Is There a Labor Market Rank Premium?*
Quantifying the Racial Gap in Occupational Prestige

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Abstract

Utilizing data from the American Community Survey (ACS) for years 2017-2019, this study seeks to quantify the occupational prestige gap present in our society. Studying disparities surrounding occupational prestige by race/ethnicity and gender have helped shape our studying overall labor market disparities. However, another critical aspect to study is the magnitude of said differences. The authors show that when analyzing the wage gap by race/ethnicity, differentials in occupational prestige score rankings account for approximately 25% of wage differentials for Black non-Hispanics (NHs), 20% for Hispanics, 16% for American Indian/Alaskan Native NHs, and 48% for Asian NHs, compared to their White male counterparts. While occupational prestige differences are present among women, the magnitude of this effect is much smaller; compared to White NH men, occupational prestige differences account for 6% of the wage differential observed among White women, 7% among Black women, 9% among Hispanic women, 6% among AIAN women, and 11% among Asian women. This study shows that a significant portion of the observed wage gap is directly attributed to prestige differentials. Quantifying this gap helps illuminate the degree to which social stratification by occupational prestige/status translates into labor market inequities.

JEL Codes: J01, J31, J24, J7

Introduction:

Assessing the determinants and implications of wage disparities is not a straightforward process. The standard neoclassical framework for individual wage determination, which relies on the workings of individual preferences (i.e., utility-maximization) and profit maximizers (i.e., setting wage equal to the marginal revenue product of labor), fails to account for the critical role that politics, culture, and economic processes have played and have, therefore, embedded themselves into the institutional and societal context (Karamessini and Ioakimoglou, 2007). As such, the social construction of income distribution involves historically specific social conditions that reflect both the nature of labor power, gender relations, and social habits, which are certainly complex and, oftentimes, difficult to measure (Karamessini and Ioakimoglou, 2007).

Complicating the matter are the mechanisms driving the wage disparities as interrelated factors such as gender, race/ethnicity, industry differences, occupational segregation, discrimination, and occupational selection have all been persistently linked to income inequalities. This, in turn, has given rise to a vast array of studies, and outcomes, regarding wage disparities with many studies indicating that disparities often arise as a consequence of productivity differences driven by education and skill set differentials (e.g. Black et al., 2006). Others, however, find that a significant portion of the gender wage gap is explained by differences in hours worked and occupational choices (e.g., O'Neill & O'Neill, 2005). However, both types of studies have fundamental limitations. The former often overestimate the significance of productivity as being the driving force for wage disparities, whereas the latter understate the function of social discrimination. In examining the Black-White wage gap, for example, a recent study showed that only "trivially small differences" in productivity differences

(i.e., time spent not working during employment time) were observed between Black NH and White NH men, where these small differences in productivity actually disappeared when non-response errors were accounted for (Darity et al., 2021).

Traditional neoclassical models and studies typically attribute wage disparities as resulting from human capital differences and productivity discrepancies, but tend to ignore the historically-specific significance of de jure and de facto discrimination. Therefore, it is imperative to also consider that the social belonging to specific social groups (e.g., based on race, class, gender or ethnicity) generates the consistent manifestation of wage disparities (Albelda et al., 2010). Social stratification, as represented by class differences, can be used to understand economic and social phenomena, including what facilitates consistent wage gaps. The social division of labor is the kernel of social inequality and the status of one's occupation constitutes a particular dimension of systemic disparity (Ganzeboom and Treiman, 1996). Hence, the subjective consensus concerning one's labor force participation is a pertinent indicator of how general valuations of work provide specific socioeconomic advantages that, in turn, dictate one's social standing (Blau and Duncan, 1967; Magnusson, 2010). Intersubjective social processes of social perception (i.e., prevailing forms of social convention and consciousness) are the means by which social positions of rank are perpetuated, reinforcing uneven social role sets and expectations that undergird social class divisions. In this sense, the degree to which occupations are praised, in addition to enshrining income differentials, underpins how society determines what work, and who performs such work, is deemed not worthy of plaudit (Leuze and Strauß, 2016).

A proxy often utilized to analyze social class division is occupational prestige, which provides a ranking of occupations of those considered 'highly' prestigious versus those that are

considered ‘less’ prestigious either on the basis of subjective perceptions (i.e., pure prestige scales) or based on income and education (i.e., socioeconomic index). Occupations, hence, provide a signal regarding one’s social standing (Hauser & Warren, 1997), which can be measured through the concept of occupational prestige. The level of social position, with respect to one’s profession, thus becomes a symbol that translates into hierarchical occupational standings. This, in turn, facilitates social structures of status that reproduce social class compositions of privilege and disadvantage (Garcia-Mainar et. al, 2018). In this respect, occupations with a low prestige ‘ranking’ are typically associated with lower wages (or lower education) and, thus, lower social standing, fundamentally signifying an unequal distribution of resources (Xu and Leffler, 1992).

