

July 23, 2010

## **RESEARCH BRIEF:**

### The State of Black Workers before the Great Recession

By Sylvia Allegretto and Steven Pitts<sup>1</sup>

#### Introduction

When first inaugurated, President Barack Obama worked to end the downward economic spiral and averted another Great Depression by restoring the health of the financial sector by injecting federal resources into the economy. After avoiding a much bigger catastrophe the focus has been on stimulating job creation and fostering economic growth. While the composition and the size of these efforts have been vigorously debated, most commentators agreed upon the goal of these efforts which is to end the recession and get the economy back on the pre-recessionary track. Few voices in mainstream policy circles have questioned whether this goal is appropriate.

Simply ending the recession will not solve the job crisis within the Black community. Many analysts have noted that labor market distress—when properly calculated—among Black workers has been at catastrophic levels for decades. In the tough labor market of today, about one out every four Black workers is underemployed, but even in good times the ratio was one in seven. This recognition calls into question the policy goal of returning the economy to pre-Great Recession norms and standards. Labor markets prior to December 2007 did not serve the Black community well; to the contrary, racial inequality in labor market outcomes was a central feature.

This research brief documents aspects of racial inequality before the Great Recession—in other words during the best of recent times. Part I provides an overview of the current job situation. Part II examines the distribution of Black men and women across the 13 major industry sectors with a special emphasis on the five industries that employ the largest number of Black workers. Part III examines the differential in median wages in each of the five key sectors. Part IV examines the racial inequality within these key sectors by exploring within industry wage distributions and the high concentration of Black pay at the bottom. The conclusion provides some policy and research recommendations.

---

<sup>1</sup> Sylvia A. Allegretto, Ph.D. is an economist at the Institute for Research on Labor and Employment. Steven Pitts, Ph.D. is a Labor Policy Specialist at the Center for Labor Research and Education. Maria Carolina Tomás, graduate student researcher, assisted the authors in the development of this research brief. The research was made possible, in part, by the generous support of a grant from the Open Society Institute's Campaign for Black Male Achievement.

## Part I: The Current Job Situation – July 2010

December 2007 marked the onset of the Great Recession. Two years later, job losses tallied over 8.4 million or 6.1% of all non-farm industry jobs.<sup>1</sup> This represented the largest loss of jobs in absolute or percentage terms since the Great Depression.<sup>2</sup> In 2010, employment growth resumed, but gains have been weak. The private sector averaged less than 100,000 per month for the first half of 2010. Monthly public sector jobs averaged just 48,000 driven by the temporary hiring of Census workers at the federal level. Job declines continued at state and local levels in response to severe budget crises. For workers, weak economic conditions are reflected and felt on the fragile jobs front.

Thus, the current situation remains bleak as the overall unemployment rate remains high at 9.5%—slightly down from a cyclical high of 10.1% reached in October 2009.<sup>3</sup> For Blacks, recessionary job losses hit hard as unemployment increased from 9.0% to high of 16.5%. The tepid jobs recovery has done little to alleviate Black unemployment as it remained an elevated 15.4% in June 2010. Comparatively, white rates at the onset of recession were just 4.4% and they topped out at 9.4% in October 2009. They have since declined to 8.6%.<sup>4</sup>

The hardship caused by this prolonged recession is not fully captured by the official unemployment rate. A more comprehensive account of economic stress for workers is what the Bureau of Labor Statistics calls the U6—which is a broader measure of labor underutilization.<sup>5</sup> The U6 or underemployment includes the officially unemployed along with discouraged and marginally attached workers who have fallen out of the labor force and those working part-time because they can not find full-time work. By this measure, the situation in the Black community is dire. The Black underemployment rate went from 14.4% at the beginning of the recession and is now 23.6% just off a recent high, in June 2010, of 25.0%.<sup>6</sup>

## Part II: Race, Gender, Industry, and Employment<sup>7</sup>

### Industrial Distribution of Employment

There is considerable variation in the distribution of employment by race and gender across industrial sectors. Policy prescriptions to facilitate employment hinge on a practical understanding of who works in what industries. Table 1 presents data on the industrial distribution of all and Black workers during the three years prior to the Great Recession (2005 through 2007).<sup>8</sup> The table represents a demographic group's distribution *across* industries. The table is sorted from highest to lowest employment concentration of Blacks by industry. The figure can be interpreted as a representation of the importance of each industry for Black employment. The top five industries that Blacks are employed in are: Public Administration, Education and Health Services, Wholesale and Retail Trade, Manufacturing, and Professional and Business Services.<sup>9</sup> These five industries employ 70.6% of all Black workers.<sup>10</sup> Further decomposition by gender shows that these industries employ 64.4% of all Black male workers and 75.8% of all Black female workers.

