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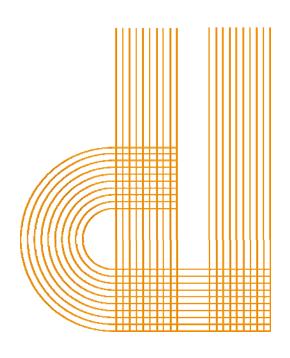
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Occupational Achievements by Sexual Orientation in the U.S.: Are There Differences Among Races?

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Occupational Achievements by Sexual Orientation in the U.S.: Are There Differences Among Races?*

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Abstract

This paper shows that the occupational sorting of racial-gender groups varies by sexual orientation. Except for Asians, women in same-sex couples are more evenly distributed across occupations than women in different-sex couples. Black and Hispanic men in same-sex couples are also less concentrated in occupations than their straight counterparts, while the pattern for Asian and white men is less conclusive. In addition, the analysis reveals that, except for black women (whose monetary losses associated with their sorting do not seem to be affected by sexual orientation), for the remaining female groups, the occupational achievements of lesbians are higher than those of their straight counterparts. The occupational attainments of gay men are also higher than those of straight men of the same race/ethnicity. However, when comparing workers having bachelor's degrees with their peers in education, the gains of Asian lesbian and straight women associated with their occupational sorting almost disappear and white lesbian women no longer have gains. Asian and white gay men still have gains associated with their sorting, although lower than those of their straight counterparts. Black and Hispanic gay men do remain better off than their straight counterparts, although they have losses associated with their sorting. When comparing workers with a low educational level with their peers in education, the only groups with gains associated with their sorting are white straight and gay men, especially the former. Gay men are worse off than straight men of the same race/ethnicity, while lesbian women tend to have lower losses than their straight counterparts.

JEL Classification: D63; I31; J15; J16

Keywords: Sexual orientation; gender; race; occupational segregation; wages; wellbeing

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1. Introduction

Although far from the interest that LGBT people has aroused in the public arena, since the mid-1990s there has been an increasing amount of economic literature on the association between sexual orientation and position in the labor market. Badgett's (1995) pioneer work spurred a wide number of studies dealing with wage discrimination in the U.S., and also in other countries, based on sexual orientation (Allegretto and Arthur, 2001; Black et al., 2003; Carpenter, 2007, 2008; Antecol et al., 2008; Drydakis, 2011; Brysson, 2016). Their findings suggest a strong evidence of wage discrimination against gay men in the U.S., at least when compared to heterosexual married men, whereas in the case of lesbian workers "more research is necessary to disentangle the complex position that lesbians find themselves in" (Badgett, 2007, p. 38).

Regarding occupations, scholars have presented evidence of a high concentration of homosexual workers in certain kinds of jobs (Badgett and King, 1997; Blandford, 2003; Ueno et al., 2013). For example, some works find that lesbian women in the U.S. (gay men, respectively) have a higher (lower, respectively) representation in highly masculinized occupations than straight women (men, respectively) do (Antecol et al., 2008; Baumle et al., 2009). However, as Tilcsik et al. (2015, p. 2) point out "the occupational segregation of gay and lesbian workers [...] presents an unresolved puzzle for researchers." The few studies that deal with the measurement of occupational segregation have explored the representation of gays and lesbians in occupations either using a broad classification of occupations or focusing only on a few titles. As opposed to the case of segregation by gender (or race), there is almost no research on the extent of occupational segregation by sexual orientation.

As far as we know, this phenomenon has only been quantified in Del Río and Alonso-Villar (2016). By using a fine classification of occupations accounting for 453 titles and distinguishing between women and men living in either in same-sex or different-sex couples, these authors show that partnered lesbians in the U.S. are the group with the lowest segregation level, which is far from the level of their straight counterparts. With respect to men, their findings are not so clear, since segregation is higher for partnered gays according to some indices while it is the other way around according to others. Their analysis reveals, however, that the occupational sorting of partnered gay men

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¹ See Badgett (2007) and Ozeren (2014) for two reviews of the literature.

brings this group monetary gains that are larger than those of straight men. They also find that the occupational distribution of partnered lesbians is not as advantageous—their monetary gain associated with its occupational sorting is close to zero—although this group does not have losses associated with their distribution across occupations as straight partnered women do. The study also shows that the occupational advantage of partnered gays and lesbians, as compared to their straight counterparts, is a consequence of their higher educational achievements. Despite this, the analysis reveals that lesbians have an occupational advantage that is far from that of straight men—who have lower educational achievements than either lesbian or straight women—and also from that of gay men, whose educational attainments are not too different from those of lesbians. Consequently, the mark of gender exists among partnered homosexual workers, although it seems to be lower than that among heterosexuals.