While, theoretically speaking, the role of social class in determining income distribution has been extensively studied, few studies have attempted to empirically link social classes with wage inequalities (Wodtke, 2016). Given this, we seek to extend the literature by quantifying the occupational prestige gap, thereby estimating the wage differentials present by occupational hierarchy. Quantifying the occupational prestige gap is requisite as it illuminates the degree to which social stratification by status translates into social inequality beyond, although intersectional, the point of mere wage disparities. It allows for more investigation into what contributes to differences concerning social outcomes based on social locational variables, like race, class, and gender. In this sense, space is created for delving into investigations as to why women, for example, often hold high prestige employment, but are still paid less than male counterparts in lower status positions (Valentino, 2020). While this study quantifies the occupational prestige gap present in the United States, these findings are likely to have international relevance as well as occupational prestige hierarchies and social stratification are

not unique to the United States. While the magnitude of the gap is likely to differ by country, given differences in income inequality, the implications of such a gap existing may lend itself to reducing social and economic disparities. Lastly, empirically measuring occupational prestige gaps elucidates varying degrees of social status, adding another layer to social inequities continuously propagated in society.

Literature Review:

Extensive research has been conducted regarding the racial and gender wage gap, where a number of theoretical explanations exist such as discrimination, occupational selection, labor market experience, and human capital/productivity differences (e.g., Weinberger, 1998; Blau and Kahn, 1999; Kamara, 2015). Still, women and minority group members earn fewer wages than White men. This is especially true in the United States, which has historically had one of the largest gender pay gaps among developed countries stemming partly from decentralized wage-setting (Blau and Kahn, 2003). In addition, employment segregation by occupation, industry, firm type, or labor contract is another contributing factor to the wage gap (Karamessini and Ioakimoglou, 2007). Occupational segregation, which analyzes the over- or underrepresentation of a demographic group by type of work (Bahn & Cumming, 2020), is understood to have stemmed from the gendered socialization processes, employment discrimination, and direct constraints on women's employment (Karamessini and Ioakimoglou, 2007).

Studies consistently show that racial/ethnic minorities and women typically are segregated into particular jobs (i.e., occupational crowding), which are often lower paying or lower skilled industries. For example, Black women are overrepresented in low-wage service sector occupations, Latino men are overrepresented in construction occupations, and women are

overrepresented in education occupations (Bahn & Cumming, 2020). Women, for example, are predominantly employed in "female-dominated" occupations (e.g., the service/care industry), which are typically characterized by lower wages due to higher levels of part-time work and fewer opportunities for promotion (Blau and Kahn, 2017; Shauman, 2006; Garcia-Mainar et al., 2018). The presence of occupational segregation, however, leads to underutilization of women's skills and undervaluation of women's work (Horrell et al., 1989; Karamessini and Ioakimoglou, 2007). While such studies are critically important, when analyzing the impact of occupational segregation or selection, studies typically consider "broad" occupational groupings such (e.g., low-skilled versus high-skilled wage) and thus may mask the unique wage disparities experienced within higher and lower status positions within the same industry. With this, the distinct pathway in which occupational prestige impacts wages, or the general levels of social standing, power, and status associated with each occupation, is often overlooked. As such, a neglected component of the wage gap literature is the distinct contribution that occupational prestige produces in wage outcomes, with occupational prestige classifications representing social class division.

Occupational prestige, a subjective consensus of occupational status, provides a measure of the general level of social standing provided to those of a particular occupation (; Garcia-Mainar et al., 2018; Hauser and Warren, 1997). In general, occupations, and thus the prestige attached, are treated as social identities whereby social positions become personal identities (MacKinnon and Langford, 1994). Analyzing occupational prestige differences by race/ethnicity and gender show that occupational prestige differences are largely seen by race/ethnicity rather than by gender alone, within the United States (Xu & Leffler, 1992). While the gap in average prestige scores is significant, to date, quantification of this gap and how it directly contributes to

labor market differentials, especially for minority group members, remains understudied. Of the studies that have attempted to quantify the gap, (Magnusson, 2010) finds that, in the Swedish labor market, married/cohabiting women or women with children experience lower wage returns to occupational prestige compared to married/cohabiting men or men with children. Such wage disadvantages were attributed to the lower likelihood of married/cohabiting women with children to occupy time-consuming positions, a trend that may arise from factors such as family prioritization or labor market discrimination (Magnusson, 2010). Similarly, a study conducted on the Danish labor market demonstrates that up to one fourth of the overall gender wage gap can be explained by gender preferences about occupational prestige. Specifically, when choosing an occupation, women were found to value a position's prestige and potential societal contribution over wages, resulting in occupational segregation into more prestigious but lower paying occupations in comparison to male workers (Kleinjans et al., 2017).

As there are significant prestige differences within racial/ethnic and gender groups, this study aims to quantify the impact such occupational prestige differences have on overall wage outcomes. Analyzing labor market outcomes as a function of prestige provides a more robust method in analyzing how inequalities and social stratification for minority groups arise. Occupational prestige reflects the hierarchical system created by a societies' predispositions; this system perpetuates inequalities as it implicitly dictates the value of an individual. Understanding the system that furthers the gap between the wages of groups is imperative to implementing mitigation strategies (Grönlund & Magnusson, 2013). Framing the wage gap as a function of occupational prestige avoids the rationalization of income inequality that is perpetuated when wage differentials are explained by means of marginal productivity (Burawoy, 2019).

