency and/or assimilation. Ultimately, they acknowledge that the reduction of the existing wage discrepancies lies in the removal of obstacles that impede skill acquisition by minority children and youth.

The above literature concludes that major policy implementation in regards to the enhancement of training of minorities is necessary in order to close the minority/wage gap that is evident. Increased labor force attachment and educational improvements, in both quality and quantity, are imperative in order to have wage convergence between minorities and whites. Additionally, minorities need to diversify the fields in which they work. This is necessary because the greater the concentration of minorities in a certain labor market, the lower the wages tend to be. The combined understanding of unemployment gaps and wage gaps between minorities and whites is essential to further different avenues of research, including the potential discrepancies faced by executive minorities.

2.3 Minority/White Executive Gap in Employment and Wages

Minorities hold a significantly smaller percentage of executive positions in top firms in North America because large firms are less likely to promote ethnic minorities.[5] However, there has not been a great deal of research on minority executive wage and employment gaps.[6] Rather, much of the executive literature has focused on gender discrepancies. Bertrand and Hallock (2001) analyze gender differences in compensation among the top executives of many U.S. firms for the years 1992-97. They find that females, relative to males, earn about 45% less. However, much of the pay discrepancy can be attributed to the fact that women tended to manage smaller companies and were less likely to be CEOs. Further, the data showed that not only did females significantly increase their participation in executive positions during the time period, they also improved representation in larger corporations. This increased representation in larger corporations led to an improvement of relative compensation between males and females.

My contribution is to bridge the literatures by using non-executive minority/white wage gap literature and applying it to the executive racial wage, employing techniques used to examine the male/female executive wage gaps. Specifically, I seek to answer if there is wage disparity within the S&P500 as a whole and whether certain industries are

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[5] "Integrated but Unequal." 1997. *Economist* 342 (8003) (02/08): 58-9.

[6] A related study by Giuliano et al. (2009) uses personnel data from a large United States based retail firm to study whether or not the race or ethnicity of the hiring manager affects the racial composition of new hires. The results show that whites, Hispanics and Asians hire fewer black workers and more white workers than black hiring managers do. This finding is especially evident in the South. Also, locations with large Hispanic populations result in more Hispanic hiring managers, and these Hispanic managers hire more Hispanics and fewer whites than white managers do in these same areas.

more discriminatory than others. The next section describes the data used for the empirical analysis.

3. Data

The data I use for this analysis is Compustat data. This data is ideal for my purposes as it includes financial data (e.g. balance sheets, income statements, and cash flow statements) for over 24,000 companies.[7] To account for executive compensation, I merge Compustat data with Compustat Executive Compensation data. Executive compensation is provided for, at minimum, the top five executives at each respective company, including the CEO. My paper examines executive compensation for the years 2008 and 2009; therefore I look at companies that are incorporated in the S&P 500 index at the start of each of those years.

Companies with incomplete financials (earnings per share, net income, revenue, and market value) are excluded from the analysis. A total of 104 companies and 646 executives were dropped due to these restrictions, resulting in a final sample of 889 companies and 4,866 executives.

To find the minority statuses of the executives, the Notable Names Database (NNDB) is used in combination with company websites and Google images. The NNDB is an intelligence aggregator that tracks the activities of people that creators have deemed to be noteworthy, both living and dead. The database has information about the person's curriculum vitae along with ethnicity. For individuals that are not found in the NNDB, company websites and Google images are used to gather minority status. The combination of these three tools allowed me to find the minority status of each executive.

[7] "WRDS," Wharton University of Pennsylvania, accessed 03 March 2011, https://wrds-web.wharton.upenn.edu/wrds/.

An executive is defined as a minority if they are black, Hispanic, Asian, and Pacific Islander, and otherwise zero. According to Table 1, 5.9 percent of the executives in the sample are minorities. This finding illustrates the under-representation of minorities in top executive positions.