This paper aims to contribute to the ongoing literature by adding a new factor into the analysis of segregation by sexual orientation in the U.S.: individuals' race/ethnicity. In fact, as Del Río and Alonso-Villar (2016) shows, the racial composition of partnered gay and lesbian workers explain part of their position in the labor market as compared to that of partnered straight men. On the other hand, there is plenty of empirical work that shows that apart from sex, race/ethnicity affects people's positions in the U.S. labor market and, in particular, the occupations they enter (King, 1992; Watts, 1995; Cotter et al., 2003; Reskin et al., 2004; Queneau, 2009; Del Río and Alonso-Villar, 2015; Alonso-Villar and Del Río, 2017). Moreover, gender and race have been claimed to contribute to shaping and maintaining social hierarchy and economic inequality (Collins, 1999; Glenn, 1999; Browne and Misra 2003).

But segregation by gender does not affect all races/ethnicities alike. It seems to be more prevalent for Hispanics and less so for Asians than it is for whites or blacks (Hegewisch et al. 2010; Mintz and Krymkowski, 2011). On the other hand, for women, occupational segregation by race/ethnicity is of a lower magnitude than it is for men (Spriggs and Williams 1996; Reskin et al. 2004; Alonso-Villar et al. 2012). Gender and race/ethnicity interplay to privilege some demographic groups and disadvantage others, and in this hierarchical system white men are the group at the top of the ranking (Darity and Mason, 1998).

In an intersectionality framework where categories according to which individuals are classified by society overlap, social and economic stratification becomes a more complex phenomenon since the interests of a person as a member of a category may conflict with her/his goals as a member of another category. There is no doubt that gender, race/ethnicity, and sexual orientation shape social relations and, therefore, labor settings. However, there is still "a lack of research on the effects of multiple group memberships on workplace discrimination. The impact of race and gender are often explored in isolation [...], and sexual orientation has been excluded from these discussions" (Ragins et al., 2003, p. 47). The scarcity of surveys that accurately account for the gay and lesbian population in all its diversity has been an obstacle to undertake this kind of studies. But as Badgett and Williams (1992, p. 654) point out, if we want to reach a thorough understanding on how sexual orientation affects one's labor market position, "this understanding must be developed in the context of other structural factors determining individuals' labor market choices and positions, that is, race, class, and gender."

In line with this, the first goal of this paper is to measure the occupational segregation of 16 mutually exclusive demographic groups, those defined by the crossing of gender, race/ethnicity (only the 4 largest racial/ethnicity groups are considered in the analysis), and sexual orientation. The second goal is to quantify the economic consequences, both in monetary terms and in terms of objective well-being, that the occupational sorting of these groups have for each of them. Given that these 16 groups differ in terms of educational achievements, this paper also explores whether the patterns of the groups change when controlling for education.

In doing so, we use the 2010-2014 5-year sample of the Integrated Public Use Microdata Series (IPUMS), drawn from the American Community Surveys (ACS) and homogenized by the University of Minnesota (Ruggles et al., 2015). The ACS, which replaced the census long form from 2000 on, includes occupation at a fine classification level and provides a wide range of economic and demographic characteristics of individuals and households. Despite the fact that this database does not offer information about one's sexual orientation, it allows for the identification of individuals living in same-sex couples, who are the only gay and lesbian workers who with we work in this investigation, as is standard practice when using the ACS or the census. Notwithstanding this limitation, this dataset is suitable for this kind of study due to its large size (Tilcsik et al., 2015). This allows us to study the relatively small group of gay and lesbian workers while taking race/ethnicity into account. In any case, the fact that

we do not account for the whole set of gay and lesbian workers determines our empirical strategy when we choose the population of reference against which to compare the occupational sorting of our target groups. We use two different benchmarks: 1) the whole economy and 2) individuals living in couple partnerships.