Data & Methodology:

Data:

Pooled cross-sectional data for years 2017-2019 for this study come from the public use American Community Surveys (ACS), which provides U.S. census microdata, and were obtained from IPUMS USA (Ruggles et al., 2022). The ACS sample design constructs monthly rolling samples, with the intent that the ACS data could replace the Census long form. Each year the ACS samples around 3 million households, where each month a representative sample is taken, systematically, so as to represent each county (or county equivalent). Survey weights are constructed to adjust for mixed geographic sample rates, nonresponse adjustments and individual sample probabilities (Ruggles et al., 2022). Given the utilization of survey data, appropriate sample weights were utilized throughout the analyses.

Initial limitations imposed on the data include limiting our sample to those of the working-age in the population (i.e., those aged 18-64), those who are in the labor force (i.e., either employed or unemployed), and those who report positive usual hours work (i.e., greater than zero). To avoid potential outliers, we also exclude those who worked more than 61 hours per week (N = 111,197) and those whose incomes/wages were outside three standard deviations from the mean (N = 65,691). After imposing these restrictions along with dropping observations with any missing data, the resultant sample size was 3,956,426.

Variables

Wages were estimated by an individual's total pre-tax wage and salary income from the previous year. Several different occupational prestige indexes are available utilizing the ACS data including the Nam-Powers-Boyd (NPB) occupational status score, the Duncan

socioeconomic index, the Hauser & Warren socioeconomic index, Nakao and Treas occupational prestige scores, and the Siegel occupational prestige scores. Of these, the Nam-Powers-Boyd, Duncan, and Hauser & Warren prestige scores are socioeconomic index scores (i.e., based on average earnings and education associated with a particular occupation) while the Siegel and Nakao-Treas scores are pure prestige based (i.e., occupational were ranked based on perceptions of social standing).

We utilized the Nakao-Treas occupational prestige scores for a couple of reasons. First, given the need for a distinction between wages and the measure of occupational prestige, pure prestige scores should be utilized as they are not computed with average income in mind. Second, the Nakao-Treas occupational prestige scores are based on the 1990 occupational classification schemes while the Siegel occupational prestige scores are based on the 1950 occupational classification scheme. For the Nakao-Treas occupational prestige scores, respondents evaluated the social standing associated with each occupational, ranging from 1 (lowest social standing) to 9 (highest social standing) which were then converted to prestige scores (Ruggles et al., 2022; Nakao and Treas, 1994). These scores can, theoretically range between 0 and 100, where 0 indicates the lowest occupational prestige ranking and 100 the highest. Within the ACS data, the Nakao and Treas scores ranged between 16.8 and 86.1; for ease of interpretation, these scores were transformed to range from 0 to 100.

Following Thomas (1993), we control for a number of relevant socioeconomic and demographic factors such as gender and race/ethnicity, with individual survey respondents classified as female (reference) or male and as Black non-Hispanic (NH), American Indian/Alaskan Native (AIAN) NH, Asian NH, Hispanic, and White NH (reference). An interaction variable was utilized to analyze the intersection of race/ethnicity and gender for all

racial/ethnic categories. Other sociodemographic and economic factors accounted for include occupational prestige, citizenship status (with non-citizen as the reference group), and marital status (classified as married (reference), formerly married (i.e., widowed, divorced or separated), and never married). Additionally, both models controlled for educational attainment (classified as less than high school (reference), high school, some college (i.e., 1-4 years of college), and college (5 years or more)), region (classified as living in the Northeast (reference), Midwest, South, or West), and age (with ages grouped as those between the ages of 18 – 30 (reference), 31 – 42, 43 – 53, and 54 – 64. Lastly, part time versus full time work status was controlled for where part time was defined by usual hours worked less than or equal to 29 hours.

Statistical Analysis

Our statistical analyses build off of earlier work, where the impact of race/ethnicity, gender, and the interaction thereof, on occupational prestige was estimated. The censored nature of the dependent variable (i.e., occupational prestige ranging from 0 to 100) necessitated the use of Tobit regression analyses. However, given the similarity in results between the use of ordinary least squares (OLS) and Tobit analysis, we utilize OLS analyses in our regression analyses for the ease of interpretation. To estimate the impact of race/ethnicity, gender, and the interaction thereof on occupational prestige, we utilized the following model:

$$(1)\ occupational\ prestige^{1} = \beta_0 + \beta_1(Black)^a + \beta_2(Asian)^a + \beta_3(Hispanic)^a + \beta_4(AIAN)^a + \beta_5(ages31\text{-}42)^b + \beta_6(ages43\text{-}53)^b + \beta_7(ages54\text{-}64)^b + \beta_8(Female)^c + \beta_9(Black\ Female)^d + \beta_{10}(Asian\ Female)^d + \beta_{11}(Hispanic\ Female)^d + \beta_{12}(AIAN\ Female)^d + \beta_{13}(formerly\ married)^e + \beta_{14}(never\ married)^e + \beta_{15}(high\ school\ degree)^f + \beta_{16}(college\text{-}up\ to\ four)^f + \beta_{17}(college\text{-}five\ or$$