One dependent variable is used within the analysis. For my dependent variable, I collected executive compensation. Executive compensation is composed of seven categories: salary, bonus, other annual payments, restricted stock grants, Long Term Incentive Program (LITP) payouts, and all other compensation. Salary is dollar value of the base salary and the bonus is the dollar value of a bonus earned by an executive officer during the fiscal year.[8] Other annual payments is the dollar value of other annual compensation not properly categorized as salary or bonus and includes perquisites and other personal benefits; above market earnings on restricted stock paid during the year but deferred by the executive; earnings on long-term incentive plan compensation paid during the year but deferred at the election of the officer; tax reimbursements; and the dollar value of difference between the price paid by the officer for company stock and the actual market price of the stock under a stock purchase plan.[9] Restricted stock grants are the value of restricted stock granted during the year.[10] LTIP payouts is the amount paid out to the executive under the company's long-term incentive plan, which measure company performance over a period of more than one year. [11] Finally, the portion of "All Other Compensation" includes items such as severance payments, debt forgiveness,

[8] "WRDS"
[9] "WRDS"
[10] "WRDS"
[11] "WRDS"

imputed interest, payouts for cancellation of stock options, payment for unused vacation, tax reimbursements, and signing bonuses.[12] Table 1 reveals that executives on average earn $4,732,930, but the spread in compensation is large, ranging from $1,611 to $214,791,000. In detail below, I discuss the differences in earnings by minority status in Section 3.1.

Additionally, I include information about the executive's personal characteristics (minority status, CEO status, and gender). I create an indicator variable equal to one if the executive is a minority, and a zero otherwise. I also create an indicator variable equal to one if the executive is a CEO, and a zero otherwise. Similarly, an indicator variable was created that equals one if the executive is female, and zero if the executive is male. Executives are roughly 53 years of age; of which 17.9 percent are CEOs and 6.5 percent are female (see Table 1).

The explanatory variables that represent company health are earnings per share, net income, revenue, and market value (see Table 1). Earnings per share functions as an indicator or a company's profitability and is the portion of a company's profit that is allocated to each outstanding share of common stock.[13] Net income is a company's total earnings and is an important measure of how profitable a company is over a period of time.[14] Revenue is the amount of money that a company receives during a specific

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[12] "WRDS"

[13] "Earnings Per Share – EPS," Investopedia, accessed 17 March 2011, http://www.investopedia.com/terms/e/eps.asp.

[14] "Net Income - NI," Investopedia, accessed 17 March 2011, http://www.investopedia.com/terms/n/netincome.asp.

period.[15] Lastly, market value is the total dollar value of all of a company's outstanding shares and is used to determine a company's size.[16]

Finally, I create a set of indicator variables for industry.[17] Specifically, I create 10 indicator variables to represent each respective industry. These are based on the Standard Industrial Classification system.[18] See Appendix Table 1 for detailed SIC code definitions and breakdown of observations within industries.[19]

3.1 Executive Compensation by Minority Status

Table 2 presents the mean compensation for both minorities and non-minorities overall, for CEOs, and within industries. Overall, the difference in means between minorities and non-minorities is insignificant, but, CEO compensation has a significant difference in compensation for minorities and non-minorities. The mean compensation for minority CEOs is $13,234,300 compared to a mean of $4,651,796 for non-minority CEOs. Also, the Mining industry is the only industry that has a significant difference in compensation for minorities and non-minorities without any controls. Minorities, on

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[15] "Revenue," Investopedia," accessed 17 March 2011, http://www.investopedia.com/terms/r/revenue.asp.

[16] "Market Capitalization," Investopedia, accessed 17 March 2011, http://www.investopedia.com/terms/m/marketcapitalization.asp.

[17] An industry consists of a group of establishments primarily engaged in producing or handling the same product of group of products or in rendering the same services.

[18] The SIC system served as the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the United States business economy for over 60 years before the induction of the North American Industry Classification System in 1997.

[19] SIC industry 10, Public Administration, and industry 11, Management of Companies and Enterprises, are left out because no companies within the S&P500 during 2008 and 2009 have these codes.

average, are better compensated within the Mining industry compared to their non-minority counterparts. Minorities have a mean compensation of $16,929,070, whereas non-minorities have a mean compensation of $4,692,695.

The remainder of the paper formally analyzes the relationships in Table 2. The next section of this paper will describe the empirical analysis and results of this data.