Table 1  
Industrial Distribution of Black Employment  
(Columns sum to 100%)

Major Industry	All Workers			Black Workers		
	Males	Females	All	Males	Females	All
Public Administration	13.4%	19.5%	16.3%	18.0%	23.3%	20.9%
Educational & Health Services	5.9%	22.9%	14.0%	8.4%	27.0%	18.5%
Wholesale & Retail Trade	15.3%	13.7%	14.5%	14.3%	11.2%	12.6%
Manufacturing	16.7%	7.8%	12.4%	14.7%	7.1%	10.6%
Professional & Business Services	9.5%	8.5%	9.1%	9.0%	7.2%	8.0%
Leisure & Hospitality	7.2%	8.5%	7.8%	7.6%	7.5%	7.5%
Financial Activities	5.5%	8.5%	6.9%	4.9%	7.5%	6.3%
Transportation & Utilities	6.3%	2.0%	4.2%	9.3%	2.7%	5.7%
Other Services	3.8%	4.6%	4.2%	3.9%	3.5%	3.7%
Construction	11.6%	1.4%	6.7%	6.2%	0.4%	3.1%
Information	2.7%	2.2%	2.4%	2.7%	2.4%	2.6%
Agriculture, Forestry, Fishing	1.2%	0.3%	0.8%	0.6%*	0.1%*	0.3%*
Mining	0.9%	0.1%	0.5%	0.4%*	0.0%*	0.2%*

Note: \*Use caution due to small sample size. Also, see Appendix A for a complete table.

As Table 1 indicates, the top industries that Blacks are concentrated in overall are not necessarily the same when broken down by race. Table 2 indicates the ranking of the distribution of Black workers across industries for All and by gender—again sorted by 'All' thus these ranking are in descending order of magnitude from 1 to 13—from most to least share of Black workers. Broken down by gender the industrial rankings vary somewhat but not much. Major exceptions are Educational and Health Services—which ranks 6<sup>th</sup> for Black male workers but 1<sup>st</sup> for Black female workers—and, Manufacturing—which ranks 2<sup>nd</sup> for Black male workers but 7<sup>th</sup> for Black female workers.

Because the top five industries employ 70% of all Black workers and because of similar industrial distributions for Black men and Black women, the remainder of this brief will focus on those industries.

Table 2  
Industrial Distribution of Black Employment  
(Ranked by Importance to Black employment)

<b>Major Industry</b>	<b>Black Males</b>	<b>Black Females</b>	<b>All Blacks</b>
Public Administration	1	2	<b>1</b>
Educational & Health Services	6	1	<b>2</b>
Wholesale & Retail Trade	3	3	<b>3</b>
Manufacturing	2	7	<b>4</b>
Professional & Business Services	5	6	<b>5</b>
Leisure & Hospitality	7	4	<b>6</b>
Financial Activities	9	5	<b>7</b>
Transportation & Utilities	4	9	<b>8</b>
Other Services	10	8	<b>9</b>
Construction	8	11	<b>10</b>
Information	11	10	<b>11</b>
Agriculture, Forestry, Fishing	12	12	<b>12</b>
Mining	13	13	<b>13</b>

Note: See Appendix B for more rankings by race/ethnicity and gender.

One measure of the uneven distribution of racial groups across industries is an “Index of Disproportionality”. This index is calculated by dividing the percentage of a group of workers (e.g. Blacks) in a specific industry by the percentage of the entire workforce in that industry. For example, 20.9% of all Black workers are employed in Public Administration, while 16.3% of the entire workforce is employed in that industry (see Appendix A). Therefore, for the Public Administration industry, the index of disproportionality for Black workers is 1.28, indicating that Black workers are overrepresented in that industry. Parity in an industry is indicated by an index figure of 1.0. Table 3 contains the indices of disproportionality for all Black workers; for Black men; and for Black women.

This index indicates that among the top five industries, Black workers were overrepresented in Public Administration, and Educational and Health Services. But, they were underrepresented in Wholesale and Retail Trade, Manufacturing, and Professional and Business Services.

Table 3  
Industrial Distribution of Employment  
Index of Disproportionality

<b>Major Industry</b>	<b>All Black Workers</b>	<b>Black Males</b>	<b>Black Females</b>
Public Administration	1.28	1.35	1.20
Educational & Health Services	1.32	1.44	1.18
Wholesale & Retail Trade	0.87	0.93	0.82
Manufacturing	0.85	0.88	0.92
Professional & Business Services	0.88	0.94	0.85

Note: See Appendix A for a complete table.

## Demographic Composition of Industries

For the 2005-2007 period, Blacks comprised 11.3% of the workforce; in contrast, white and Latino workers were 68% and 14.4% of the workforce, respectively. However, when examining Black employment *within* each of the five major industries, one finds an uneven racial distribution (see Table 4) within industries.