[1] The reference groups for the sequences in all of the regression analyses conducted are: a) White NH, b) Ages 18-30; c) Male; d) White NH Female; e) Married; f) Less than high school; and g) North

[2] The reference groups for the sequences in all of the regression analyses conducted are: a) White NH, b) Ages 18-30; c) Male; d) White NH Female; e) Married; f) Less than high school; g) North; h) year 2019

$more)^f + \beta_{18}(Midwest)^g + \beta_{19}South)^g + \beta_{20}(West)^g + \beta_{21}(year(2017))^h + \beta_{22}(year(2018))^h + \beta_{23}(citizen) + \beta_{24}(full\ time\ employed) + \varepsilon_i$

As the goal of this analysis is to quantify these observed differences in occupational prestige (i.e., prestige gaps) by race/ethnicity and gender, regression analyses were conducted with occupational prestige serving as an additional cofactor to wage determination utilizing weighted OLS regression analyses:

$$(2)\ wages^2 = \beta_0 + \beta_1(Black)^a + \beta_2(Asian)^a + \beta_3(Hispanic)^a + \beta_4(AIAN)^a + \beta_5(ages31\text{-}42)^b + \beta_6(ages43\text{-}53)^b + \beta_7(ages54\text{-}64)^b + \beta_8(Female)^c + \beta_9(Black\ Female)^d + \beta_{10}(Asian\ Female)^d + \beta_{11}(Hispanic\ Female)^d + \beta_{12}(AIAN\ Female)^d + \beta_{13}(formerly\ married)^e + \beta_{14}(never\ married)^e + \beta_{15}(high\ school\ degree)^f + \beta_{16}(college\text{-}up\ to\ four)^f + \beta_{17}(college\text{-}five\ or\ more)^f + \beta_{18}(Midwest)^g + \beta_{19}South)^g + \beta_{20}(West)^g + \beta_{21}(year(2017))^h + \beta_{22}(year(2018))^h + \beta_{23}(citizen) + \beta_{24}(full\ time\ employed) + \boldsymbol{\beta_{25}(occupational\ prestige)} + \varepsilon_i$$

Results:

Weighted descriptive statistics are provided in Table 1. After limiting the sample to those of the working-age population, the average age for our sample is 40.30, with 28% of the sample aged 18 – 30, 28% aged 31 – 42, 24% aged 43 – 53, and 20% aged 54 or over. Additionally, with the restrictions imposed on wages and usual hours worked, average wages for the sample amount to $44,409 and average number of hours worked average approximately 39 hours per week, with 85% of the sample being employed full time. The mean occupational prestige score was 40.14 and 48% of the same is female. Regarding racial/ethnic composition, the majority of our is identified as White NH (62%), followed by Hispanic (20%), Black NH (12%), Asian NH (6%), and American Indian/Alaskan Native NH (<1%). Further breaking this down through the intersection of race/ethnicity and gender, we see that among the racial/ethnic groupings, 30% of White NH are female, followed by 8% of Hispanics, 7% of Black NHs, 3% of Asian NH, and <1% of American Indian/Alaskan Native NHs are female. For the total sample, 91% are a

citizen, and the majority of the sample is married (50%), has attended college for up to four years (48%), and lives in the South (37%).

Confirming results from previous work, we see that significant differences in occupational prestige scores are present among minority group members (Table 2). All else equal, compared to White men, on average, Black men have Nakao-Treas occupational prestige rankings that are 5.45 points lower, Hispanic men are 3.38 points lower, and AIAN men have scores that are 3.84 points lower on average while Asian men have 2.51 points higher rankings. In comparison to White men, White women have an average of 1.60 points higher rankings and Asian women have scores that are 2 points higher, on average. On the other hand, compared to White men, Black women have scores that are 1.17 points lower, Hispanic women have scores that are 2.85 points lower, and AIAN women have scores that are 2.24 points lower, on average. Only small differences in average prestige scores are observed when comparing Asian men to Asian women (-0.51, respectively) and comparing Hispanic men to Hispanic women (0.53, respectively). In comparison to Black NH men, Black NH females have scores that are, on average, 4.28 points higher and in comparison to AIAN men, AIAN women have scores that are 1.60 points higher, on average.

Next, occupational prestige, along with other relevant covariates, was utilized as a cofactor in estimating wages (Table 3).[2] Overall results confirm to prior expectations for all included covariates. In addition, the results confirm that occupational prestige has a significant positive impact on average wages, with each additional prestige score increase leading to an increase in wages by an average of $494 dollars.[3] To see the impact of this on average wages,

[2] Due to the nonlinear nature of wages, the model was first estimated through a log-level approach. However, in order to quantify the occupational prestige gap, we elected to utilize a level-level model.
[3] All dollar figures have been rounded to the nearest whole dollar.

given the prestige scores gap observed by race/ethnicity among men, compared to White NH men, this would lead to a reduction in wages of $2,692 for Black NHs (-5.45*$494), a reduction of $1,670 for Hispanics (-3.38*$494), and a reduction of $1897, for AIAN men (-3.84*$494) and a premium of $1,240 for Asian NHs (2.51*$494).