4. Estimation Strategy and Results

In order to determine whether minorities earn less than their non-minority counterparts and whether this differential is more pronounced among CEOs relative to non-CEOs, I estimate a regression in the following form:

$$\textbf{(1)}\ C_i = \alpha + \beta X_i + \delta MIN_i + \eta CEO_i + \gamma MIN_i * CEO_i + \varepsilon_i.$$

In the above equation, C is compensation and X is a vector of personal characteristics (minority status, CEO status, gender, and age) and firm characteristics (earnings per share, net income, revenue, and market value). MIN is an indicator variable equal to one if the executive is a minority, and zero otherwise. CEO is also an indicator variable and is equal to one if the executive is a CEO, and zero if the executive is not. Lastly, ε is an error term with the usual properties.[20]

I estimate several specifications based on Equation (1). Specification 1 only includes the indicator variable for minority status. Specification 2 includes controls for CEO status in addition to Specification 1. Specification 3 includes Specification 2 as well as the cross term between Minority and CEO status. Specification 4 includes Specification 3 along with controls for personal characteristics. Finally, Specification 5 includes Specification 4 plus controls for firm characteristics. The addition of variables in each specification serves to wipe out the limited effects the minority variable has on compensation.

[20] An error term is a variable in a statistical model that is created when the model does not fully represent the actual relationship between the independent variables and the dependent variable. As a result of this incomplete relationship, the error term is the amount at which the equation may differ during empirical analysis.

Table 3 and 4 present the results of Specification 1 through 5 for compensation and the natural log of compensation, respectively. Using the natural log of compensations lessens the variance between observations and helps eliminate outliers. However, it may be important to include those outliers because they may reveal the true differences between minorities and non-minorities. As such, it is necessary to use both compensation and the natural log of compensation.

According to Table 3, minorities do not earn more than their non-minority counterparts when no controls are included in the analysis. However, when CEO status is added, minorities earn a premium over their non-minority counterparts equal to $853,600. Interestingly, when the CEO status is interacted with minority status, this earnings advantage is only enjoyed by minority CEOs relative to non-minority CEOs. Minority CEOs earn a premium of over $2.7 million annually in total compensation compared to non-minority CEOs (see Column 3). Moreover, this effect holds with the successive addition of variables. This suggests that when minorities attain CEO status, not only are they very good, but they are compensated accordingly. However, this result differs from previous racial wage gap literature. Typically, racial wage gap literature for non-executives finds that there is a wage penalty for minorities compared to their non-minority counterparts.

The same pattern is not found using the natural log of compensation (see Table 4). I argue this occurs because using the natural log results in the elimination of outliers in the sense that it causes the data to converge. The most highly compensated executive

within the S&P500 is a minority CEO, and using the natural log of compensation eliminates the effect that this observation has on results.

The results for the remaining variables are similar if one focuses on compensation versus the natural log of compensation, so I focus on the former. Furthermore, I focus on Specification 5, which includes the full set of control variables. Not surprisingly, CEOs earn more than their non-CEO counterparts. Specifically, a CEO makes over $6 million more than non-CEO executives within the S&P500. Age is also significant at the one percent level. With each additional year, an executive earns over 150,000 more dollars. Also, market value is the greatest predictor of the total compensation of the executives that work for that company. An interesting finding is that gender was not statistically significant at any level. Based on previous literature, it would be expected to find that women suffer a wage disparity relative to men.[21] However, the fact that this is not statistically significant may be due to my analysis solely examining executives within the S&P500. As such, it may be that females in these positions are so highly qualified and unique that they no longer suffer from a wage gap.

4.1 Industry Specific Minority Wage Gaps

In order to ascertain whether minorities earn less than their non-minority counterparts within industries, I estimate a regression of the following form:

$$\textbf{(2)}\ C_i = \alpha + \beta X_i + \delta MIN_i + \eta CEO_i + \gamma MIN_i * CEO_i + \kappa SIC_i + \delta MIN_i * SIC_i + \varepsilon_i.$$

[21] See Bertrand and Hallock (2001)

In the above equation, SIC is a vector of indicator variables for industry and all other variables are as defined in Equation (1). I estimate two specifications, one with all variables expect the cross terms between minority status and industry indicator variables, and one with those variables included.[22] Moreover, I estimate Equation (2) for compensation and the natural log of compensation.

Table 5 and 6 present the results of Specification 1 and 2 for compensation and the natural log of compensation, respectively. Again, compensation and the natural log of compensation are both utilized for the same reasons as listed above.