Table 4  
Racial Composition of Industries

<b>Major Industry</b>	<b>All Black Workers</b>	<b>Black Males</b>	<b>Black Females</b>
<b>All Industries</b>	<b>11.3%</b>	<b>5.2%</b>	<b>6.2%</b>
Public Administration	14.5%	5.7%	8.8%
Educational & Health Services	15.0%	3.1%	11.9%
Wholesale & Retail Trade	9.8%	5.1%	4.7%
Manufacturing	9.7%	6.1%	3.5%
Professional & Business Services	10.0%	5.1%	4.9%

Note: See Appendix C for a complete table.

Table 1 indicated the importance of each industry to a demographic (race/gender) groups employment and distributed workers across industries. Table 4 indicates the share of a each demographic group *within* each industry. For example, of all workers in Public Administration, 14.4% were Black—which is a higher share of Blacks in the overall workforce (11.3%). Black females were 6.2% of the workforce but they represented 11.9% of Education and Health Services workers and just 3.5% of workers in Manufacturing.

In sum, we used two methods to analyze the representation of Blacks by major industrial sectors. These analyses offer comparative insight by race and gender into the representativeness of Blacks across and within industries.

## Part III: Race, Gender, Industry and Median Wages

### Median Wage Differentials

Part II established racial differences in the employment arena and documents the distribution of employment both within and across industries. This section will show those racial differences extended to the wage arena. Table 5 presents median wages for the 2005-07 period by gender and race/ethnic categories. Black workers were paid more than their Latino counterparts but less than their white counterparts.

Table 5  
Median Wages by Race and Gender

	<b>Males</b>	<b>Females</b>
<b>Black</b>	\$13.75	\$12.36
<b>White</b>	\$18.51	\$14.47
<b>Latino</b>	\$12.25	\$10.62

Note: All wages are in 2007 dollars.

Based on these averages, Black male workers earned 74.3% of what white male workers earned and 112.2% of what Latino men earned. Black women earned, on average, 85.4% and 116.4% respectively compared to their white and Latino counterparts.

Some of these differences may be due to the relative racial density of workers across industries. For instance, Black males are overrepresented relative to white males in low wage industries and underrepresented in high wage industries. Tables 6 and 7 present median wage comparisons for each of the top five industries from Table 2. Here the basic pattern still holds as Black workers are paid more than Latino workers and less than white workers. However, the magnitude of the differences varies widely. In particular, the Black wage premium relative to Latinos falls sharply in Public Administration, Educational and Health Services, and Wholesale and Retail Trade to the point where Black men earn slightly less than Latino men in those three industries. The Black wage premium relative to Latino has the same trend for women except that Black women still earn a bit more than Latinas in Public Administration, Educational and Health Services, and Wholesale and Retail Trade.

Table 6  
Industry Median Wages by Race and Gender

<b>Major Industry</b>	<b>White</b>		<b>Black</b>		<b>Latino</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
Public Administration	\$21.24	\$17.39	\$17.00	\$15.50	\$18.28	\$15.00
Educational & Health Services	\$20.57	\$15.70	\$14.00	\$12.23	\$15.00	\$12.00
Wholesale & Retail Trade	\$15.28	\$10.83	\$11.31	\$9.88	\$11.87	\$9.56
Manufacturing	\$19.03	\$14.87	\$13.70	\$11.85	\$12.34	\$10.00
Professional & Business Services	\$22.84	\$16.24	\$13.00	\$12.86	\$11.00	\$10.50

Note: See Appendix D for a complete table.

Table 7  
Black Median Wages in Comparison to Whites and Latinos

Major Industry	Black Male Wage as a % of:		Black Female Wage as a % of:	
	White Males	Latino Males	White Females	Latino Females
<b>All Industries</b>	74.3%	112.2%	85.4%	116.4%
Public Administration	80.0%	93.0%	89.1%	103.3%
Educational & Health Services	68.1%	93.3%	77.9%	101.9%
Wholesale & Retail Trade	74.0%	95.3%	91.2%	103.3%
Manufacturing	72.0%	111.0%	79.7%	118.5%
Professional & Business Services	56.9%	118.2%	79.2%	122.4%

Note: See Appendix E for a complete table.

This analysis compared median wages by race/ethnicity and gender for the top five industries where 70% of Black workers were employed. Blacks, on average, consistently earned less than their white counterparts. Latina women earned more than Black women and the outcome was mixed for Latino and Black men. The next section delves into the wage composition within industries by race/ethnicity and gender.