Discussion:

A limitation in the current literature on wage inequalities by race/ethnicity and gender is that these studies do not take occupational prestige into account and the additional inequities in wages that stem from differences in occupational prestige rankings. If we were to analyze the impact of race/ethnicity, gender, and the interaction thereof on wages without controlling for differences observed in Nakao-Treas occupational prestige rankings, our estimates would show that significant wage differentials are observed (Table 4). In comparison to White NH men, on average, Black men have wages that are $10,681 less, Hispanic wages are $8,554 less, and AIAN wages are $11,698 less, *ceteris paribus*, while Asian men earn $2,604 more. Regarding gender differences, in comparison to White NH men, we see that, on average, White women earn $13,530 less, Black women earn $15,383 less, Asian women earn $8,792 less, Hispanic earn $16,386 less, and AIAN women earn $18,976 less. These results are noted as 'the standard wage gap' in Table 5 and conform to the current literature on wage disparities regarding the impact of race/ethnicity and gender.

However, we now show that this wage gap does not just stem from race/ethnicity and gender, rather also due to the differences in occupational prestige status present. When including occupational prestige as a covariate, the observed wage gap observed by race/ethnicity less, as noted by 'wage gap prestige' in Table 5. Recall that in comparison to their White NH male

counterparts, prestige score differentials for Black NHs, Hispanics, AIAN NHs had scores that were lower by 5.45, 3.38, and 3.84 points, respectively, while they were 2.51 higher for Asian NHs (Table 2 and Table 5). Compared to White NH men, White and Asian women have prestige scores that are 1.60 and 2 points higher while Black women, Hispanic women, and AIAN women have scores that are 1.17, 2.85, and 2.24 points lower (Table 2 and Table 5). Utilizing these prestige scores to quantify the impact on average wages, armed with the knowledge that each additional prestige score differences amounts to an average difference in wages by $494, we see that this would amount a wage differential of -$2,692, -$1,670, -$1,897, and $1,240 for Black NHs, Hispanics, AIAN NHs, and Asian NHs, respectively, compared to their White male counterparts. Compared to White men, quantifying the prestige gap observed among women shows a wage differential of $790 for white women, $988 for Asian women, -$1,409 for Hispanic women, and -$1,107 for AIAN women, compared to White men.

As such, incorporating prestige scores more fully explains the wage gap previously attributed only to race/ethnicity and gender. That is, one can disaggregate the wage gap further as, *ceteris paribus,* the wage gap is both attributable to race/ethnicity and prestige differences. As noted in Table 5, after controlling for differences in occupational prestige rankings (the wage gap prestige) versus not controlling for prestige (the standard wage gap), the wage differentials observed between White NH men and their minority group male counterparts decreased by $2,691 for Black men, $1,242 for Asian men, $1,669 for Hispanic men, and $1,900 for AIAN men. Similarly, for women, compared to White men, the difference in wage gap observed amounts to $789 for White women, $578 for Black women, $989 for Asian women, $1,407 for Hispanic women, and $937 for AIAN women.

As such, we show that this "reduction" in the wage gap is accounted for in full by the prestige score differences, with the exception of AIAN women where the prestige gap is higher than the observed wage gap between the two wage models ($1,107 versus $937). This stems from the statistically insignificant coefficient observed on AIAN women in the occupational prestige regression analysis (Table 2). As shown in Table 5, after quantifying the prestige gap (Column 5), it accounts for $2,692 of the wage differentials observed for Black men, $1,240 for Asian men, $1,670 for Hispanic men, and $1,897 for AIAN men, in comparison to White NH men. Among women, we see that quantifying the prestige gap accounts for $790 wage differential among White women, $578 for Black women, $988 for Asian women, $1,408 for Hispanic women, and $1,107 for AIAN women. It should be noted, of course, that the overall wage gap observed by race/ethnicity and gender still amounts to thousands of dollars of a gap; we simply show that this gap is 'lowered' when accounting for the differences in occupational prestige attainment by race/ethnicity and gender.

Conclusions:

While we attempt to minimize our limitations in this study, it is important to note that several limitations remain. First, while a number of different occupational prestige scales exist (e.g., the Duncan Socioeconomic Index), we limit our analysis to occupational prestige rankings as measured through the Nakao and Treas prestige scale. However, a sensitivity analysis was conducted utilizing the Siegel scale, as it, too, is based on a 'pure' prestige ranking. Similar results were observed utilizing the Siegel scale.[4] Second, given the use of survey data, nonresponse bias, which may not be truly random, may be present. To limit this impact, proper

[4] Results from the sensitivity results utilizing the Siegel prestige scoring are available from the authors upon request.

survey weights were utilized throughout the analyses. Third, our analysis could have been strengthened if we had the ability to control for job tenure/experience, though this variable was not available to us, though the inclusion of age as a cofactor may served as an assumed indicator for job tenure/experience (Kamara, 2015). Lastly, our study is limited to the United States, given the available data. Thus, while the results are unique to that of the U.S. and are likely to vary in magnitude depending on the degree of income inequality, they are likely to be relevant in the international context given the presence of wage and occupational prestige inequality.

