

*Gender, Race, and Class in an Intersectional
Framework: Occupations and Wages in the United
States*

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Abstract

The literature offers limited insights into the labor market experiences of women and men of different racial/ethnic groups by social class beyond considering their educational achievements or occupational status, common proxies for social class, or their positions on the wage distribution. This paper follows a different approach by thinking of class as life conditions at the family level, which we approximate with family income, and by exploring wages at the intersection of gender, race/ethnicity, and family class. Dealing with “individuals in families,” this paper delves deeper into the stratification of women and racial minorities. Our analysis suggests that the “mark of gender” extends beyond race and class. No matter the social class to which individuals belong, women of any race/ethnicity receive conditional wages below the average wage of workers in the corresponding class. Our investigation also suggests that the racial wage penalty of Black women (vis-à-vis White women) stems from a stratification by class that penalizes them. When compared with individuals of the same class, Black women do not earn less than White women with similar characteristics do. On the contrary, the wage disadvantage of Black men (vis-à-vis White men) goes beyond class. No matter the class to which they belong, Black men have lower wages than comparable White men do because they tend to concentrate in occupations that pay less.

JEL Classification: D63; J15; J16; J71

Keywords: Class, Gender, Race, Ethnicity, Occupations, Earnings

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1. Introduction

There exists a wide body of research analyzing racial and gender wage gaps in the United States (Altonji and Blank, 1999; Blau and Kahn, 2017). For a long time, racial analyses focused on men, and gender analyses focused on the White population. However, there is a growing scholarship documenting that the positions of women and men in the labor market are not independent of the racial or ethnic groups to which they belong (Reid, 2002; England et al., 2004; Alon and Haberfeld, 2007; Pettit and Ewert, 2009).

Research on stratification acknowledges that, in addition to race and gender, class helps to shape the labor opportunities individuals face (Thomas, 1993; Cotter et al., 1999; Browne and Misra, 2005; Rivera and Tilcsik, 2016). However, this literature offers limited insights into the labor market experiences of women and men of different racial/ethnic groups by social class beyond considering their educational achievements or occupational status, which are common proxies for social class in sociology studies, or their positions on the wage distribution. In other words, class is usually considered at the individual level, with little research on the link between class at the family level and individual position in the labor market.

On the other hand, there is an extensive literature on how decisions adopted at the family level (mainly involving children and other household arrangements) affect the position of individuals in the labor market and, in particular, those of women, including whether to participate, number of hours worked, and earnings (Reid, 2002; Blau and Kahn, 2013; England et al., 2012; England et al., 2016; Junh and McCue, 2017). Notwithstanding, little is known about how a family's social class shapes the labor experiences of men and women.

The aim of this paper is to explore wages at the intersection of gender, race/ethnicity, and family social class to determine whether the gender and racial/ethnic penalties are the same across classes and whether occupational segregation plays a more important role in explaining the advantages or disadvantages of the groups in some classes than in others. To account for class, this paper uses family income, which is a class indicator extensively used in economics research (Atkinson and Brandolini, 2013; Rose, 2020). Family income approximates the social context in which family members are situated. We think of class “as a determinant of individual actions and mentalities” associated with life conditions

(Sorensen, 2000, p. 17), which may result in different outcomes for individuals depending on their gender and race/ethnicity (Rivera and Tilcsik, 2016). Dealing with “individuals in families,” our research aims to delve deeper into the stratification of women and racial minorities.¹

This paper addresses this topic in an intersectional framework that distinguishes among 24 gender-race/ethnicity-class groups, which result from combining gender (women and men), the four largest races/ethnicities (Whites, Blacks, Asians, and Hispanics), and three classes defined based on family income.² The idea of first defining social class based on household income and then studying occupational patterns, or other labor market characteristics, is not new in analyses involving developing countries (Banerjee and Duflo, 2008). However, we know little about how a family’s social class shapes racial and gender differences in U.S. labor market outcomes, in particular the occupational sorting of the groups and their wage gaps. Is the racial wage gap of Black women living in lower-class households the same as that of those living in middle- or upper-class households? Do Hispanic women earn less than comparable White women of the same family social class do? Does the gender wage gap of White women or the racial gap of Black men vary by class? Does the role that occupations play in explaining the wage advantages or disadvantages of the various gender-race/ethnicity groups depend on a family’s social class? Is it the same for White and Asian men in the upper class as it is for these men in the lower class?

To address these questions, we determine the wage advantage/disadvantage of each of these gender–race/ethnicity–class groups (*vis-à-vis* the economy’s average wage) before and after controlling for basic attributes such as education, immigration profile, age, residential location, and so forth. The role that occupations play in determining the wage advantage or disadvantage of each group is also explored. To undertake the analysis, we combine the tools proposed by Del R o and Alonso-Villar (2015), which allow the decomposition of each

¹ Plutzer and Zipp (2001) advocate for the use of “individuals in families” as the adequate unit of class analysis, taking the expression from earlier works (Marshall et al., 1988).

² Intersectionality is a term coined by law professor Kimberl e Crenshaw in 1989 to describe that in understanding how power works in society, the intersection of different individuals’ characteristics is important. The lens of intersectionality, initially used to explain the position of Black women, has been broadly used in different disciplines. Intersectionality means that the intersection of gender, race, ethnicity, sexual orientation, class, and so forth creates new social categories, which helps to delve deeper into intergroup inequalities and hierarchical systems (England et al., 2004).

group's earnings advantage or disadvantage in terms of occupational sorting and within-occupation wage disparities, with the counterfactual method put forward by DiNardo et al. (1996) and adapted by Gradín (2013). This methodology allows us to use a detailed occupational classification, which differs from what is usually done in racial/gender analyses based on wage equations that use a dummy variable for each occupation and, therefore, employ a limited list of categories.

2. Social Class: Unit of Analysis, Indicator, and Categories

The class concept has a long tradition in sociological theory (Sorensen, 2000; Browne and Misra, 2005; Wright, 2015). There are three main traditions for conducting class analysis: social stratification (associated with the different living conditions that people enjoy, depending on their individual attributes of class); the Weberian tradition (in which the classes are defined based on the control that some individuals have over economic resources, together with their ability to exclude other individuals from accessing those resources); and the Marxist tradition (which puts emphasis on the domination and exploitation that some individuals exert over others' activities). Although these three theoretical approaches have been considered mutually exclusive, scholars such as Wright (2015) advocate for combining them and adopting an integrated framework to identify better the complex processes of social classes in the 21st century.³

Apart from these theoretical considerations, in empirical work there is no consensus on how to define social class, especially in an intersectionality framework (Browne and Misra, 2005). Some scholars, especially sociologists, use occupational status or education level as a proxy for class (Cohen, 2001; Damaske, 2011; Ren, 2019). Others define class based on aspirations or self-perceptions (U.S. Department of Commerce, 2010; Reeves et al., 2018). In economics, scholars usually define class based on financial indicators, mainly income; although, wealth is also used when information is available (Atkinson and Brandolini, 2013; Rose, 2020).⁴

³ Some recent empirical results seem to support this strategy. Thus, for example, although the distinction between workers and capitalists is common in sociology and economics, recent studies on economic inequality suggest that this distinction may no longer hold in the current U.S. context due to a growing intersection between the top 10% earners in the labor- and capital-income distributions since World War II (the percentage rose from 10% in 1950 to 30% in 2018; Berman and Milanovic, 2020).

⁴ Other approaches are multidimensional (Iceland et al., 2005; Edo et al., 2021).

In this paper, we follow the latter approach and build social class categories based on income level (wealth is not available in our dataset) to approximate individuals' living conditions. Note that, even when using income-based definitions, additional decisions are in order because no consensus exists in academia on how to use income to identify the different class categories. Some scholars focus on the income-distribution range and divide it into intervals of equal size, usually quintiles, delimiting the middle class between the second and the fourth quintile (Dallinger, 2013; Atkinson and Brandolini, 2013). Other researchers establish, instead, class categories based on absolute income levels (in purchasing power parity terms), especially when international comparisons are involved (Banerjee and Duflo, 2008).