According to Table 5, when the cross terms between minority status and industry indicator variables are absent, minority executives do not earn more than non-minorities. Interestingly, when the cross terms between minority status and industry indicator variables are included, minorities earn a premium compared to non-minorities. In Specification 2, minority compensation is greater than non-minority compensation by $10,423,000. Additionally, in Specification 1, the Construction industry is significant unlike in Specification 2. When the cross terms between minority status and industry indicator variables are not included, executives working within the Construction industry earn $1,922,000 less than executives who work in other industries. The remaining variables that Specification 1 and Specification 2 have in common are similar, so I will focus on specification 2.

[22] The Public Administration industry is not included because there are no observations. Also, the Mining industry is not included as well in order to make the results contingent on this industry. No minorities work within the Agriculture, Forestry, and Fishing industry and Nonclassified Establishments. As a result, no minsic_1 and minsic_11were created. Again, minsic_2 is not included to make the regression results contingent on this industry.

As expected, similar to the results of testing standard compensation across industries, CEOs earn a premium over non-CEOs ($6,012,000), minority CEOs have a higher compensation level than non-minority CEOs ($3,693,000), and each additional year increases an executive's compensation ($154,000). What is unique to note are the effects of the minority status and industry indicator variable cross terms. When the minority status is interacted with industry indicator variables, the minority executives within each respective industry earn less than their non-minority counterparts; despite the fact that overall minorities earn more than non-minority executives (see Column 2).[23]

The results when using the natural log of compensation were not the exactly the same as when using just compensation (see Table 6). Once more, I contend this is the case because using the natural log results in the elimination of outliers in the sense that it causes the data to converge, and the most highly compensated executive within the S&P500 is a minority CEO. Like in compensation, CEOs earn more than non-CEOs and age results in higher earnings when using the natural log of compensation. However, the natural log of compensation differs because minorities CEOs no longer have a premium over their non-minority CEO equivalents. When Ln compensation is used under Specification 2, the only cross term between minority status and industry indicator variable that is significant is the Retail Trade industry. The following section provides concluding remarks.

[23] All minority status and industry indicator cross terms are significant at the one percent level except for the Wholesale Trade industry, which is statistically insignificant.

5. Conclusion

This paper contributes to the racial wage gap literature by bridging non-executive minority/white wage gap literature and applying it to the executive racial wage, employing techniques used to examine the male/female executive wage gaps. Specifically, I answered if there is wage disparity within the S&P500 as a whole and whether certain industries are more discriminatory than others. While the results differ in regards to minority compensation when the natural log of compensation is used in lieu of standard compensation, there are three key consistencies. Minorities do not suffer from a wage disparity compared to non-minorities overall, CEOs are always better compensated than non-CEOs, and each yearly increase of age raises the amount that an executive is compensated.

When compensation is used, I find that minority CEOs are better compensated than their non-minority CEO counterparts. This result suggests that when minorities achieve this level, they are not only highly qualified but compensated according to their unique abilities that merit such high compensation levels. However, this result does not hold when the natural log of compensation is used. In addition, I documented the effects of industry classification has on compensation for minorities. I find that within certain industries there is a wage disparity between minorities and non-minorities when the results are contingent on the Mining industry.[24]

The research in this paper provides insight into executive compensation as it relates to the minority/white wage gap. The significance of my findings could be

[24] The most highly compensated minority executive is a CEO of a company within the Mining industry.

increased by looking at a broader range of years which would increase the number of companies and top executives in the sample. Additionally, with a larger data range, there could be a more detailed industry break down. Overall, the results of this paper suggest that minorities who are employed in S&P 500 companies are not undercompensated relative to non-minorities. As such, minorities must seek to become more prevalent in these companies.