#### Part IV: Racial Wage Inequality within Industries

While the above analysis explored racial wage inequality by examining median wages in selected industries, racial wage inequality is also reflected in the distribution of wages within industries. To capture this feature, the industry wage was disaggregated into terciles. Workers in each industry (regardless of race and gender) were stratified by wages and two wage cutoffs were established to segment the industry into thirds. These industry-wide cutoffs were then applied to determine the extent to which wages were unequally distributed by race within the selected industries. In Table 8, these cutoffs were applied to Black men and Black women for the top five industries for Black employment. In each industry, Black men and Black women were concentrated in the lowest terciles.

Table 8  
Distribution of Black Workers by Wage Terciles

Major Industry	Tercile Level	Black	
		Males	Females
Public Administration	Lowest	40.5%	46.5%
	Middle	31.7%	29.7%
	Top	27.8%	23.8%
Educational & Health Services	Lowest	40.2%	51.0%
	Middle	36.0%	32.2%
	Top	23.8%	16.8%
Wholesale & Retail Trade	Lowest	39.5%	54.6%
	Middle	33.0%	30.0%
	Top	27.4%	15.4%
Manufacturing	Lowest	46.3%	60.1%
	Middle	34.7%	25.4%
	Top	19.0%	14.5%
Professional & Business Services	Lowest	51.1%	53.3%
	Middle	30.7%	32.1%
	Top	18.2%	14.6%

Note: Using the thresholds for all workers: parity is 33.3%. See Appendix F for complete table.

Table 9 presents the index of disproportionality for this wage tercile analysis. Since parity would be represented by a figure of 33.3%, the disproportionality figure was calculated by dividing the actual proportion of workers in a wage tercile by 33.3. For instance, 40.5% of the Black men working in Public Administration are in the lowest paid tercile; consequently, the disproportionality index is 1.21, in this example, Black men are overrepresented in the lowest tercile by 21%. In each of the five key industries, Black women have a higher degree of concentration in the lowest terciles compared to Black men.



Table 9  
Distribution of Black Workers by Wage Terciles  
Index of Disproportionality

Major Industry	Tercile Level	Black	
		Males	Females
Public Administration	Lowest	1.21	1.40
	Middle	0.95	0.89
	Top	0.84	0.71
Educational & Health Services	Lowest	1.21	1.53
	Middle	1.08	0.97
	Top	0.71	0.51
Wholesale & Retail Trade	Lowest	1.19	1.64
	Middle	0.99	0.90
	Top	0.82	0.46
Manufacturing	Lowest	1.39	1.80
	Middle	1.04	0.76
	Top	0.57	0.43
Professional & Business Services	Lowest	1.53	1.60
	Middle	0.92	0.96
	Top	0.55	0.44

Note: See Appendix G for complete table.

## Conclusion

The Great Recession has wrecked havoc upon the lives of everyday people. The Federal Government has an obligation to address this pain and suffering and how it responds has been the source of tremendous debate within the halls of Congress and in communities throughout the country. What cannot be lost in this debate is that employment and wage prospects were not distributed evenly prior to the recession's onset.

This research brief has documented that racial inequality was manifested in three ways:

- In the distribution of employment across industries
- In the median wage levels of workers in the economy
- In the distribution of earnings within industries

The existence of a racialized labor market must be taken into account as policies are designed to improve the economy. Without a clear understanding of differential labor market outcomes based on race, it is highly likely that racial inequalities will be maintained.

Two policy recommendations follow from this analysis. First, the Department of Labor (and associated entities at the state and local levels) must aggressively enforce labor and employment laws that support racial equality.<sup>11</sup> Second, there must be targeted workforce development programs that are designed to place Black workers into pipelines leading to the

higher paying segments of industries. Beyond these recommendations, additional research needs to be undertaken to gain a better understanding of how and why there exists such an unbalanced racial representation across industrial sectors. Moreover, we need to analyze why racial wage inequality is so pervasive both across and within the major industrial sectors.

## Endnotes

---

<sup>1</sup> Bureau of Labor Statistics, Current Employment Statistics data: <http://www.bls.gov/ces>.

<sup>2</sup> In comparison, just 2.1% of jobs were lost during the 2001 recession and jobless recovery.

<sup>3</sup> Unemployment was 9.5% as of June 2010, it was 5.0% at the onset of recession.

<sup>4</sup> As of June 2010.

<sup>5</sup> The U6 series started in 1994.

<sup>6</sup> The Economic Policy Institute, Washington, DC provided seasonally adjusted underemployment (U6) rates by race. During the same timeframe white rates went from 7.3% to 14.2%.

<sup>7</sup> The numbers in this brief were calculated using data from the Current Population Survey. Data from the years 2005–2007 were pooled together to form a reliable sample.