However, the two most common approaches in economics are those that consider either an absolute poverty line or the median income as the reference for which the different classes are established.⁵ Using the poverty line as the reference implies following an absolute approach. The monetary value of a basket of basic goods is first set, and then, the various classes are defined based on income-to-needs ratios. The middle class is often defined as “those ‘comfortably’ clear of being at-risk-of-poverty” (Atkinson and Brandolini, 2013). The discussion is when individuals can be considered to be far enough from poverty and when they start to become rich, two matters on which there is no consensus. The middle class is sometimes established as between two and four times the poverty line (Duncan et al., 1996; Litcher et al., 2006); however, cut-offs below two times and above four are also used. Thus, Latner and Smeeding (2013) set the upper cut-off at six times the poverty line, and other scholars have raised it to nine, ten, or even higher depending on the group of rich they are interested in studying.⁶

When using the median income, a relative approach is adopted. Each class is defined based on a reference that changes as the income distribution of the economy does. Different thresholds can be used to delimit the middle class around the median income. Among these, one of the most popular is the one proposed by the Pew Research Center (2015), which sets the range between two-thirds and two times the national median income. Other scholars have

⁵ Alternatively, the upper cut-off for middle class is sometimes established at the income level that allows a household to hire a full-time worker for personal services (e.g., cleaning, childcare, etc.) whereas the cost of that employee accounts for a low percentage of the household's income (Atkinson and Brandolini, 2013).

⁶ Rosen (2020), for example, sets the upper bound at 17.5 times the poverty line because he defines the rich as those at the top 1% of the income distribution.

considered other limits. For example, Krueger (2012) used an income band between one-half and one and a half of the median, and Thurow (1987) used a narrower range, three-quarters to one and a quarter.⁷

When following this approach, one has to bear in mind that, to calculate the median income, the income levels of different households cannot be compared without accounting for their sizes. To deal with this, scholars use equivalence scales that permit converting household income into “equivalent income,” which is comparable among households regardless of size. One equivalence scale assumes full economies of scale in consumption, so that to obtain the equivalent income the unadjusted income is divided by 1. In this case, the well-being of a family with an income of \$50,000 would be the same whether it has four members or one. Another equivalence of scale assumes there are no economies of scale at all, thus to obtain the equivalent income, the unadjusted income is divided by the family size. In this case, the well-being of a family of four with an income of \$50,000 would be the same as that of a single-person household with an income of \$12,500. Between these two extreme equivalence scales, there is a wide range of options. One of the most widely employed scales in income distribution analyses in the U.S. is the “square root” (Atkinson and Brandolini, 2013; Fisher et al., 2013; Gornick et al., 2019; Rose, 2020), for which the equivalent income results from dividing the unadjusted income by the square root of the family size. Thus, the equivalent income of a family of four members is half its unadjusted income. In other words, the well-being of a family of four with an income of \$50,000 is the same as that of a single-person household with an income of \$25,000.

In this paper, we use the square root equivalence scale to convert household income into equivalent income and allocate this income to each household member to build the individual income distribution of the economy. Then, we define the class categories following the criterion established by the Pew Research Center mentioned above. The lower class comprises individuals with equivalent incomes up to two-thirds of the median equivalent income; the middle class ranges between two-thirds and two times the median; and the upper class includes individuals with incomes greater than two times the median. This results in a middle class that comprises 56.9% of total workers, whereas the lower and upper classes

⁷ Reeves et al. (2018) provided an empirical comparison of these three proposals.

account for 19.8% and 23.3%, respectively. To check the robustness of our results, this paper also uses a definition of class based on poverty lines. We set the limits of the middle class between two times and six times the absolute poverty line. Thus, the lower class comprises incomes below or equal to twice the poverty line, whereas the upper class includes those incomes greater than six times the poverty line. This lower cut-off of the middle class is widely used in the literature (Farley and Frey, 1994; Duncan et al., 1996; Adelman, 2004; Litcher et al., 2006), and Latner and Smeeding (2013) proposed the upper cut-off. We use the (federal) poverty lines provided by the U.S. Census Bureau for each type of family, which account for size and householder's age.⁸

We define class based on a financial indicator, income, allowing us to use the family, not the individual, as the unit of reference. We assume that family income reflects the class of its members in a better way than education and occupation do, given that the two latter characteristics are individual based and class moves beyond the individual, affecting the rest of the family members residing in the same dwelling (Manduca, 2018). The goods that individuals can buy, the education they can provide to their children, their lifestyle, aspirations, and even what society expects from them depend on family income (and wealth).⁹ Family class is also a reflection of connections and job opportunities for its members. In fact, as audit studies show, cultural marks (e.g., sports practiced or music preferences) are sometimes used by employers to identify applicants' family backgrounds, which shapes individuals' job opportunities beyond their own educational achievements; however, these class marks work differently for women and men (Rivera and Tilcsik, 2016).

The discussion we have brought here is not new in the stratification and class literature, throughout which there has been a heated debate about whether the individual or the household should be the unit of reference and whether using the latter could make women's work invisible (Sorensen, 1994; Plutzer and Zipp, 2001; Thaning and Hallsten, 2020). A conclusion emerging from this literature is that a distinction between an individual's position in the labor market and a family's position in the consumption market is pertinent, using one

⁸ Despite the critiques to the official poverty lines (Michael et al., 1997), they are still the usual reference of poverty in the U.S. Note that, when building classes based on the poverty line, we do not have to convert household income into equivalent income because there are different lines for the households depending on their sizes and compositions.

⁹ Our approach implies disregarding intra-household inequalities in well-being.

unit of analysis or the other depending on the type of research questions researchers want to answer. As Sorensen (1994, p.32) pointed out, “It is useful to distinguish between three types of concerns. The first has to do with research on the class position of individuals, the second with the family’s class position, and the third with the influence of the family on the individual’s class position.” The latter is precisely the kind of question this paper addresses: Whether the occupational patterns and wage gaps of workers of the various gender–race/ethnicity groups vary by a family’s social class.

3. Data and Methods

3.1 Defining Gender–Race/ethnicity–Class Groups in Our Data

Our data come from the 2015–2019 5-year sample of the ACS provided by the Integrated Public Use Microdata Series (IPUMS; Ruggles et al., 2020). To calculate a family’s total income, we aggregate the pre-tax personal income of all its members from all sources (i.e., wage and salary income, business income, social security income, public assistance income, supplementary security income, interests, dividends and rental income, retirement income, and other income) for the last 12 months.¹⁰ As previously mentioned, we adjust the family income by dividing it by the square root of the family size, which allows us to compare the incomes of households with different compositions. This adjusted or equivalent income reflects the socioeconomic status of the household (i.e., consumption, life style, aspirations, connections, etc.), which we assume translates to the members equally. To determine the median income for which class categories are established, we first calculate the family equivalent income and then allocate it to each family member. This means that our income distribution refers to individuals, not families. Then, we calculate the quotient between an individual’s equivalent income and the median equivalent income, which allows us to classify this individual as lower, middle, or upper class depending on whether the quotient is lower than or equal to two-thirds, higher than two-thirds and lower or equal to two, or higher than two.

Given the increasing number of unmarried couples in U.S. society (Autor and Wasserman, 2013; Pew Research Center, 2019), we consider that to explore the labor patterns of women

¹⁰ The IPUMS standardized all dollar amounts of the 2015-2019 5-year sample to dollars in 2019.

and men, cohabitation is more important than being legally married. This is why our families consist of different-sex and same-sex couples, whether married or not. By extension, single-person households and individuals who do not live with either a partner or relatives are considered single-person families.¹¹ We only work with individuals who live in households, eliminating those who live in group quarters.

Apart from social class, we also take into account individuals' gender and race/ethnicity to define our groups.¹² Based on self-reported information, we classify workers into nine gender–race/ethnicity groups: (non-Hispanic) White, Black, and Asian women and men, Hispanic (irrespective of race) women and men, and remaining workers (men and women lumped together). We partition White, Black, Asian, and Hispanic women and men into our three class categories (i.e., lower, middle, and upper class). This results in 25 gender–race/ethnicity–class groups. Figure 1 shows the share of each gender–race/ethnicity within each class. We see that the distribution of the groups changes with class. Thus, although Blacks and Hispanics represent 29% of total workers, they account for 46% of the lower class and 14% of the upper class. Moreover, despite the fact that our approach does not allow us to disentangle the class of men and women belonging to the same family, we find gender differences by class. Although White, Black, Asian, and Hispanic women represent 46% of the workers, they account for 50% of the individuals in the lower class and 45% in the upper class.

¹¹ Our explorations suggest that the inclusion of single-person households barely affects the unconditional and conditional wages of any group in the upper and middle classes. In the lower class, the wages of Asian women and men would be lower if we restricted the analysis to households with at least two members whereas the wages of other groups would increase (White men) or remain almost the same. This suggests that, in the lower class, Asians who live alone are better than single-person households of other races are.