To quantify the occupational segregation of each of our 16 target groups, the occupational sorting of each group is compared to the occupational structure of the benchmark economy. This allows us to determine how evenly or unevenly a group is distributed across occupations. If a group represents, for example, 5% of the workers of the (benchmark) economy, we say that that group is not segregated so long as it accounts for 5% of each occupation's employment. Or equivalently, if an occupation accounts for 1% of the employment of the (benchmark) economy, no segregation for the group would require 1% of its members to be working in that occupation. This is the approach developed by Alonso-Villar and Del Río (2010) and the one followed in this paper.

However, in exploring the segregation of our target groups, this paper takes one step further. The measurement of the degree of unevenness of a group regarding its distribution across occupations does not say enough about the situation of that group since wages vary considerably among occupations. In analyzing segregation, it is also important to assess the "quality" of the occupational sorting of the group under consideration. For that purpose, this paper uses the measures developed by Alonso-Villar and Del Río (2016a), which allow quantifying the (objective) well-being loss or gain of a group associated with its occupational sorting, and also the measure proposed by Del Río and Alonso-Villar (2015), which allows quantifying this phenomenon in monetary terms rather than in terms of well-being. The use of several indices rather than only one will allow us to check the robustness of our findings. Apart from analyzing the 16 demographic groups mentioned above, we partition each of them by educational level to explore what happens when each group is compared with its peers in education.

The paper is structured as follows. Section 2 shows the methodology that is used to explore occupational segregation by sexual orientation, race/ethnicity, and gender. After presenting a brief background on the relationship between sexual orientation and position in the labor market, Section 3 offers some figures on the extent of occupational segregation for each target group. Later on, Section 4 explores whether the occupational sorting of each group brings it advantages or disadvantages, which depends on

occupations' relative wages. Given that there are important discrepancies in educational achievements among groups, this section ends adding this dimension into the analysis. Finally, Section 5 offers the main conclusions.

2. Methodology and Data

This paper addresses two aspects of segregation: 1) unevenness in the distribution of a target group across occupations—which is what we mean by the segregation of that group—and 2) the economic consequences of that unevenness.

2.1 Measuring the Segregation Level of Each Target Group

Occupational segregation is a phenomenon that can be dealt with from different perspectives, although the most common is the one which pays attention to whether demographic groups are evenly or unevenly distributed across occupations. This paper also follows this evenness perspective of segregation but departs from the most popular indices by focusing on the measurement of the segregation of a target group rather than on total or overall segregation. To clarify these differences, note that, for example, the well-known index of dissimilarity used to compare the occupational sorting of women and men actually quantifies segregation by gender and not the segregation of women.² Women are unevenly distributed across occupations not only because they are underrepresented in some occupations but also because they are overrepresented in others, which are precisely those in which men are underrepresented. In other words, both women and men are unevenly distributed across occupations (whatever the reasons for why they tend to concentrate in different kinds of occupations and the consequences that this fact has for each of these two groups). Apart from quantifying overall segregation in a binary framework, as is the case of gender, the literature has more recently developed tools to measure this phenomenon in a multigroup context in which more than two groups are involved (Silber, 1992; Reardon and Firebaugh, 2002; Frankel and Volij, 2011).

The approach we follow here is quite different because it allows measuring, in a multigroup context, the extent to which a target group is unevenly distributed across

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 $^{^2}$ This index was initially proposed by Jahn et al. (1947) and later popularized by Duncan and Duncan (1955), who compared it with other indices.

occupations. We move, therefore, from focusing on overall segregation to focus attention on what happens to a target group. We have to keep in mind, though, that the way the segregation of a group is quantified is consistent with how overall segregation is measured in the literature (as we explain below), and this is performed in a simple manner since it is not based on pairwise comparisons among groups.