<sup>8</sup> In this analysis, non-Latino Blacks, non-Latino whites, and Latino were defined as mutually exclusive categories; the balance of the workforce was grouped into a fourth category, Other. See Henceforth, for ease of exposition, non-Latino Blacks and non-Latino whites will be referred to as Blacks and whites, respectively. See Appendix A for distributions by race/ethnicity and gender.

<sup>9</sup> Public Administration is defined as working in that occupational category and/or working in the government sector.

<sup>10</sup> By way of comparison, 66.3% of all workers, 67.7% of non-Latino whites, and 55.7% of Latinos are employed in those five industries. See Appendix A.

<sup>11</sup> See National Employment Law Project, “Just Pay: Improving Wage and Hour Enforcement at the United States Department of Labor” (April 2010) for detailed descriptions of a set of policies designed to remedy labor law enforcement

## Appendix A

### Industrial Distribution of Employment (columns sum to 100%)

Major Industry	All Workers			White			Black			Latino		
	All	Males	Females	All	Males	Females	All	Males	Females	All	Males	Females
Agriculture, forestry, fish	0.8%	1.2%	0.3%	0.6%	0.9%	0.3%	0.3%	0.6%	0.1%	2.2%	3.0%	1.0%
Mining	0.5%	0.9%	0.1%	0.6%	1.0%	0.2%	0.2%	0.4%	0.0%	0.5%	0.8%	0.1%
Construction	6.7%	11.6%	1.4%	6.2%	10.5%	1.6%	3.1%	6.2%	0.4%	13.7%	21.9%	1.4%
Manufacturing	12.4%	16.7%	7.8%	12.6%	17.6%	7.2%	10.6%	14.7%	7.1%	12.9%	14.4%	10.7%
Wholesale & retail trade	14.5%	15.3%	13.7%	15.1%	16.1%	14.1%	12.6%	14.3%	11.2%	14.0%	13.6%	14.6%
Transportation & utilities	4.2%	6.3%	2.0%	4.1%	6.3%	1.9%	5.7%	9.3%	2.7%	4.1%	5.3%	2.2%
Information	2.4%	2.7%	2.2%	2.6%	2.9%	2.2%	2.6%	2.7%	2.4%	1.7%	1.6%	1.8%
Financial activities	6.9%	5.5%	8.5%	7.4%	6.0%	8.9%	6.3%	4.9%	7.5%	5.1%	3.7%	7.3%
Professional & business svc	9.1%	9.5%	8.5%	9.0%	9.3%	8.6%	8.0%	9.0%	7.2%	9.2%	9.6%	8.6%
Educational & health svc	14.0%	5.9%	22.9%	14.1%	5.8%	23.1%	18.5%	8.4%	27.0%	9.1%	3.4%	17.7%
Leisure & hospitality	7.8%	7.2%	8.5%	6.8%	5.9%	7.9%	7.5%	7.6%	7.5%	11.7%	10.9%	12.8%
Other services	4.2%	3.8%	4.6%	4.0%	3.7%	4.4%	3.7%	3.9%	3.5%	5.4%	4.3%	7.0%
Public Administration	16.3%	13.4%	19.5%	16.9%	14.2%	19.8%	20.9%	18.0%	23.3%	10.5%	7.5%	14.9%

### Index of Disproportionality

Major Industry	White			Black			Latino		
	All	Males	Females	All	Males	Females	All	Males	Females
Agriculture, forestry, fishing	0.76	0.75	0.80	0.38	0.49	0.18	2.86	2.55	3.10
Mining	1.14	1.14	1.21	0.38	0.46	0.21	1.01	0.91	0.88
Construction	0.92	0.90	1.14	0.46	0.53	0.33	2.04	1.88	1.02
Manufacturing	1.01	1.05	0.92	0.85	0.88	0.92	1.04	0.86	1.38
Wholesale & retail trade	1.04	1.05	1.03	0.87	0.93	0.82	0.96	0.89	1.07
Transportation & utilities	0.97	1.00	0.92	1.35	1.47	1.37	0.96	0.84	1.11
Information	1.05	1.08	1.02	1.05	1.01	1.12	0.68	0.60	0.81
Financial activities	1.06	1.08	1.05	0.91	0.89	0.88	0.74	0.67	0.86
Professional & business services	0.99	0.97	1.01	0.88	0.94	0.85	1.01	1.01	1.00
Educational & health services	1.01	0.98	1.01	1.32	1.44	1.18	0.65	0.58	0.77
Leisure and hospitality	0.88	0.82	0.92	0.96	1.06	0.88	1.49	1.53	1.50
Other services	0.96	0.96	0.95	0.87	1.02	0.75	1.27	1.11	1.51
Public Administration	1.04	1.06	1.02	1.28	1.35	1.20	0.64	0.56	0.76

Note: The figures represent the ratio of the percentage of workers in a group in a particular industry divided by the percentage of the entire workforce employed in that industry. For example, 0.6% of Black males are employed in agriculture and 1.2% of all males work in agriculture. The index of disproportionality is 0.49 indicating that Black males are underrepresented in agriculture. (Parity is indicated by an index figure of 1.0.)