¹² Our sample is restricted to workers aged 16 or older who were employed at the time of the interview. The “self-employed not incorporated” and the “unpaid family members” are not included in our sample.

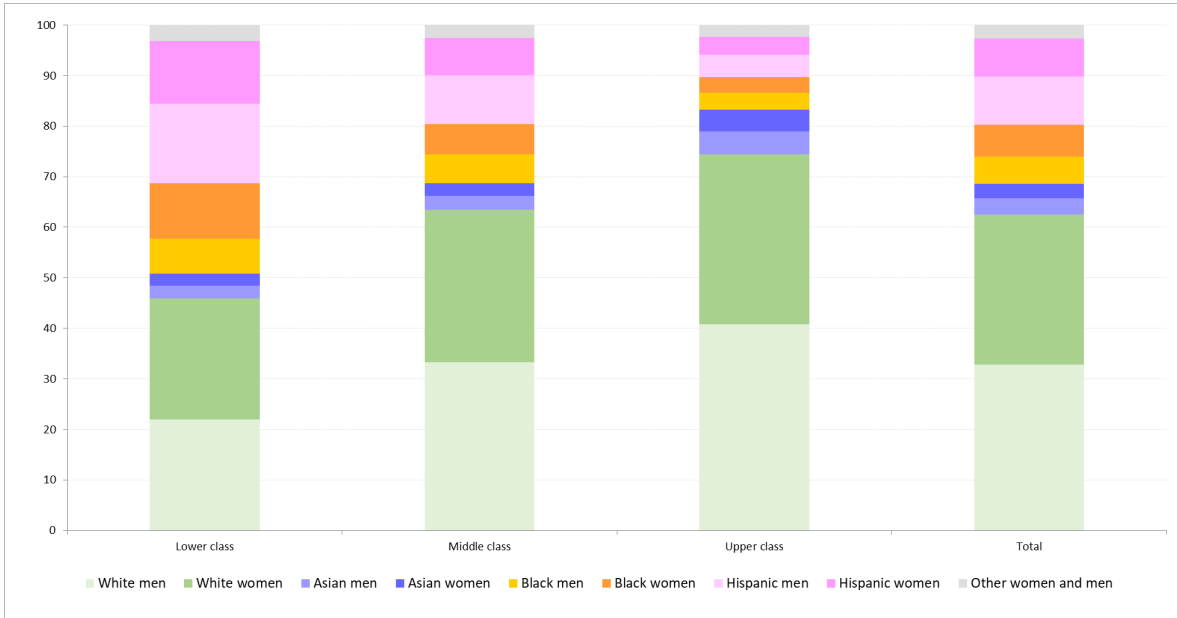


Figure 1. Gender–race/ethnicity composition of each social class.

With respect to occupations, we distinguish among 426 categories, which allows us to explore the role that occupations play in explaining intergroup wage disparities with a high level of detail.¹³ Each occupation’s wage is approximated by the average hourly wage after trimming the first percentile and the 99th percentile of the wage distribution in that occupation.

3.2 Estimating the (Un)Conditional Earning Gap of All Groups Simultaneously

To explore each group’s wages before and after controlling for characteristics, we follow the tools proposed by Del Río and Alonso-Villar (2015). For each gender–race/ethnicity group (g), we calculate the differential between the group’s wage and the average wage of the economy, expressed as a proportion of the latter ($EGap^g$):

¹³ Although the occupational classification accounts for 458 categories, there is no employment data for 32 of them during the 2015–2019 period.

$$\begin{aligned}
EGap^g &= \left(\sum_j \frac{c_j^g}{C^g} w_j^g - \sum_j \frac{t_j}{T} w_j \right) \frac{1}{\bar{w}} = \\
&= \underbrace{\sum_j \left(\frac{c_j^g}{C^g} - \frac{t_j}{T} \right) \frac{w_j}{\bar{w}}}_{\Gamma^g} + \underbrace{\left[\sum_j c_j^g (w_j^g - w_j) \right]}_{\Delta^g} \frac{1}{C^g \bar{w}}, \tag{1}
\end{aligned}$$

where C^g represents group g 's size; c_j^g is the size of group g in occupation j ; T is the total number of workers in the economy; t_j represents occupation j 's size; w_j is the average wage of occupation j ; w_j^g is the average wage of group g in occupation j ; and $\bar{w} = \sum_j \frac{t_j}{T} w_j$ is the average wage of the economy.

The $EGap^g$ is decomposed into two terms: one represents the monetary gain or loss of the group due to its occupational sorting (Γ^g), and another shows whether, within occupations, the group has wage advantages or disadvantages (Δ^g). If group g tends to concentrate in highly paid (respectively, low-paid) occupations, Γ^g will be positive (respectively, negative). Analogously, if within occupations the group g tends to be paid above (respectively, below) average, Δ^g will be positive (respectively, negative). We also refer to them as the *between* and *within* components. Using this decomposition, we can determine whether a group's wage advantage or disadvantage (relative to the average wage of the economy) comes from its occupational sorting, from out-earning workers from other groups who work in the same occupations, or from a combination of both factors.

An advantage of this approach is that it can be easily combined with the counterfactual methods proposed by DiNardo et al. (1996) and Gradín (2013) to determine the conditional earning gaps of all the gender–race/ethnicity groups simultaneously. In other words, we can obtain the position of all the groups in the labor market if they did not differ in terms of basic characteristics. To do that, we split each group into subgroups or cells, denoted by z , which result from combining those characteristics (i.e., education, age, immigration profile, etc.). We keep the wages and occupational sorting of the individuals in that cell unaltered but we reweight the size of that cell to make it equal to that of the reference group, which are White

$$\Psi_z = \frac{\Pr(\text{Group} = BW) \Pr(\text{Group} = WM|z)}{\Pr(\text{Group} = WM) \Pr(\text{Group} = BW|z)}, \text{ for only one group, Black women (} BW \text{ denotes}$$

Black women and WM denotes White men). The first fraction of Ψ_z is approximated by the quotient between the number of Black women and White men in the sample. We obtain the second fraction through a logit model, over the pooled sample of Black women and White men, which estimates the probability of an individual with attributes z being in the White men group rather than in the Black women group:

$$\Pr(\text{Group} = WM|z) = \frac{\exp(z\hat{\beta})}{1 + \exp(z\hat{\beta})}, \quad (2)$$

where $\hat{\beta}$ is the associated vector of estimated coefficients. The other term, follows immediately from the above given that $\Pr(\text{Group} = BW|z) = 1 - \Pr(\text{Group} = WM|z)$.

By following this procedure for all the groups, we build a counterfactual economy in which all groups have the same basic characteristics. This will allow us to determine—if the groups do not differ in terms of characteristics other than gender and race/ethnicity—which groups have wages above or below the average wage, how far they are from that average, and how important the between and within components are.

Additionally, we decompose the difference between the earning gap in the actual and counterfactual distributions to determine each covariate's contribution. We use the Shapley decomposition (Gradín, 2013), which improves DiNardo and coauthors' decomposition, because the result does not depend on the sequence followed to include the covariates.

The covariates we include in our conditional analysis are standard in the gender and racial wage gap literature (Darity and Mason, 1998; Altonji and Blank, 1999; Bailey and Collins, 2006; Kim, 2009; Paul et al., 2021; Alonso-Villar and Del Río, 2021): Education achievements (less than high school, high school diploma, some college, bachelor's degree, and master's or doctoral degree); age (younger than 36, between 36 and 55, and 56 or older); years of residence (U.S. born, up to 15 years in the country, and more than 15 years); English proficiency (speaking only English at home or speaking English very well/well, and speaking not well or not at all); city size (living in a metropolitan area with at least 1 million inhabitants

and living elsewhere); and region of residence (Northeast, Midwest, South, and West).¹⁴ In some analyses, we also control for a family's class to account for differences in the class structure of our gender–race/ethnicity groups.

4. Looking at Wages at the Intersection of Gender, Race/Ethnicity, and Social Class

We start our analysis by looking at the unconditional wage of each gender–race/ethnicity group, whose differential with respect to the average wage of the economy, $EGap^g$, is expressed as a proportion of the average wage. As Figure 2 illustrates, there are important discrepancies among groups, whose unconditional wages (see the actual distribution) range between 41% above the average (Asian men) and 31% below it (Hispanic women).