We observe that the occupational prestige differences present by race/ethnicity contributes significantly to the observed wage gap, but only slightly with respect to the overall *gender* wage disparity. As shown in Table 5, when disaggregating the wage gap by race/ethnicity, the "standard" wage gap (i.e., when not accounting for prestige differences) amounts to -$10,681, -$8,554, -$11,698, and $2,604 for Black NHs, Hispanics, AIAN NHs, and Asian NHs, respectively, compared to White men. Given the occupational prestige differences, nevertheless, the wage gap can be disaggregated further into two components: race/ethnicity differences (-$7,990, -$6,885, -$9,798, and $1,362, respectively) and occupational prestige differences (-$2,692, $1,670, -$1,897, and $1,240, respectively) for Black NHs, Hispanics, Asian NH and AIAN NHs, respectively, compared to White men. Compared to White men, the "standard" wage gap (i.e., when not accounting for prestige differences) for White women amounts to amounts to -$13,530, -$15,383 for Black women, -$8,792 for Asian women, -$16,386 for Hispanic women, and -$18,976 for AIAN women. Again, we show that this 'standard wage gap' can be decomposed into the two components: race/ethnicity differences ($-14,319, $-14,805, -$9,781, -$14,979, and -$18,039, respectively) and occupational prestige

differences ($790, -$578, $988, -$1,408, and -$1,107) for White women, Black women, Asian women, Hispanic women, and AIAN women, respectively.

Thus, analyzing the wage gap by race/ethnicity alone, we see that in comparison to their White NH male counterparts, differentials in prestige score rankings account for 25% of wage differentials for Black men, 19.5% for Hispanic men, 16% for AIAN men, and 47.60% for Asian men, whereas the rest of the wage differential is attributed to race/ethnicity alone. Compared to White men, differentials in prestige score rankings account for a much smaller percentage of the wage differential, amount to 5.84% of wage differentials for White women, 6.57% for Black women, 8.59% for Hispanic women, 5.83% for AIAN women, and 11.24% for Asian women. Thus, the overall gender wage gap, with an observed wage difference of $13,530 between men and women, remains largely unexplained by occupational prestige differences among women. As such, for women, the main contributing factor for wage differences continues to be gender in-and-of itself.

This study provides a more nuanced study of labor market inequalities through quantifying occupational prestige differences by race/ethnicity and gender more concretely contributing, therefore, to the growing literature on stratification economics, given the degree to which economic outcomes are centered on particular social positional differences.

Tables

Table 1: Weighted Descriptive Statistics IPUMS-ACS 2017-2019

Variable	Mean/Proportion	Standard Deviation
Wages	$44,409	$39,227
Age (mean)	40.30	12.90
Ages 18 – 30	28.34%	0.45
Ages 31 – 42	27.58%	0.45
Ages 43 – 53	23.79%	0.43
Ages 54 – 64	20.29%	0.40
Usually Hours Worked	38.57	10.32
Full time employed	86.40%	0.34
Part time employed	13.60%	0.34
Occupational Prestige Scores	40.14	20.97
Race/Ethnicity		
White NH	61.94%	0.49
Black NH	12.33%	0.33
Asian NH	6.44%	0.25
Hispanic	19.81%	0.39
AIAN NH	<1%	0.08
Gender		
Female (1 = female; 0 = male)	48.46%	0.50
Female & Race/Ethnicity		
White NH female	30%	0.46
Black NH female	6.65%	0.25
Asian NH female	3.16%	0.17
Hispanic female	8.38%	0.28
AIAN NH female	<1%	0.05
Citizenship		
Citizen (1 = yes, 0 = no)	91%	0.29
Marital Status		
Married	50.43%	0.50
Formerly married	13.97%	0.35
Never married	35.61%	0.48
Education Level		
Less than high school	6.88%	0.25
High school degree	33.24%	0.47
College (up to four years)	47.91%	0.50
College (five years or more)	11.97%	0.32
Region		
Northeast	17.71%	0.38
Midwest	21.55%	0.41
South	37.02%	0.48
West	23.72%	0.43