## Appendix B

### Industrial Distribution of Employment (Ranked by Importance)

Major Industry	All Workers			White			Black			Latino		
	<i>All</i>	Males	Females	All	Males	Females	All	Males	Females	All	Males	Females
Public Administration	1	3	2	1	3	2	<b>1</b>	1	2	5	6	2
Educational & health services	3	8	1	3	9	1	<b>2</b>	6	1	7	10	1
Wholesale & retail trade	2	2	3	2	2	3	<b>3</b>	3	3	1	3	3
Manufacturing	4	1	7	4	1	7	<b>4</b>	2	7	3	2	5
Professional & business services	5	5	5	5	5	5	<b>5</b>	5	6	6	5	6
Leisure & hospitality	6	6	4	7	8	6	<b>6</b>	7	4	4	4	4
Financial activities	7	9	6	6	7	4	<b>7</b>	9	5	9	9	7
Transportation & utilities	9	7	10	9	6	10	<b>8</b>	4	9	10	7	9
Other services	10	10	8	10	10	8	<b>9</b>	10	8	8	8	8
Construction	8	4	11	8	4	11	<b>10</b>	8	11	2	1	11
Information	11	11	9	11	11	9	<b>11</b>	11	10	12	12	10
Agriculture, forestry, fishing	12	12	12	13	13	12	<b>12</b>	12	12	11	11	12
Mining	13	13	13	12	12	13	<b>13</b>	13	13	13	13	13

## Appendix C

<b>Demographic Composition of Industries</b>									
<b>Major Industry</b>	<b>White</b>			<b>Black</b>			<b>Latino</b>		
	<b>All</b>	<b>Males</b>	<b>Females</b>	<b>All</b>	<b>Males</b>	<b>Females</b>	<b>All</b>	<b>Males</b>	<b>Females</b>
<b>All Industries</b>	68.0%	35.1%	32.9%	11.3%	5.2%	6.2%	14.4%	8.6%	5.8%
Agriculture, forestry, fishing	51.5%	40.1%	11.3%	4.3%	3.9%	0.5%	41.1%	33.4%	7.7%
Mining	77.4%	67.0%	10.4%	4.4%	4.0%	0.3%	14.5%	13.1%	1.3%
Construction	62.5%	54.9%	7.6%	5.2%	4.8%	0.4%	29.3%	28.1%	1.2%
Manufacturing	68.7%	49.7%	18.9%	9.7%	6.1%	3.5%	15.0%	10.0%	5.0%
Wholesale & retail trade	70.7%	38.9%	31.8%	9.8%	5.1%	4.7%	13.9%	8.1%	5.8%
Transportation & utilities	66.3%	51.9%	14.4%	15.3%	11.3%	4.0%	13.8%	10.7%	3.0%
Information	71.5%	41.8%	29.7%	11.9%	5.8%	6.1%	9.8%	5.7%	4.1%
Financial activities	72.3%	30.3%	42.0%	10.3%	3.6%	6.7%	10.7%	4.6%	6.1%
Professional & business services	67.4%	36.1%	31.3%	10.0%	5.1%	4.9%	14.6%	9.1%	5.4%
Educational & health services	68.7%	14.5%	54.2%	15.0%	3.1%	11.9%	9.4%	2.1%	7.3%
Leisure & hospitality	59.5%	26.4%	33.1%	10.9%	5.0%	5.9%	21.5%	12.0%	9.4%
Other services	65.0%	30.8%	34.3%	9.8%	4.8%	5.0%	18.2%	8.7%	9.5%
Public Administration	70.4%	30.5%	39.9%	14.5%	5.7%	8.8%	9.2%	4.0%	5.3%

Note: the rows do not sum to 100% because groups that are not white, Black, or Latino are not reported in this table.