Given that our interest is to explore the different integration of these groups into the labor market, we also determine those earnings if the groups did not differ in terms of basic characteristics such as education achievements, immigration profile, English proficiency, age structure, region of residence, and metropolitan area size—factors that are usually accounted for in the literature. In addition to the counterfactual based on these six factors, we build another one (labeled counterfactual+) that accounts for those factors and social class, which is where our approach differs from what has been done in the literature so far. We want to explore if social class structure plays any role in explaining the gender–race/ethnicity wage disparities.

¹⁴ We do not control for additional variables to have enough observations for each group and cell within each class.

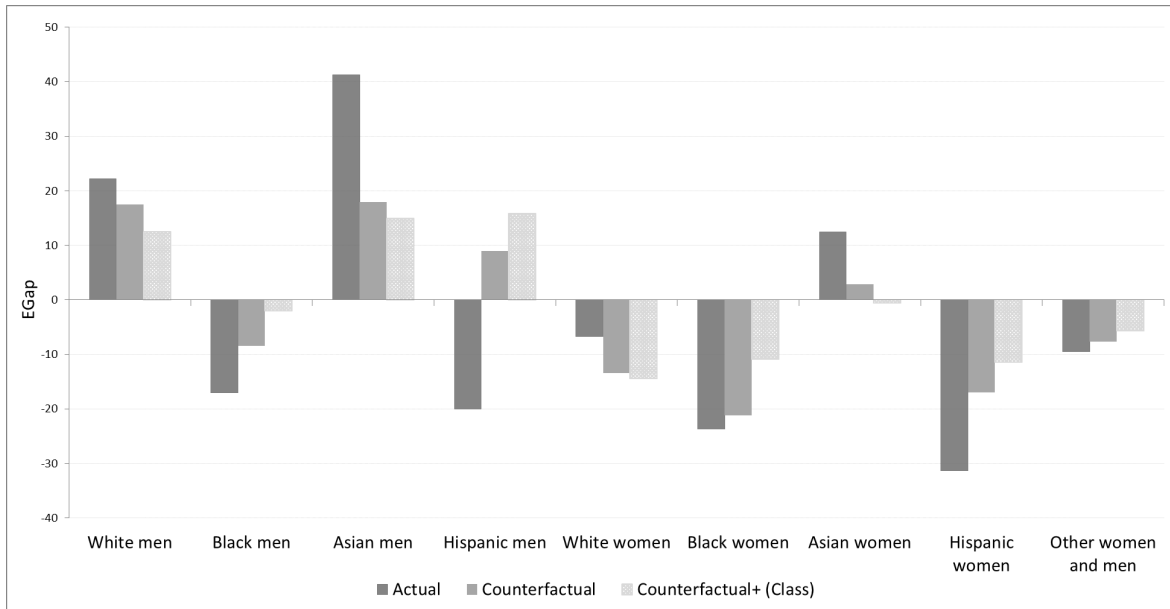


Figure 2. Earning gap of each group ($EGap^s$) in the actual, the counterfactual (six covariates), and the counterfactual+ (six covariates + class) distributions.

Figure 2 shows that intergroup wage disparities substantially fall when accounting for these factors. The wages of Black men are no longer far from average, and those of Black and Hispanic women are closer to the average than they were in the actual distribution. The wage advantage of White and Asian men also shrink after controlling for characteristics. However, we still find important wage differentials among groups. In the counterfactual+ economy, the conditional wages of White, Asian, and Hispanic men are well above average (13–16%), whereas those of Black men are around average. On the contrary, White, Black, and Hispanic women have conditional wages well below average (11–14%). Asian women is the only female group with conditional wages around average.¹⁵ The chart also reveals that Black women earn less than comparable White women do when accounting for the six basic characteristics. However, when additionally controlling for class, Black women earn a bit more than White women do. This suggests that the racial penalty of Black women is not independent of their class structure, a matter to which we will return.

¹⁵ We should be aware of the fact that the earnings of Asian women and Hispanic men may be slightly overestimated. In line with Alonso-Villar and Del Río (2021), we find that the earnings of these two groups would be lower if we replaced the weight of each cell by the weight of the corresponding cell in the sample for White men, rather than estimating that weight using the logit model. The reason why we follow the semiparametric approach is that it provides a decomposition of the factors involved.

Figure 3 shows the contribution of each covariate to explain the difference between the $EGap^s$ in the actual and counterfactual+ distributions for each group. As White men are the reference group, their characteristics are the same in both distributions, which explains why they do not appear in the chart.¹⁶ To interpret the graph, note that the factors contributing positively (respectively, negatively) are those that make the group have higher (respectively, lower) wages in the actual distribution than in the counterfactual one.

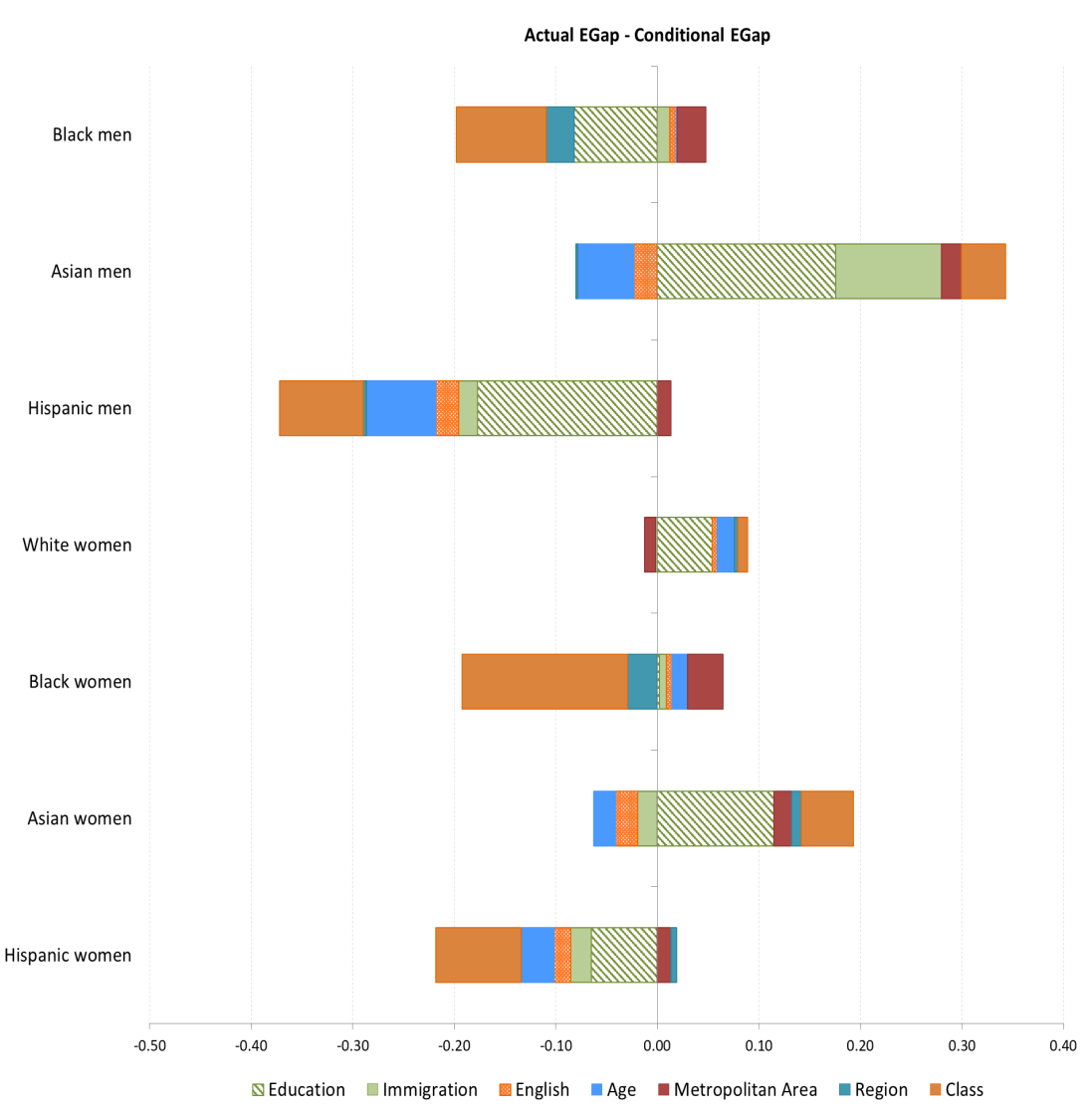


Figure 3. Actual $EGap^s$ minus conditional $EGap^s$ and factors' contributions.