Year of Survey		
2017	33.17%	0.47
2018	33.33%	0.47
2019	33.49%	0.47

Table 2: Occupational Prestige Weighted OLS Regression Analysis

Variable	Coefficient	Robust Standard Error
Intercept	25.37**	0.07
Black NH	-5.45**	0.06
Asian NH	2.51**	0.07
Hispanic	-3.38**	0.05
American Indian/Alaskan Native NH	-3.84**	0.20
Aged 31 – 42	2.31**	0.04
Aged 43 – 53	2.08**	0.04
Aged 54 – 64	1.65**	0.04
Female	1.60**	0.03
Black NH Female	2.68**	0.08
Asian NH Female	-2.11**	0.10
Hispanic Female	-1.07**	0.06
American Indian/Alaskan Native NH Female	0.35	0.29
Formerly married	-2.95**	0.03
Never married	-4.11**	0.03
High school degree	4.41**	0.04
College (up to four years)	17.17**	0.04
College (five years or more)	33.29**	0.05
Midwest	-1.34**	0.04
South	-0.07**	0.03
West	-0.41**	0.04
Year 2017	-0.35**	0.03
Year 2018	-0.37**	0.03
Citizen	3.82**	0.05
Part time employed	-6.98**	0.03
R^2	**0.31**	
F-statistics	**53675.26**	

**Statistically significant at the 1% level; *Statistically significant at the 5% level.

Table 3: Weighted OLS Regression Analysis on Total Wages (including prestige)

Variable	Coefficient	Robust Standard Error
Intercept	-4051.76**	123.76
Black NH	-7989.72**	94.12
Asian NH	1361.56**	148.04
Hispanic	-6884.74**	77.26
American Indian/Alaskan Native NH	-9798.40**	310.79
Aged 31 – 42	9441.38**	52.53
Aged 43 – 53	14091.62**	60.57
Aged 54 – 64	13129.21**	62.44
Female	-14319.39**	50.82
Black NH Female	7504.22**	118.86
Asian NH Female	3175.59**	188.79
Hispanic Female	6225.31**	92.13
American Indian/Alaskan Native NH Female	6077.75**	411.34
Formerly married	-5299.33**	60.72
Never married	-7037.86**	50.14
High school degree	3540.96**	67.43
College (up to four years)	11722.89**	72.29
College (five years or more)	27373.18**	107.48
Midwest	-4973.30**	63.55
South	-5356.09**	58.40
West	-1014.57**	65.55
Occupational Prestige	494.03**	1.17
Year (2017)	-2630.12**	47.52
Year (2018)	-1473.13**	48.13
Full time employed	25739.90**	42.09
Citizen (1 = yes, 0 = no)	4010.85**	79.09
R^2	**0.36**	
F-statistics	**59545.84**	

**Statistically significant at the 1% level.

Table 4: Weighted OLS Regression Analysis on Total Wages (excluding prestige)

Variable	Coefficient	Robust Standard Error
Intercept	5030.78**	126.64
Black NH	-10680.58**	97.64
Asian NH	2603.85**	155.42
Hispanic	-8553.88**	80.35
American Indian/Alaskan Native NH	-11697.76**	328.28
Aged 31 – 42	10581.12**	54.52
Aged 43 – 53	15117.41**	63.00
Aged 54 – 64	13946.09**	65.08
Female	-13530.04**	52.35
Black NH Female	8827.61**	123.60
Asian NH Female	2134.05**	198.98
Hispanic Female	5698**	96.02
American Indian/Alaskan Native NH Female	6251.55**	431.34
Formerly married	-6759.17**	63.38
Never married	-9070.12**	51.83
High school degree	5721.78**	69.49
College (up to four years)	20204.40**	72.89
College (five years or more)	43818.84**	103.43
Midwest	-5635.294**	65.94
South	-5389.39**	60.60
West	-1216.28**	68.16
Year (2017)	-2800.81**	49.37
Year (2018)	-1653.76**	49.96
Full time employed	29188.71**	41.32
Citizen (1 = yes, 0 = no)	5898.80**	82.76
R^2	**0.31**	
F-statistics	**55227.75**	

**Statistically significant at the 1% level.

Table 5: Disaggregation of Wages by Race/Ethnicity Gap

	Standard Wage Gap	Wage Gap Prestige	Difference in Wage Gap	Prestige Gap	Quantifying Prestige
White NH Men (reference)					
Black NH men	-10,681**	-7,990**	**$2,691**	-5.45**	**-$2,692**
Asian NH men	2,604**	1,362**	**$1,242**	2.51**	**$1,240**
Hispanic men	-8,554**	-6,885**	**$1,669**	-3.38**	**-$1,670**
AIAN NH men	-11,698**	-9,798**	**$1,900**	-3.84**	**-$1,897**
White NH Men (reference)					
White NH women	-13,530**	-14,319**	**$789**	1.60	**$790**
Black NH women	-15,383**	-14,805**	**$578**	-1.17	**-$578**
Asian NH women	-8,792**	-9,781**	**$989**	2.00	**$988**
Hispanic women	-16,386**	-14,979**	**$1,407**	-2.85	**-$1,408**
AIAN NH women	-18,976**	-18,039**	**$937**	-2.24	**-$1,107**

**Statistically significant at the 1% level.

References

Albelda R, Drago R, and Shulman S (2004) *Unlevel playing fields: Understanding wage inequality and discrimination.* Cambridge, Mass: Economic Affairs Bureau.