The measurement of the segregation of a group was a conception initially proposed in Moir and Shelby-Smith (1979) in the context of two groups, women and men, to quantify the segregation of women in Australia. This idea was later formally developed in a multi-group context by Alonso-Villar and Del Río (2010), who proposed new measures and explored their properties. These authors showed that if we partition an economy into mutually exclusive demographic groups and calculate the segregation of each of these groups according to the measures they proposed, the weighted average of the segregation of these groups (with weights equal to the demographic shares of the groups) is equal to the overall segregation of the economy according to the corresponding measures that exist in the literature. This is why we say that the way the segregation of a group is calculated is consistent with the measurement of overall segregation.

Following this approach, a group is said to be segregated when its occupational sorting departs from the distribution of employment across occupations in the benchmark economy.³ For example, if a group represents 20% of workers, we say that it has no segregation when it accounts for 20% of the employment of each occupation in the (benchmark) economy. To measure the segregation of group g we use several of the measures proposed in Alonso-Villar and Del Río (2010) in a multi-group context:

$$D^{g} = \frac{1}{2} \sum_{j} \left| \frac{c_{j}^{g}}{C^{g}} - \frac{t_{j}}{T} \right| , \qquad (1)$$

$$G^{g} = \frac{\sum_{i,j} \frac{t_{i}}{T} \frac{t_{j}}{T} \left| \frac{c_{i}^{g}}{t_{i}} - \frac{c_{j}^{g}}{t_{j}} \right|}{2 \frac{C^{g}}{T}}$$

$$(2)$$

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³ As we already mentioned, in our empirical analysis, we consider two benchmarks: that of total workers and also that of workers living in couples since homosexual workers are identified based on the sex of individuals living with a partner.

$$\Phi_{\alpha}^{g} = \begin{cases}
\sum_{j} \frac{c_{j}^{g}}{C^{g}} \ln \left(\frac{c_{j}^{g}/C^{g}}{t_{j}/T} \right) & \alpha = 1 \\
\frac{1}{\alpha(\alpha - 1)} \sum_{j} \frac{t_{j}}{T} \left[\left(\frac{c_{j}^{g}/C^{g}}{t_{j}/T} \right)^{\alpha} - 1 \right] & \alpha \neq 0, 1
\end{cases}$$
(3)

where c_j^g stands for the number of workers that group g has in occupation j, $C^g = \sum_j c_j^g$

is the size the group, t_j is the number of jobs that the (benchmark) economy has in occupation j, and $T = \sum_i t_j$ is the total number of jobs in the (benchmark) economy.

The reason why we use several indices rather than one is to check the robustness of our findings.

 D^g , which ranges between 0 (no segregation) and 1 (complete segregation), has a clear economic interpretation, which is why we pay special attention to it in our empirical section. It measures the proportion of members of group g who would have to shift occupations in order to have no segregation (without altering the occupational structure of the benchmark economy).⁴ This index is related to the index of dissimilarity, but it differs from it. 5 G^g is also bounded between 0 and 1 (without reaching the latter), while the members of the family Φ_{α}^{g} are unbounded. These indices are adapted versions of well-known income inequality measures (G^g is a modified version of the Gini index and Φ_{α}^{g} of the Theil index). The higher the value of these indices, the larger the segregation level of the group. With respect to Φ_{α}^{s} , note that this family depends on parameter α , which stands for an aversion toward segregation, i.e., toward the overrepresentation of the group in some occupations and its underrepresentation in others. Loosely speaking, the lower the value of this parameter, the more affected the index is by an intense underrepresentation of the group in some occupations, while the higher the value of the parameter, the more affected the index is by its overrepresentation. In this study, we use three values of this parameter: 0.5, 1, and 2, which are standard values in the literature on income distribution.

⁴ See Alonso-Villar and Del Río (2016b).

 $^{^5}$ D^8 was proposed in a two-group context by Moir and Shelby-Smith (1979). The differences between this index and the dissimilarity index are explained in Alonso-Villar and Del Río (2017), see online appendix.

⁶ For further information about these indices, see Alonso-Villar and Del Río (2010).