¹⁶ In Figure 2, the earning gap of this group is not the same in the actual and counterfactual distributions because, although their wages are the same, the average wage of the economy varies.

Perhaps the most striking finding is the role class plays for Black women, which stands out as the group's most important factor.¹⁷ In line with Figure 2, the earning gap of Black women would decrease substantially, although it would not disappear, if they were distributed across social classes in the same way that White men are (in the actual distribution, Black women have a much lower presence in the upper class and a much higher presence in the lower class than White men do; see Appendix). Notably, in Figure 3 the variable class plays a role in itself, disentangled from that of the other variables. This suggests that the composition by class of Black women plays a role in explaining their low wages beyond human capital and location factors. Class structure also helps to explain the low wages of Black men and Hispanic women and men, although the magnitude of the effect is smaller. For Black men and Hispanic women, class is as important as education, whereas for Hispanic men education continues to be the most important determinant of their wage disadvantage. Finally, Asian women and men's earning gap decrease after including class control, although the effect is small (especially for the latter, for whom their immigration profile is a more important factor).

4.1 Analysis Disaggregated by Class

In what follows, we look at each class separately (Figures 4-6). This means that workers are compared to workers of the same class, and average wages are determined based on individuals in the corresponding class. We undertake the analysis in the actual distribution and in the counterfactual one (six variables).¹⁸

¹⁷ Although not shown here, the contribution of each of the six factors in the counterfactual analysis without accounting for class is similar to the ones given here. Class seems to be a factor that does not alter the role of the other six factors for any of the groups. The exception are Black women, for whom education plays no role in counterfactual+, but it does in the counterfactual without class (although small). Our analysis suggests that education in the counterfactual distribution without class may capture part of the social class that explicitly appears when using counterfactual+. The reason may be that the proportion of Black women with tertiary education who are in the upper class (respectively, lower class) is lower (respectively, higher) than that of White men. College-educated Black women tend to concentrate in the middle class to a higher extent than college-educated White men do. Something similar, but less intense, happens to Black men.

¹⁸ Although not provided in the paper, if we define class based on the absolute poverty line, as explained in Section 2, the results involving Figures 2-6 do not change. This suggests that our results are robust whether we use a relative or an absolute approach.



Figure 4. Decomposition of $EGap^g$ in occupational sorting (Γ^g) and within-occupation advantages/disadvantages (Δ^g) in the actual and counterfactual distributions: Upper class.

In the upper class (Figure 4), we find large intergroup wage differences after controlling for basic characteristics, with wages ranging from approximately 17% above average for Asian and White men to 20% below average for Hispanic women. The wages of White and Black women barely change after including controls; however, the wages of Hispanics rise and those of Asians decrease, especially those of men. The wages of Black men also increase, but less so than those of Hispanic men. All female groups have conditional wages below average; the situation of Asian women is better than that of the other female groups (the

conditional wage of Asian women is 6% below average, whereas for other women, the gaps range between 18% and 20%). Moreover, the four female groups have lower conditional wages than any male group, including Black men, which is the only male group with wages below average (5%). We also find that the position of Hispanic men is not as advantageous as that of White and Asian men, although they have conditional wages above average (9%).

The decomposition of $EGap^g$ in its two components (Γ^g and Δ^g) reveals that most of the disadvantage of Asian women arises from being underpaid within occupations with respect to other (male) upper-class workers. Although underpayment within occupations also harms White, Hispanic, and Black women, these women are additionally penalized by their occupational distributions, especially Black women.

In the middle class (Figure 5), conditional wages range between 10% above average (White men) and 10% below average (White women). Hispanic women are the only female group whose wages increase after controlling for characteristics. As in the upper class, when including controls, the wages of Asian men decrease whereas those of Black and, especially, Hispanic men rise. Once again, all female groups have conditional wages below average, less so Asian women than the other groups. As opposed to what happens in the upper class, the disadvantage of Asian women does not arise from their underpayment within occupations but from their occupational sorting. For Black women, occupational sorting is again the main reason for their wage disadvantage after controlling for characteristics. In the middle class, the wage advantage is also higher for White men than it is for Asian and Hispanic men (who share similar conditional wages). The conditional wages of Black men are again below average, although less so than in the upper class (2% versus 5%), perhaps because wage dispersion increases with class. Once more, the wage disadvantage of the four female groups is larger than that of Black men.

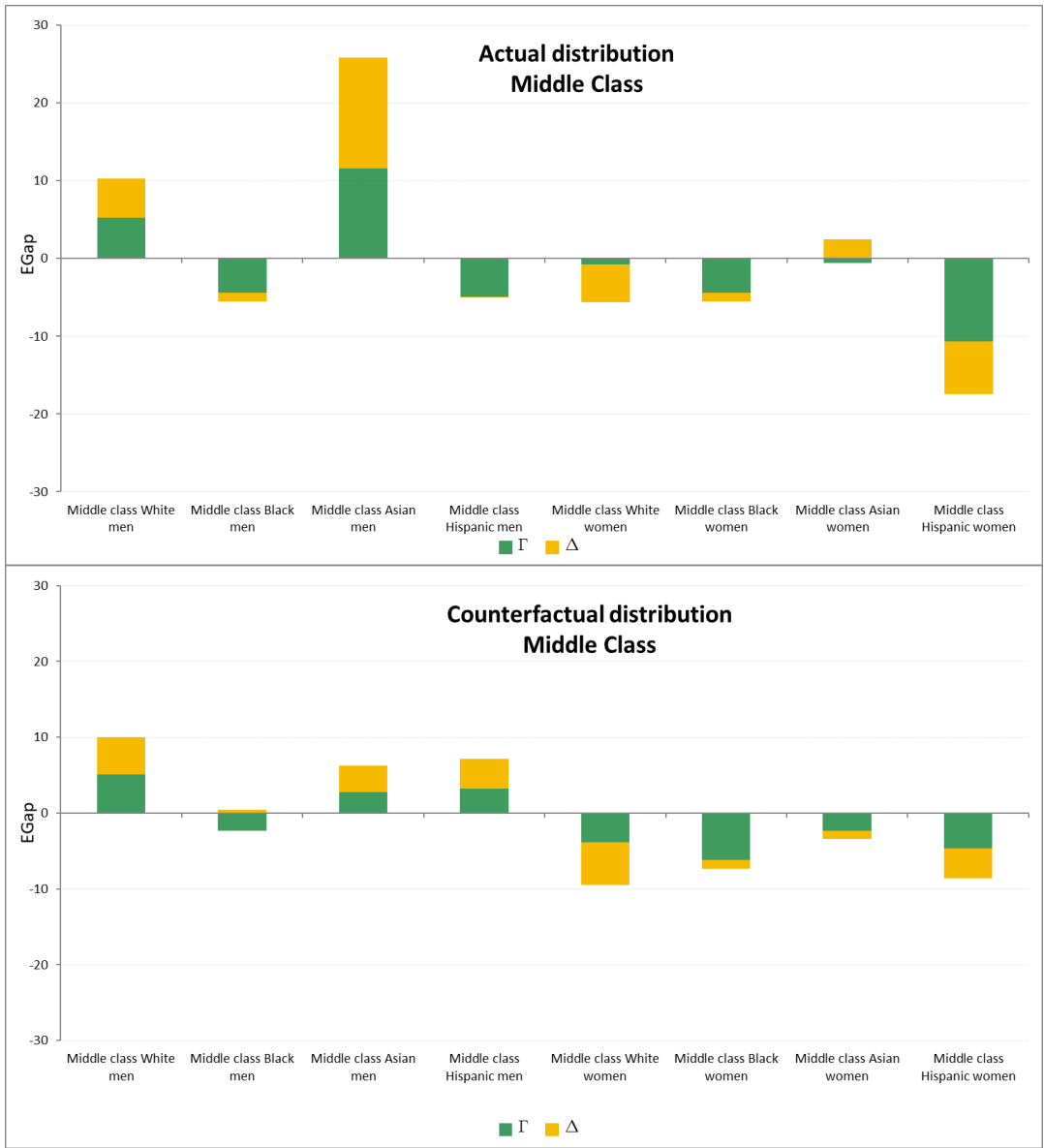


Figure 5. Decomposition of $EGap^g$ in occupational sorting (Γ^g) and within-occupation advantages/disadvantages (Δ^g) in the actual and counterfactual distributions: Middle class.