Bauer L, Breitweiser A, Nunn R, Shambaugh J (2018) Where work pays: how does where you live matter for your earnings? *The Hamilton Project Brookings Institute.*

Bahn, K and Cumming C (2020) U.S. occupational segregation by race, ethnicity, and gender. *Washington Center for Equitable Growth*. Fact Sheet: Labor.

Black D, Haviland A, Sanders S, and Taylor L (2006) Why do minority men earn less? A study of wage differentials among the highly educated. *Review of Economics and Statistics, 88*(2), 300-313. doi:10.1162/rest.88.2.300

Blau F and Kahn L (1999). Analyzing the gender pay gap. *The Quarterly Review of Economics and Finance,* 39, pp. 625-646.

Blau F and Kahn L (2003) Understanding international differences in the gender pay gap. *Journal of Labor Economics*, 21 (1), pp. 106-144.

Blau F and Kahn L (2017) The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature,* 55(3): 789–865.

Blau P, and Duncan O (1967) *The American occupational structure.* John Wiley & Sons Inc.

Burawoy M (2019) *Symbolic Violence: Conversations with Bourdieu*. Durham, NC: Duke University Press.

Darity W, Hamilton D, Myers S (2021) Racial Differences in Time at Work Not Working. *ILR Review,* 75 (3), pp. 552-572

Ganzeboom H and Treiman D (1996) Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations. *Social Science Research* 25: 201-239.

Garcia-Mainar I, Montuenga V, and Garcia-Mainar V (2018) Occupational prestige and gender occupational segregation. *Work, Employment, and Society*, 32 (2), 348–367.

Grönlund A, and Magnusson C (2013) Devaluation, crowding or skill specificity? Exploring the mechanisms behind the lower wages in female professions, *Social Science Research*, 42 (4), 1006–1017.

Kamara J (2015) Decomposing the Wage Gap: Analysis of the Wage Gap Between Racial and Ethnic Minorities and Whites. *Pepperdine Policy Review*, Vol. 8, Article 1.

Karamessini M. and Ioakimoglou E (2007) Wage determination and the gender pay gap: A feminist political economy analysis and decomposition. *Feminist Economics,* 13 (1): 31-66.

Kleinjans K, Krassel K, Duke A (2017) Occupational Prestige and the Gender Wage Gap. *Kyklos International Review of Social Sciences* Vol. 70, Issue 4, pp. 565-593.

Hauser R and Warren J (1997) Socioeconomic Indexes for Occupations: A Review, Update, and Critique. *Sociological Methodology* 27: 177–298.

Horrell S, Rubery J, and Burchell B (1989) Unequal jobs or unequal pay? *Industrial Relations Journal,* 20 (3), pp. 176-191.

Leuze K and Strauß S (2016) Why do occupations dominated by women pay less? How 'female typical' work tasks and working-time arrangements affect the gender wage gap among higher education graduates. *Work, Employment, and Society (30),* 5, pp. 802-820.

MacKinnon N, and Langford T (1994). The meaning of occupational prestige scores: a social psychological analysis and interpretation. *The Sociological Quarterly,* 35 (2), pp. 215-245.

Magnusson, C. 2010. Why is there a gender wage gap according to occupational prestige? An analysis of the gender wage gap by occupational prestige and family obligations in Sweden. *Acta Sociologica,* 53 (2), pp. 99-117.

Nakao K and Treas J (1994) Updating Occupational Prestige and Socioeconomic Scores: How the New Measures Measure Up. *Sociological Methodology*, 24: 1-72.

O'Neill J, and O'Neill, D (2005). What do wage differentials tell us about labor market discrimination? *National Bureau of Economic Research Working Paper (11240).* https://doi.org/10.3386/w11240.

Ruggles S, Flood S, Foster S, Goeken R, Schouweiler M, and Sobek M (2022) IPUMS USA: Version 12.0 [dataset]. Minneapolis, MN: IPUMS. https://doi.org/10.18128/D010.V12.0

Shauman K (2006) Occupational sex segregation and the earnings of occupations: What causes the link among college-educated workers? *Social Science Research* 35(3): 577–619.

Thomas, M (1993) Race, class, and personal income: An empirical test of the declining significance of race thesis, 1968-1988. *Social Problems* 40(3): 328-342.

Valentino L (2020) The segregation premium: How gender shapes the symbolic valuation process of occupational prestige judgments. *Social Forces* 99(1): 31–58.

Weeden K, Kim Y, Di C, and Grusky D (2007) Social class and earnings inequality. *American Behavioral Scientist* 50(5): 702-736.

Weinberger C (1998) Race and Gender Wage Gaps in the Market for Recent College Graduates. *Industrial Relations: A Journal of Economy and Society* 37(1): 67-84.

Wodtke G (2016) Social class and income inequality in the United States: ownership, authority, and personal income distribution from 1980 to 2010. *American Journal of Sociology* 121(5): 1375 – 1415.

Xu W and Leffler A (1992) Gender and Race Effects on Occupational Prestige, Segregation, and Earnings. *Gender & Society* 6(3): 376–392.