**Appendix D****Median Wage**

<b>Major Industry</b>	<b>Total</b>	<b>White</b>		<b>Black</b>		<b>Latino</b>	
		<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
<b>All Industries</b>	\$15.37	\$18.51	\$14.47	\$13.75	\$12.36	\$12.25	\$10.62
Agriculture, forestry, fishing	\$9.62	\$10.62	\$10.28	\$8.55	\$9.60	\$8.50	\$7.75
Mining	20.00	20.57	17.50	16.95	15.43	15.93	17.77
Construction	15.93	18.00	15.00	14.00	15.93	12.50	12.34
Manufacturing	16.35	19.03	14.87	13.70	11.85	12.34	10.00
Wholesale & retail trade	12.34	15.28	10.83	11.31	9.88	11.87	9.56
Transportation & utilities	16.69	18.59	15.40	14.40	12.89	13.81	12.00
Information	19.65	23.08	17.11	17.63	14.87	16.16	13.68
Financial activities	17.80	24.51	16.00	15.43	14.87	15.43	13.50
Professional & business services	17.40	22.84	16.24	13.00	12.86	11.00	10.50
Educational & health services	15.43	20.57	15.70	14.00	12.23	15.00	12.00
Leisure & hospitality	9.00	10.00	8.23	9.45	8.50	9.26	8.23
Other services	12.75	16.00	11.68	13.20	10.81	11.68	9.27
Public Administration	18.38	21.24	17.39	17.00	15.50	18.28	15.00

## Appendix E

<b>Median Wage Comparisons</b>					
<b>Comparison group</b>	<b>Black Male Wage as a % of:</b>			<b>Black Female Wage as a % of:</b>	
<b>Major Industry</b>	<b>White Males</b>	<b>Latino Males</b>	<b>Black Females</b>	<b>White Females</b>	<b>Latino Females</b>
<b>All Industries</b>	74.3%	112.2%	111.2%	85.4%	116.4%
Agriculture, forestry, fishing	80.5%	100.6%	89.0%	93.3%	123.8%
Mining	82.4%	106.4%	109.9%	88.1%	86.8%
Construction	77.8%	112.0%	87.9%	106.2%	129.1%
Manufacturing	72.0%	111.0%	115.6%	79.7%	118.5%
Wholesale & retail trade	74.0%	95.3%	114.5%	91.2%	103.3%
Transportation & utilities	77.5%	104.3%	111.7%	83.7%	107.5%
Information	76.4%	109.1%	118.6%	86.9%	108.7%
Financial activities	62.9%	100.0%	103.7%	92.9%	110.1%
Professional & business services	56.9%	118.2%	101.1%	79.2%	122.4%
Educational & health services	68.1%	93.3%	114.5%	77.9%	101.9%
Leisure & hospitality	94.5%	102.1%	111.2%	103.3%	103.3%
Other services	82.5%	113.0%	122.1%	92.5%	116.6%
Public Administration	80.0%	93.0%	109.7%	89.1%	103.3%



## Appendix F

### Distribution of Workers by Income Terciles

Major Industry	Tercile Level	White		Black		Latino	
		Males	Females	Males	Females	Males	Females
Agriculture, forestry, fishing, and hunting	Lowest	26.5%	29.6%	43.4%	41.6%	50.1%	63.6%
	Middle	28.1%	26.9%	23.8%	15.3%	34.7%	21.5%
	Top	45.3%	43.5%	32.7%	43.1%	15.2%	14.9%
Mining	Lowest	34.0%	47.2%	52.6%	56.0%	55.2%	47.3%
	Middle	34.5%	23.7%	29.6%	17.8%	25.7%	24.2%
	Top	31.6%	29.1%	17.8%	26.2%	19.1%	28.4%
Construction	Lowest	25.6%	36.7%	45.8%	33.9%	56.8%	56.5%
	Middle	33.8%	35.9%	32.8%	35.7%	28.3%	30.3%
	Top	40.5%	27.4%	21.4%	30.4%	14.9%	13.1%
Manufacturing	Lowest	21.6%	38.1%	46.3%	60.1%	55.8%	75.4%
	Middle	34.7%	34.5%	34.7%	25.4%	28.7%	17.2%
	Top	43.7%	27.5%	19.0%	14.5%	15.5%	7.4%
Wholesale and retail trade	Lowest	23.4%	42.2%	39.5%	54.6%	35.0%	56.1%
	Middle	29.2%	32.8%	33.0%	30.0%	35.9%	30.1%
	Top	47.4%	25.0%	27.4%	15.4%	29.1%	13.8%
Transportation and utilities	Lowest	27.6%	37.2%	47.0%	55.6%	48.8%	61.8%
	Middle	32.9%	36.4%	32.6%	31.2%	29.1%	25.5%
	Top	39.5%	26.4%	20.4%	13.2%	22.1%	12.7%
Information	Lowest	22.6%	39.2%	39.4%	51.5%	43.2%	55.7%
	Middle	32.9%	34.4%	33.8%	32.3%	32.7%	28.0%
	Top	44.6%	26.4%	26.7%	16.2%	24.1%	16.3%
Financial activities	Lowest	19.6%	37.2%	43.3%	44.0%	43.4%	52.9%
	Middle	27.4%	37.0%	31.9%	38.1%	32.3%	32.0%
	Top	53.0%	25.8%	24.8%	17.9%	24.3%	15.1%
Professional and business services	Lowest	21.3%	34.3%	51.1%	53.3%	60.2%	65.0%
	Middle	30.9%	38.4%	30.7%	32.1%	25.2%	24.5%
	Top	47.8%	27.3%	18.2%	14.6%	14.6%	10.4%
Educational and health services	Lowest	21.3%	31.6%	40.2%	51.0%	34.5%	51.3%
	Middle	29.0%	35.0%	36.0%	32.2%	35.3%	32.6%
	Top	49.7%	33.3%	23.8%	16.8%	30.2%	16.1%
Leisure and hospitality	Lowest	28.7%	41.9%	31.2%	36.7%	28.2%	41.1%
	Middle	29.1%	30.3%	36.0%	38.5%	39.8%	39.2%
	Top	42.2%	27.8%	32.8%	24.8%	32.0%	19.8%
Other services	Lowest	20.3%	39.0%	34.5%	45.1%	38.1%	59.6%
	Middle	30.7%	34.6%	35.2%	36.0%	36.7%	28.9%
	Top	49.0%	26.3%	30.3%	18.9%	25.3%	11.5%
Public Administration	Lowest	23.7%	35.5%	40.5%	46.5%	32.9%	47.0%
	Middle	32.5%	34.8%	31.7%	29.7%	35.4%	31.8%
	Top	43.8%	29.8%	27.8%	23.8%	31.7%	21.2%