In the lower class (Figure 6), intergroup wage disparities are lower than in the other classes, although the directions of the changes between the unconditional and conditional analyses are analogous.

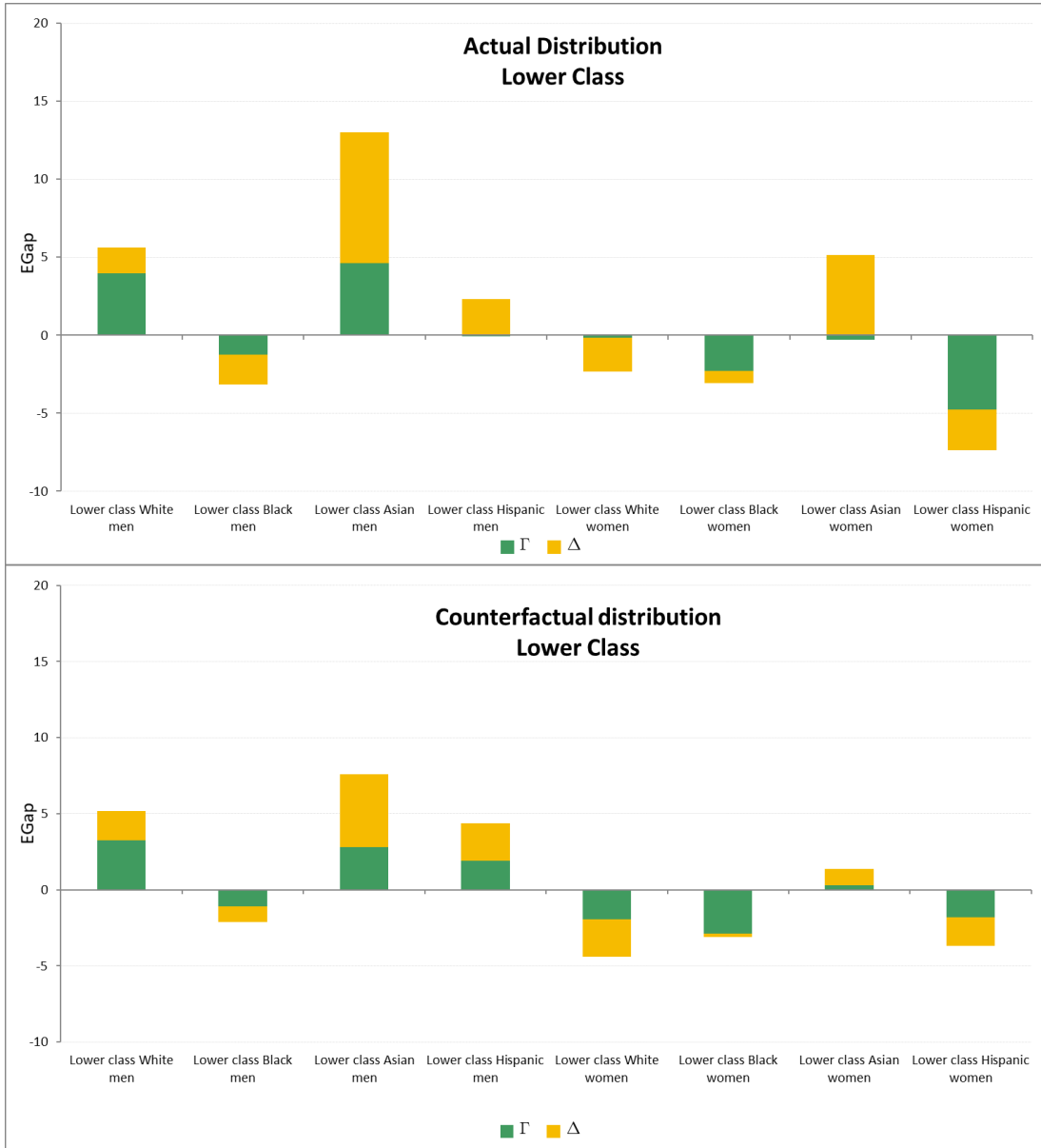


Figure 6 Decomposition of $EGap^g$ in occupational sorting (Γ^g) and within-occupation advantages/disadvantages (Δ^g) in the actual and counterfactual distributions: Lower class

Hispanic women are again the only female group whose wages increase after controlling for characteristics. The wages of Black and Hispanic men also increase whereas those of Asian men substantially fall. Notably, most of the wage disadvantage of Black women in the counterfactual economy comes again from their occupational sorting, whereas for White and

Hispanic women occupational sorting and underpayment within occupations play a role.¹⁹ As for men, Asians, Whites, and Hispanics have conditional wages above average, especially the former, but those of Blacks are slightly below average. About two-thirds of the wage advantage of White men in the counterfactual distribution stems from their occupational sorting. On the contrary, approximately two-thirds of the wage advantage of Asian men arises from out-earning other groups within occupations, which differs from what happens in the other classes.

When comparing Figures 4-6, we find that the racial gaps of Black and Hispanic men (relative to White men) increase with class, which is not surprising because there is more wage dispersion in the upper tail of the wage distribution than in the lower tail. The conditional wages of Asian men are lower than those of White men in the upper and middle classes, although not in the lower class. White and Asian men also differ because of the role within and between components play in explaining their positions. For Asian men, the proportion of the earning advantage (*vis-à-vis* the average wage) explained by occupational sorting increases with class, whereas for White men, occupational sorting is a more important factor in the lower class.

As with the racial/ethnic gap of Black and Hispanic men, the gender wage gaps of female groups increase with class (as does the wage advantage of Asian women *vis-à-vis* White women). The gender wage gap of Black women is consistently lower than that of other female groups (due to the racial disadvantage of Black men), no matter the class at which we look; however, the gender gap of White women is systematically larger than that of other women (due to the high privilege of White men). We do not find a systematic racial/ethnic penalty for Black and Hispanic women (*vis-à-vis* White women).

As shown in the Appendix, the factors that explain the wage differentials between the actual and counterfactual economies for each group are similar across classes. There are some exceptions though. Region plays an important role to explain the low unconditional wages of Black women and men in the lower class. Metropolitan area pushes in the other direction, offsetting part of its effect. Immigration seems to be an especially important factor that

¹⁹ The conditional wages of Asian women are approximately average. However, if we built the counterfactual as explained in footnote 15, their wages would be below average, which suggests that the semiparametric counterfactual may overestimate the earnings of Asian women.

explains the unconditional wage advantage of Asian men in the upper and middle classes (as important as and more important than education, respectively).

4.2 Analysis with 25 Groups

Finally, we provide an analysis in which all the gender–race/ethnicity–class groups are explored simultaneously (Figure 7) in the actual and counterfactual economies. This analysis departs from the previous one because we now use a common reference, middle-class White men, for all of them. We aim to explore if the wage advantage of some male groups in a class surpass the advantages of other gender–race/ethnicity groups in an upper class.