2.2 Measuring the Economic Consequences of Segregation for each Group

Above and beyond the lack of integration that an uneven distribution across occupations implies for the group that experiences it, we should pay special attention to the economic consequences of that unevenness. This is why we now measure the loss or gain that each group g faces for being unevenly distributed across occupations. In doing so, we use two indices that take into account both the presence of the group in each occupation and the relative wages of occupations, which are a proxy of their "quality" (Del Río and Alonso-Villar 2015; Alonso-Villar and Del Río, 2016a):

$$\Gamma^g = \sum_j \left(\frac{c_j^g}{C^g} - \frac{t_j}{T} \right) \frac{w_j}{\overline{w}} \,, \tag{4}$$

$$\Psi_1^g = \sum_j \left(\frac{c_j^g}{C^g} - \frac{t_j}{T} \right) \ln \frac{w_j}{\overline{w}} \tag{5}$$

where $\frac{c_j^g}{C^g}$ is the share of group g in occupation j, $\frac{t_j}{T}$ is the employment share accounted by that occupation in the (benchmark) economy, w_j represents the (average) wage of occupation j, and $\overline{w} = \sum_j \frac{t_j w_j}{T}$ is the average wage of the (benchmark) economy.

An advantage of index Γ^g is its clear economic interpretation since it quantifies the per capita monetary loss (or gain) that group g derives from its occupational sorting. Like Ψ^g_1 , Γ^g_2 also satisfies several sensible properties. On the one hand, both indices are zero when either the group is evenly distributed across occupations (i.e., if the group has no segregation) or there is no wage disparities among occupations (because in this case there are no monetary penalties or advantages for the group from working in some occupations and not in others). On the other hand, these indices rise when some members of the group move from one occupation to another with a higher wage, while they fall if the opposite holds. In addition, they are unaffected by the size of the group, which makes these indices appropriate for comparing different demographic groups, and also by the number of total workers in the economy (so long as the occupational

structure of the economy does not change). They are also independent of the monetary unit in which wages are measured, allowing comparisons across time or countries.

There is, however, an important difference between Γ^g and Ψ_1^g since the former does not show an inequality aversion, while the latter does. This means that when an individual of group g moves from one occupation to another, Ψ_1^g increases more, the lower the wage of the occupation left behind. In addition, this index considers small improvements for many people derived from moving to a higher pay occupation to be more important than an improvement of the same magnitude for only one person. However, for Γ^g , when an individual of the group moves to an occupation which has an increase of 100 monetary units, for example, with respect to the position left behind, its effect on the index is the same whether the occupation left behind was high- or lowpaying. On the other hand, the effect of an individual moving to an occupation with an extra wage of 100 monetary units has the same effect as that of 10 individuals moving into an occupation with an additional 10 units paid. In other words, the inequality that exists among members of a group arising from filling occupations with a different "quality" is not taken into account by index Γ^g but by index Ψ^g_1 . However, as mentioned above, Γ^g shares with Ψ_1^g some other properties, and the former has a clear economic interpretation. In our empirical analysis, we use both indices to check the robustness of our results against changes in the inequality aversion.

The relevance of these measures lies on that they allow moving beyond the mere measurement of unevenness to focus attention on the economic consequences of that unevenness, which is where the main problem lies.

2.3 Data

The dataset used in our analysis comes from the 2010-2014 5-year sample of the IPUMS, drawn from the 2010-2014 ACS (Ruggles et al., 2015). The classification of occupations has 453 titles.⁷ We proxy the wage of each occupation by the average hourly wage (calculated from the information provided by the IPUMS).⁸ The number of observations in the sample is nearly 7 million workers, of which 25,874 and 27,158 are,

⁷ The total list includes 458 occupations but in 5 of them there is no employment during this period.

⁸ We have trimmed the tails of the hourly wage distribution to prevent data contamination from outliers. Thus, we computed the trimmed average in each occupation eliminating all workers whose wage is zero, missing, or situated below the first or above the 99th percentile of positive values in that occupation.

respectively, men and women living in same-sex couples. For simplicity, we will refer to women and men leaving in same-sex couples as lesbians and gays, respectively. Lesbian workers are split into 21,328 (non-Hispanic) whites and 5,830 non-whites. Gay workers consist of 20,135 (non-Hispanic) whites and 5,739 non-whites.