6. Tables

Table 1: Summary Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
Comp	4866	4732.93	8161.808	1.661	214791
LnComp	4866	7.950896	0.9594315	0.50742	12.2774
Minority	4866	0.058981	0.2356128	0	1
CEO	4866	0.178997	0.3833893	0	1
MinCEO	4866	0.009453	0.0967776	0	1
Gender	4866	0.064529	0.2457189	0	1
Age	4866	53.30991	6.726895	33	91
EPS	4866	1.840288	3.440452	-29.72	22.29
NetIncome	4866	1049.709	3264.193	-16998	45220
TotalRev	4866	17967.49	35804.52	549.07	425071
MrktValue	4866	19190.38	35501.31	548.749	397234
sic_1	4866	0.004316	0.0655585	0	1
sic_2	4866	0.084464	0.2781104	0	1
sic_3	4866	0.014797	0.1207502	0	1
sic_4	4866	0.443896	0.4968935	0	1
sic_5	4866	0.078093	0.2683453	0	1
sic_6	4866	0.017468	0.1310211	0	1
sic_7	4866	0.103781	0.305008	0	1
sic_8	4866	0.083436	0.2765687	0	1
sic_9	4866	0.165228	0.3714245	0	1
sic_11	4866	0.004521	0.0670943	0	1
minsic_2	4866	0.003288	0.0572537	0	1
minsic_3	4866	0.001233	0.0350967	0	1
minsic_4	4866	0.029182	0.1683339	0	1
minsic_5	4866	0.003494	0.0590097	0	1
minsic_6	4866	0.000206	0.0143355	0	1
minsic_7	4866	0.00596	0.0769767	0	1
minsic_8	4866	0.003083	0.0554413	0	1
minsic_9	4866	0.012331	0.1103672	0	1

Table 2: Compensation by Minority Status Overall, within CEO, and within Industry

Variable	Minority	Non-minority
Overall	5410.992 (806.6428)	4690.43 (113.6024)
CEO	13234.33*** (4564.079)	4651.796*** (109.3233)
SIC 2: Mining	16929.07*** (13321.08)	4692.695*** (108.9402)
SIC 3: Construction	3073.923 (1141.076)	4734.978 (117.1383)
SIC 4: Manufacturing	5092.146 (558.9892)	4722.132 (119.3488)
SIC 5: Transportation, Communications and Public Utilities	2647.073 (335.9657)	4740.242 (117.3951)
SIC 6: Wholesale Trade	605.099	4733.778 (117.0249)
SIC 7: Retail Trade	5348.944 (885.2965)	4729.236 (117.5878)
SIC 8: Finance, Insurance, and Real Estate	4495.445 (1192.206)	4733.664 (117.3115)
SIC 9: Services	4510.366 (572.9277)	4735.708 (118.2517)

Standard errors in parentheses

***Difference between Minority and Non-minority means are significant at p<0.001 or better

Table 3: Determinants of Compensation (OLS Coefficients and Standard Errors)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	**Comp**	**Comp**	**Comp**	**Comp**	**Comp**	**Comp**
Minority	720.6	853.6*	404.9	402.0	612.2	330.3
	(496.6)	(471.5)	(514.7)	(514.7)	(510.6)	(499.4)
CEO		6,686***	6,536***	6,513***	6,012***	6,015***
		(289.8)	(297.8)	(298.7)	(300.7)	(293.9)
MinCEO			2,781**	2,834**	3,214**	3,531***
			(1,281)	(1,282)	(1,272)	(1,243)
Gender				-465.7	-224.6	-121.4
				(453.4)	(450.0)	(440.0)
Age					157.7***	151.7***
					(16.70)	(16.36)
EPS						67.35*
						(37.59)
NetIncome						-0.148**
						(0.0691)
TotalRev						0.000847
						(0.00446)
MrktValue						0.0553***
						(0.00648)
Constant	4,690***	3,486***	3,513***	3,547***	-4,801***	-5,520***
	(120.6)	(125.8)	(126.4)	(130.6)	(893.3)	(879.4)
Observations	4,866	4,866	4,866	4,866	4,866	4,866
R-squared	0.000	0.099	0.100	0.100	0.116	0.157