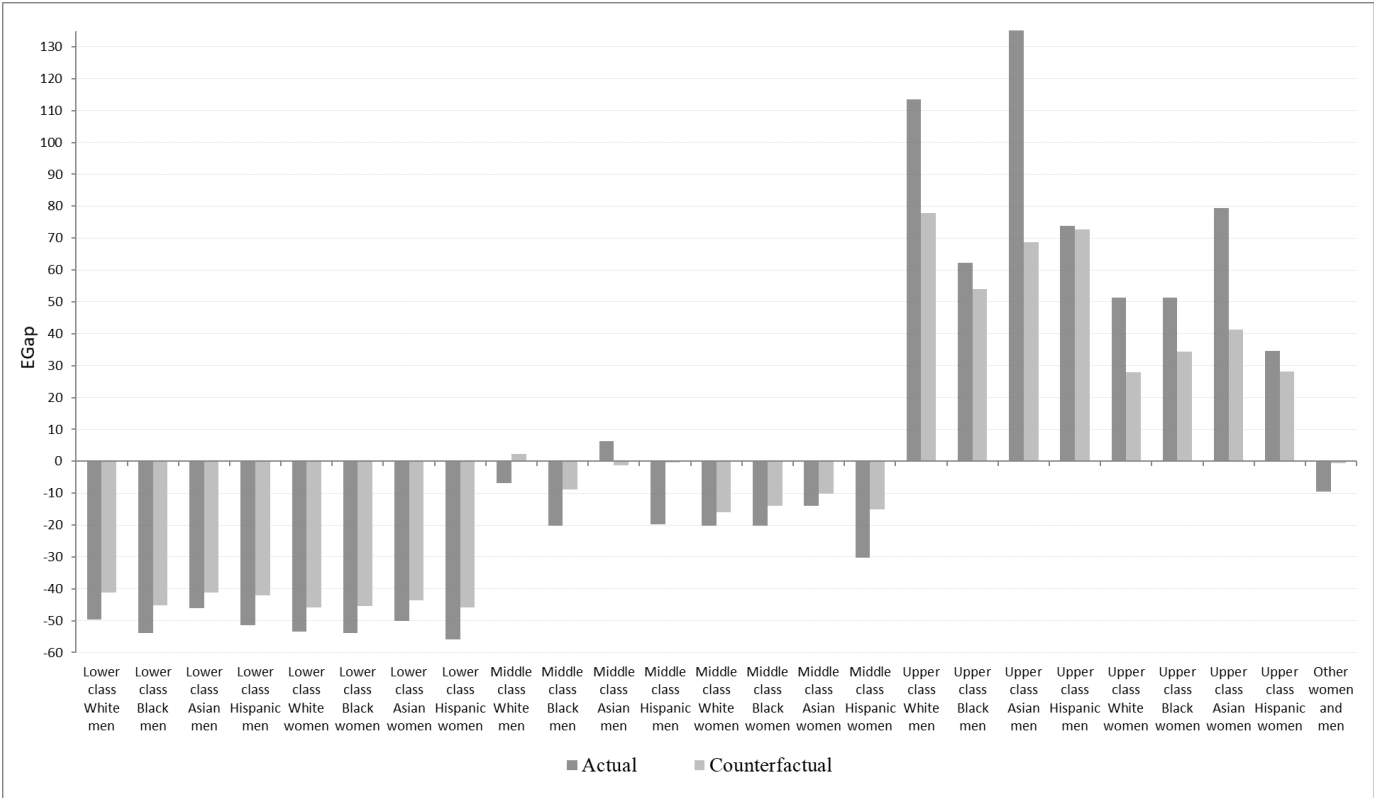


Figure 7. Earning gap of each group ($EGap^g$) in the actual and counterfactual distributions.

Figure 7 suggests a hierarchy in which the groups are first stratified by class, second by gender, and third by race/ethnicity. Focusing on the counterfactual economy, we find that all gender–race/ethnicity groups in the upper class have conditional wages well above average, all groups in the lower class have wages well below average, and those in the middle class are in between those extremes. The next key characteristic seems to be gender: all the female groups have lower conditional wages than any male group in the same class (except in the lower class, in which the conditional wages of Black men are similar to those of female

groups). Race comes third in this categorization. The conditional wages of Black men are lower than those of any other male group in the same class. As for women, the most distinctive pattern is that, in each class, the conditional wages of Asian women are always higher than those of other women. In addition, we find that the conditional wages of Black women are not lower than those of White and Hispanic women are. These findings are consistent with the ones obtained in our separated analysis for each class.

5. Conclusions

Our analysis suggests that the “mark of gender” extends beyond race and class. No matter the family social class to which individuals belong, women of any race/ethnicity receive conditional wages below the average wage of workers in the corresponding social class; this is especially the case for White, Black, and Hispanic women and less so for Asian women. Moreover, within each class, the conditional wages of women of any race/ethnicity are lower than those of Black men, which is the only male group with conditional wages below average.²⁰

We do not find a racial penalty for Black women relative to comparable same-class White women; in each class, the conditional wages of Black women are slightly above those of White women. However, the literature shows that Black women as a whole, without accounting for class, earn less than comparable White women (Kim, 2002; Paul et al., 2021; Alonso-Villar and Del Río, 2021), which our estimations confirm when only controlling for standard human capital and location variables. By including a family’s social class into the analysis, we take a step further. Our investigation suggests that the racial wage penalty of Black women stems from a class stratification that penalizes them: they are overrepresented in the lower class and underrepresented in the upper class. If we remove the class-composition effect, Black women do not earn less than White women with similar characteristics do. Likewise, the ethnic disadvantage of Hispanic women (*vis-à-vis* White women) detected in previous studies (Mora and Dávila, 2018; Alonso-Villar and Del Río,

²⁰ As previously mentioned, our counterfactual distribution based on logit models overestimates the wages of Asian women, which explains why their conditional wages in the lower class are slightly above average and, therefore, higher than those of Black men. When building instead a counterfactual distribution based on direct observation of the sample as explained in footnote 15, we find that the conditional wages of Asian women are lower than those of Black men.

2021) may almost vanish if they are compared with same-class White women. The different class structure seems to explain the conditional wage differential between Hispanic and White women. This study also suggests that White women steadily lag behind Asian women (especially in the upper class, where the wages of White women are 12% lower than those of comparable Asian women), a pattern that their same-race male peers do not share.

Our analysis unveils some discrepancies among female groups with respect to the sources of their wage disadvantages after controlling for characteristics. Thus, Asian women get most of their disadvantage in the upper class (relative to the average wage) from being underpaid within occupations, whereas in the other classes, this factor plays almost no role. Unlike them, the disadvantage of Black women steadily stem from their occupational sorting, no matter the class to which they belong, although in the upper class, they are also underpaid within occupations. In the three classes, White and Hispanic women are penalized by both factors in a similar way.

This paper also shows that the wage disadvantage of Black men goes beyond class. Their conditional wages are below average in the three classes, especially in the upper class, because they tend to concentrate in occupations that have lower wages than those in which their male peers work. The distinctive pattern of Black men is even more notorious when looking at the wages of White, Asian, and Hispanic men, who systematically have conditional wages well above average no matter their class.

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Appendix



Figure A1. Basic characteristics of the gender-race/ethnicity groups (continued on next page).