## Appendix G

### Index of Disproportionality (parity = 1.0)

Major Industry	Total	White		Black		Latino	
		Males	Females	Males	Females	Males	Females
Agriculture, forestry, fishing	Lowest	0.80	0.89	1.30	1.25	1.50	1.91
	Middle	0.84	0.81	0.72	0.46	1.04	0.64
	Top	1.36	1.30	0.98	1.29	0.46	0.45
Mining	Lowest	1.02	1.42	1.58	1.68	1.66	1.42
	Middle	1.03	0.71	0.89	0.53	0.77	0.73
	Top	0.95	0.87	0.53	0.79	0.57	0.85
Construction	Lowest	0.77	1.10	1.37	1.02	1.70	1.70
	Middle	1.01	1.08	0.98	1.07	0.85	0.91
	Top	1.22	0.82	0.64	0.91	0.45	0.39
Manufacturing	Lowest	0.65	1.14	1.39	1.80	1.67	2.26
	Middle	1.04	1.03	1.04	0.76	0.86	0.52
	Top	1.31	0.82	0.57	0.43	0.46	0.22
Wholesale & retail trade	Lowest	0.70	1.26	1.19	1.64	1.05	1.68
	Middle	0.88	0.98	0.99	0.90	1.08	0.90
	Top	1.42	0.75	0.82	0.46	0.87	0.42
Transportation & utilities	Lowest	0.83	1.12	1.41	1.67	1.46	1.85
	Middle	0.99	1.09	0.98	0.93	0.87	0.77
	Top	1.19	0.79	0.61	0.40	0.66	0.38
Information	Lowest	0.68	1.18	1.18	1.55	1.30	1.67
	Middle	0.99	1.03	1.02	0.97	0.98	0.84
	Top	1.34	0.79	0.80	0.48	0.72	0.49
Financial activities	Lowest	0.59	1.12	1.30	1.32	1.30	1.59
	Middle	0.82	1.11	0.96	1.14	0.97	0.96
	Top	1.59	0.77	0.75	0.54	0.73	0.45
Professional & business services	Lowest	0.64	1.03	1.53	1.60	1.81	1.95
	Middle	0.93	1.15	0.92	0.96	0.76	0.74
	Top	1.43	0.82	0.55	0.44	0.44	0.31
Educational & health services	Lowest	0.64	0.95	1.21	1.53	1.04	1.54
	Middle	0.87	1.05	1.08	0.97	1.06	0.98
	Top	1.49	1.00	0.71	0.51	0.91	0.48
Leisure & hospitality	Lowest	0.86	1.26	0.93	1.10	0.85	1.23
	Middle	0.87	0.91	1.08	1.16	1.19	1.17
	Top	1.27	0.83	0.99	0.74	0.96	0.59
Other services	Lowest	0.61	1.17	1.03	1.35	1.14	1.79
	Middle	0.92	1.04	1.06	1.08	1.10	0.87
	Top	1.47	0.79	0.91	0.57	0.76	0.35
Public Administration	Lowest	0.71	1.06	1.21	1.40	0.99	1.41
	Middle	0.98	1.04	0.95	0.89	1.06	0.95
	Top	1.31	0.89	0.84	0.71	0.95	0.64