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: Determinants of Ln Compensation (OLS Coefficients and Standard Errors)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	**LnComp**	**LnComp**	**LnComp**	**LnComp**	**LnComp**	**LnComp**
Minority	0.0662	0.0874*	0.0794	0.0790	0.101*	0.0607
	(0.0584)	(0.0528)	(0.0577)	(0.0577)	(0.0573)	(0.0545)
CEO		1.066***	1.064***	1.061***	1.009***	1.011***
		(0.0325)	(0.0334)	(0.0335)	(0.0338)	(0.0321)
MinCEO			0.0498	0.0564	0.0953	0.156
			(0.144)	(0.144)	(0.143)	(0.136)
Gender				-0.0578	-0.0331	-0.0174
				(0.0508)	(0.0505)	(0.0480)
Age					0.0161***	0.0148***
					(0.00187)	(0.00179)
EPS						0.0182***
						(0.00410)
NetIncome						-2.57e-05***
						(7.54e-06)
TotalRev						2.09e-06***
						(4.87e-07)
MrktValue						7.39e-06***
						(7.07e-07)
Constant	7.947***	7.755***	7.755***	7.760***	6.905***	6.793***
	(0.0142)	(0.0141)	(0.0142)	(0.0146)	(0.100)	(0.0960)
Observations	4,866	4,866	4,866	4,866	4,866	4,866
R-squared	0.000	0.182	0.182	0.182	0.194	0.273

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 5: Determinants of Compensation including SIC Controls (OLS Coefficients and Standard Errors)

VARIABLES	(1) Comp	(2) Comp
Minority	344.3	10,324***
	(498.3)	(1,850)
CEO	6,010***	6,012***
	(292.9)	(292.2)
MinCEO	3,442***	3,693***
	(1,239)	(1,248)
Gender	-34.56	-10.84
	(439.3)	(438.3)
Age	154.2***	154.0***
	(16.39)	(16.36)
EPS	59.21	54.66
	(38.02)	(38.05)
NetIncome	-0.125*	-0.129*
	(0.0693)	(0.0692)
TotalRev	0.00451	0.00415
	(0.00465)	(0.00465)
MrktValue	0.0514***	0.0522***
	(0.00659)	(0.00659)
sic_1	950.9	1,332
	(1,676)	(1,673)
sic_3	-1,922**	-1,313
	(959.3)	(996.0)
sic_4	-1,831***	-1,396***
	(404.1)	(411.4)
sic_5	-2,820***	-2,432***
	(533.1)	(542.8)
sic_6	-3,372***	-3,073***
	(896.9)	(900.0)
sic_7	-1,972***	-1,597***
	(510.4)	(519.7)
sic_8	-2,335***	-1,962***
	(525.6)	(534.3)
sic_9	-1,357***	-882.1*
	(456.1)	(465.8)
sic_11	-3,553**	-3,178*
	(1,673)	(1,670)
minsic_3		-12,761***
		(3,682)
minsic_4		-10,728***
		(1,956)

Table 5 (Continued)

VARIABLES	(1) Comp	(2) Comp
minsic_5		-9,886***
		(2,615)
minsic_6		-11,181
		(7,721)
minsic_7		-9,700***
		(2,331)
minsic_8		-9,757***
		(2,693)
minsic_9		-11,268***
		(2,101)
Constant	-3,904***	-4,278***
	(954.7)	(955.4)
Observations	4,866	4,866
R-squared	0.164	0.170

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: Determinants of Ln Compensation including SIC Controls (OLS Coefficients and Standard Errors)

VARIABLES	(1) LnComp	(2) LnComp
Minority	0.0517	-0.116
	(0.0542)	(0.202)
CEO	1.011***	1.011***
	(0.0319)	(0.0319)
MinCEO	0.134	0.134
	(0.135)	(0.136)
Gender	-0.0114	-0.0126
	(0.0478)	(0.0478)
Age	0.0150***	0.0151***
	(0.00178)	(0.00178)
EPS	0.0185***	0.0183***
	(0.00414)	(0.00415)
NetIncome	-2.39e-05***	-2.37e-05***
	(7.54e-06)	(7.55e-06)
TotalRev	2.82e-06***	2.77e-06***
	(5.06e-07)	(5.07e-07)
MrktValue	6.60e-06***	6.64e-06***
	(7.17e-07)	(7.18e-07)
sic_1	0.214	0.206
	(0.182)	(0.182)
sic_3	-0.0261	-0.00298
	(0.104)	(0.109)
sic_4	-0.0176	-0.0210
	(0.0440)	(0.0449)
sic_5	-0.204***	-0.215***
	(0.0580)	(0.0592)
sic_6	-0.629***	-0.621***
	(0.0976)	(0.0982)
sic_7	-0.142**	-0.162***
	(0.0555)	(0.0567)
sic_8	-0.159***	-0.170***
	(0.0572)	(0.0583)
sic_9	0.00113	-0.00688
	(0.0496)	(0.0508)
sic_11	-0.286	-0.293
	(0.182)	(0.182)
minsic_3		-0.192
		(0.402)
minsic_4		0.122
		(0.213)