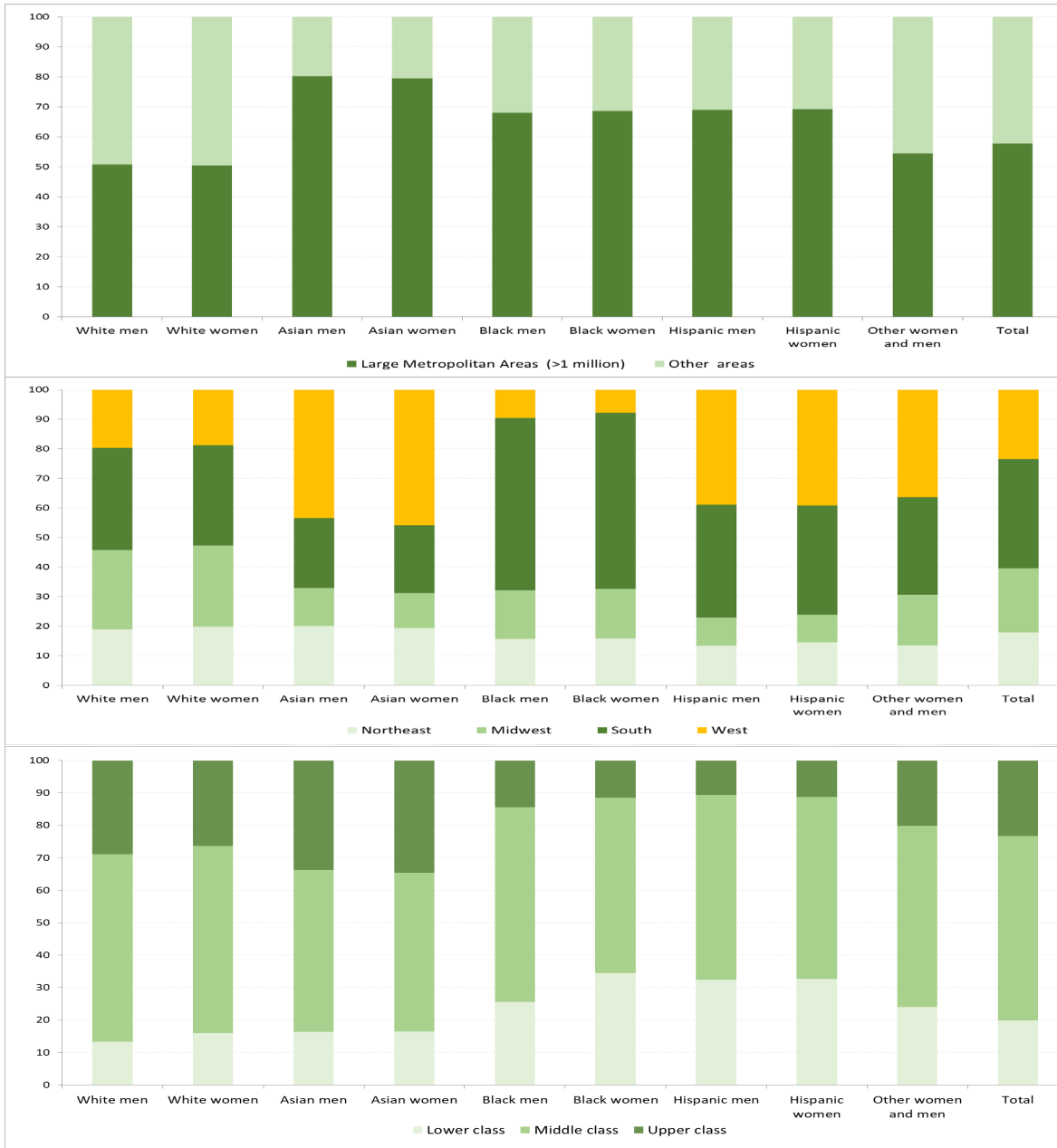


Figure A1. Basic characteristics of the gender-race/ethnicity groups.

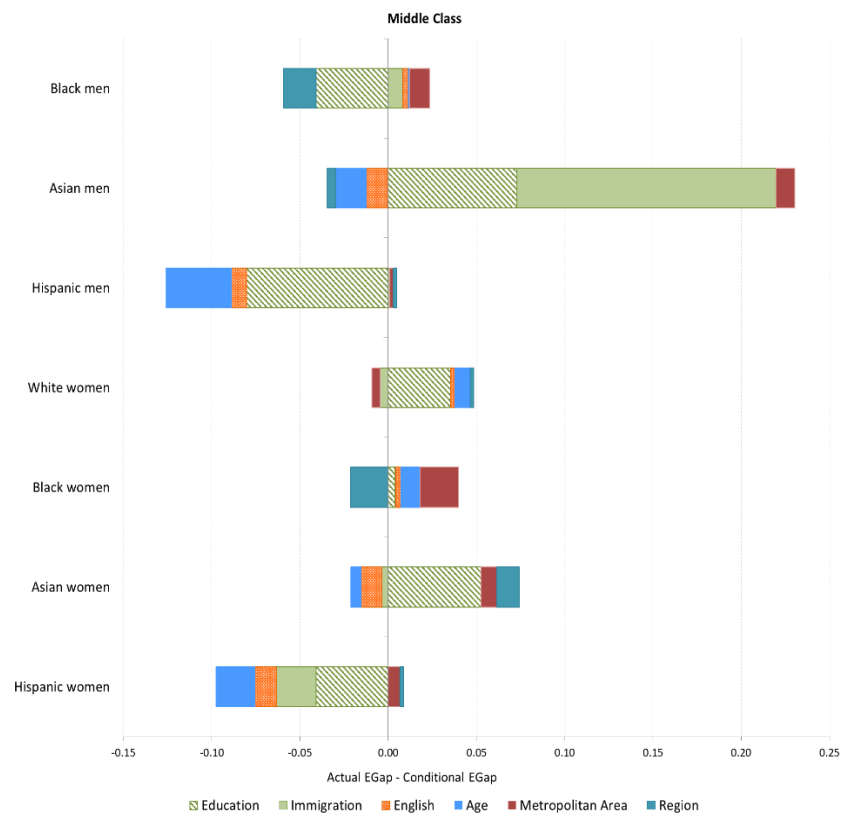
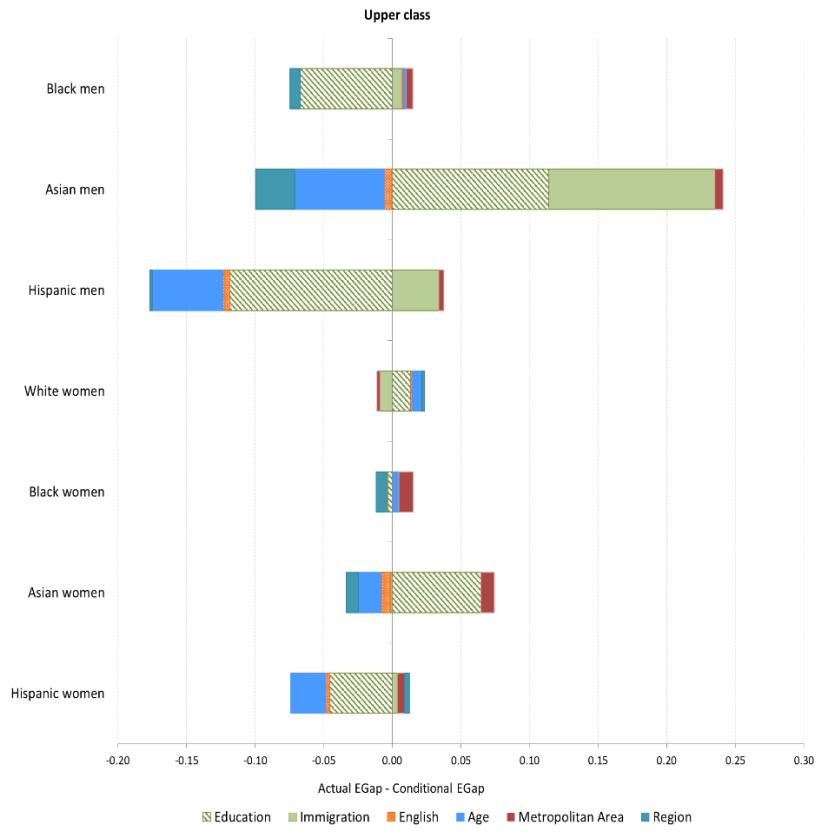


Figure A2. Actual $EGap^s$ minus conditional $EGap^s$ and factors' contributions in each class (continued on next page).

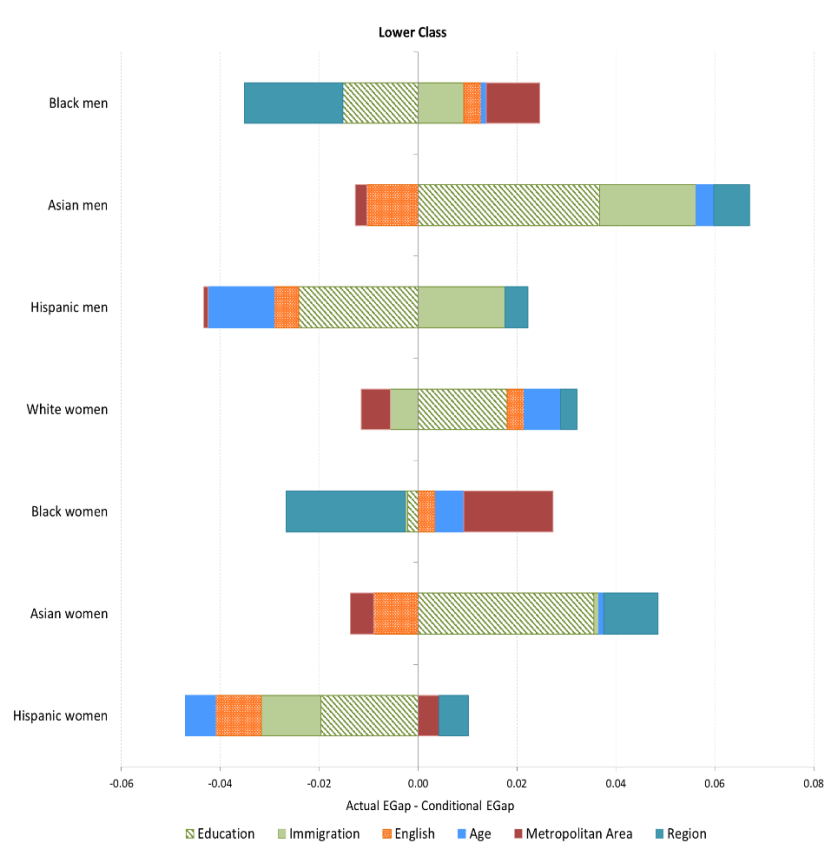


Figure A2. Actual $EGap^s$ minus conditional $EGap^s$ and factors' contributions in each class.