Table 6 (Continued)

VARIABLES	(1) LnComp	(2) LnComp
minsic_5		0.278
		(0.285)
minsic_6		-0.759
		(0.842)
minsic_7		0.431*
		(0.254)
minsic_8		0.281
		(0.294)
minsic_9		0.187
		(0.229)
Constant	6.842***	6.845***
	(0.104)	(0.104)
Observations	4,866	4,866
R-squared	0.285	0.286

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

7. Appendix

Table 1: SIC Code Definitions

SIC Code	Industry Title	Number of Observations	Minorities Within SIC CODE
1	Agriculture, Forestry, and Fishing	21	0
2	Mining	411	16
3	Construction	72	6
4	Manufacturing	2,160	142
5	Transportation, Communications and Public Utilities	380	17
6	Wholesale Trade	85	2
7	Retail Trade	505	29
8	Finance, Insurance, and Real Estate	406	15
9	Services	804	60
10	Public Administration	0	0
11	Nonclassified Establishments	22	0

8. References

Agesa, Jacqueline, and Kristen Monaco. 2004. Industry racial employment by skill level: The effects of market structure and racial wage gaps. *Journal of Labor Research* 25 (2) (Spring2004): 315-28.

Alon, Sigal, and Yitchak Haberfeld. 2007. Labor force attachment and the evolving wage gap between white, black, and Hispanic young women. *Work & Occupations* 34 (4) (11): 369-98.

Anderson, Deborah, and David Shapiro. 1996. Racial differences in access to high-paying jobs and the wage gap between black and white women. *Industrial & Labor Relations Review* 49 (2) (01): 273-86.

Antecol, Heather, and Kelly Bedard. 2004. The racial wage gap. *Journal of Human Resources* 39 (2) (Spring2004): 564-83.

Baldwin, Marjorie, and John A. Bishop. 1991. An analysis of racial differences in wage distributions. *Economics Letters* 37 (1) (09): 91-5.

Bernstein, Aaron, Lois Therrien, Pete Engardio, Deborah C. Wise, and Michael A. Pollock. 1985. THE FORGOTTEN AMERICANS. *Business Week* (2910) (09/02): 50-5.

Bloch, Farrell. 1994. *Antidiscrimination law and minority employment: Recruitment practices and regulatory constraints* Chicago and London: University of Chicago Press.

Ewing, Bradley T., Reyes, Angel L., I.,II, Mark A. Thompson, and James C. Wetherbe. 2008. Examination and comparison of Hispanic and white unemployment rates. *Journal of Business Valuation and Economic Loss Analysis* 3 (1).

Fairlie, Robert W., and William A. Sundstrom. 1999. The emergence, persistence, and recent widening of the racial unemployment gap. *Industrial & Labor Relations Review* 52 (2) (01): 252-70.

The racial unemployment gap in long-run perspective. *American Economic Review* 87 (2) (05): 306.

Fieldhouse, Edward A. 1999. Ethnic minority unemployment and spatial mismatch: The case of London. *Urban Studies* 36 (9) (08): 1569-96.

Giuliano, Laura, David I. Levine, and Jonathan Leonard. 2009. Manager race and the race of new hires. *Journal of Labor Economics* 27 (4) (10): 589-631.

Gyimah-Brempong, Kwabena, and Rudy Fichtenbaum. 1997. Racial wage gaps and differences in human capital. *Applied Economics* 29 (8) (08): 1033-44.

Hirsch, Barry T., and David A. Macpherson. 2004. Wages, sorting on skill, and the racial composition of jobs. *Journal of Labor Economics* 22 (1) (01): 189-210.

Hirsch, Barry T., and Edward J. Schumacher. 1992. Labor earnings, discrimination, and the racial composition of jobs. *Journal of Human Resources* 27 (4) (Fall): 602-28.

Huffman, Matt L., and Philip N. Cohen. 2004. Racial wage inequality: Job segregation and devaluation across U.S. labor markets. *American Journal of Sociology* 109 (4) (01): 902-36.

Integrated but Unequal. 1997. *Economist* 342 (8003) (02/08): 58-9.

Kamalich, Richard F., and Solomon W. Polachek. 1982. Discrimination: Fact or fiction? An examination using an alternative approach. *Southern Economic Journal* 49 (2) (10): 450.

Last hired, first fired? Unemployment and urban black workers during the great depression. *Journal of Economic History* 52 (2) (06): 415-29.

Lindley, Joanne. 2005. Explaining ethnic unemployment and activity rates: Evidence from the QLFS in the 1990s and 2000s. *Bulletin of Economic Research* 57 (2) (04): 185-203.

Maume Jr., David J. 2004. Wage discrimination over the life course: A comparison of explanations. *Social Problems* 51 (4) (11): 505-27.

Mincer, Jacob, and Solomon Polachek. 1978. Women's earnings reexamined. *Journal of Human Resources* 13 (1) (Winter78): 118-34.

Moon-Kak Kim, and Solomon W. Polachek. 1994. Panel estimates of male-female earnings functions. *Journal of Human Resources* 29 (2) (Spring94): 406-28.

Investopedia. "Earnings Per Share – EPS." Accessed 17 March 2011. http://www.investopedia.com/terms/e/eps.asp.

Investopedia. "Error Term." Accessed 11 April 2011. http://www.investopedia.com/terms/e/errorterm.asp.

Investopedia. "Market Capitalization." Accessed 17 March 2011. http://www.investopedia.com/terms/m/marketcapitalization.asp.

Investopedia. “Net Income - NI.” Accessed 17 March 2011. http://www.investopedia.com/terms/n/netincome.asp.

Investopedia. “Revenue.” Accessed17 March 2011, http://www.investopedia.com/terms/r/revenue.asp.

Noon, Mike, and Kim Hoque. 2001. Ethnic minorities and equal treatment: The impact of gender, equal opportunities policies and trade unions. *National Institute Economic Review*(176) (04): 105-16.

Oaxaca, Ronald. 1973. Male-female wage differentials in urban labor markets. *International Economic Review* 14 (3) (10): 693.

John S. Heywood, John S. and Daniel Parent. "PERFORMANCE PAY AND THE WHITE-BLACK WAGE GAP" McGill University, Department of Economics, Departmental Working Papers, 2009), http://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=1045836&site=ehost-live; http://www.mcgill.ca/files/economics/HP_black_white_v7_jan2009.pdf.

Queneau, Herve, and Amit Sen. 2009. Regarding the unemployment gap by race and gender in the United States. *Economics Bulletin* 29 (4): 2749-57.

Selod, Harris, and Yves Zenou. 2001. Social interactions, ethnic minorities and urban unemployment. *Annales d'Economie Et De Statistique*(63-64) (July): 183-214.

Showler, Brian. 1980. Racial minority group unemployment: Trends and characteristics. *International Journal of Social Economics* 7 (4): 194-205.

Sundstrom, William A. 1997. Explaining the racial unemployment gap: Race, region, and the employment status of men, 1940. *Industrial & Labor Relations Review* 50 (3) (04): 460-77.

"The Racial Wage Gap: The Importance of Labor Force Attachment Differences" Department of Economics, UC Santa Barbara, University of California at Santa Barbara, Economics Working Paper Series: 1023, 2002), http://search.ebscohost.com/login.aspx?direct=true&db=ecn&AN=0685875&site=ehost-live; http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1023&context=ucsbecon.

United States Department of Labor. “North American Industry Classification System (NAICS) at BLS.” Last modified December 8, 2010. http://www.bls.gov/bls/naics.htm.

U.S. Census Bureau. “New Sectors in NAICS.” Last modified March 6, 1998. http://www.census.gov/epcd/www/naicsect.htm.

U.S. Census Bureau. “Standard Industrial Classification (SIC) System.” Accessed 13 April 2011. http://www.census.gov/epcd/www/sic.html.

Wharton University of Pennsylvania. “WRDS.” Accessed 03 March 2011. https://wrds-web.wharton.upenn.edu/wrds/.