Individuals living in same-sex couples are the only population that can be identified in this dataset as homosexual. This limitation is somehow offset by the fact that the sample is much larger than that of alternative datasets, such as the General Social Survey (GSS). In addition, Baumle et al. (2009, p. 157) claim that there is "strong evidence that the individual characteristics of same-sex unmarried partners are similar to those captured by other data sources, suggesting little bias in the use of census data." Note that the ACS, conducted by the Census Bureau, is the new source from which to obtain information about occupation since "the Census Bureau is discontinuing the decennial long-form sample in the 2010 Census" (U.S. Census Bureau, 2009, p.1). Tilcsik et al. (2015) also state that the number of individuals living in homosexual households according to the ACS is consistent with those obtained in other datasets based on other definitions of sexual orientation. In our dataset, gay men accounts for 0.33% of all workers in the U.S., and lesbian women workers represent 0.35%.

In our homosexual population, the proportion of those over 55 years of age is lower and the proportion of those having bachelor's degrees is higher than those in our heterosexual population (see Appendix, Figure A1). The educational level is slightly higher for gay men than it is for lesbian women. For heterosexuals it is the opposite, with women having higher educational achievements than men. Same-sex couples also have higher proportions of (non-Hispanic) whites and tend to be overrepresented in the Northeast and West regions. With respect to race/ethnicity, our analysis focuses on the three major single-race groups that do not have a Hispanic origin, plus Hispanics of any race: whites, African Americans or blacks, Asians (Chinese, Japanese, and other Asians or Pacific Islanders), and Hispanics. The size of each demographic group in the sample is given in the Appendix (Tables A1 and A2).¹⁰

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⁹ Unpartnered men and women represent, respectively, 18.1% and 20.2% of the sample.

We do not analyze Native Americans and other races separately due to the small size that these racial groups have in same-sex couples.

3. Quantifying Occupational Segregation

In this section, we first present a brief background of the literature that studies the position of homosexuals in the U.S. labor market as compared to heterosexuals. Later, we quantify the extent of occupational segregation of partnered gays, lesbians, straight women, and straight men, taking race also into account.

3.1 Background

As already mentioned, the literature exploring the effect of sexual orientation on the position of individuals in the U.S. labor market has mainly focused on wages. Using the 1989-91 GSS and controlling for various factors (including education, potential experience, race, marital status, and geographical location), Badgett's (1995) seminal work shows that gay and bisexual men face an important and statistically significant wage penalty as compared to their straight counterparts, while the penalty for lesbian women does not appear to be statistically significant. Using the GSS including other waves and other sexual orientation definitions, subsequent studies also confirm the wage penalty for gays, and some find a wage premium for lesbians (Black et al., 2003), which does not contradict Badgett's thesis of discrimination since the potential experience of lesbian workers could be underestimated.¹¹

Carpenter (2007) also documents a remarkable earning penalty for same-sex behaving men using the Third National Health Nutrition Examination Surveys (NHANES). Likewise, Allegretto and Arthur (2001) give evidence of a penalty for gay men based on the 1990 Census data, although these authors attribute this wage gap mainly to marital status rather than to sexual orientation discrimination. Using the 2000 Census, Antecol et al. (2008) take a step further and find that gay men have higher earnings than cohabiting heterosexual men but lower than their married counterparts. They also conclude that lesbian women earn more than women engaged in other types of couples. On the whole, according to the literature, and despite the broad range of estimates that arise from using different datasets, sexual orientation definitions, and control variables,

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¹¹ In fact, undertaking a meta-regression analysis, Klawitter (2015) concludes that the reasons behind the disparities among studies in the estimates of those premiums/penalties are not as clear for lesbian women as they are for gay men, although for the former they seem to depend mainly on work intensity controls.

As opposed to the GSS and the NHANES, sexual orientation is not a variable included in the census. As mentioned above, it is inferred from information about the sex of individuals living in couple partnerships. Note that this definition of sexual orientation, which is based on household living arrangements, differs from that based on sexual behavior (Carpenter, 2007).

gay men seem to face a wage penalty while lesbian women seem to have a premium compared to their straight counterparts (Klawitter, 2015). Although that premium seems to apply only to "primary" earner lesbians, not to their "secondary" partners, who actually have a wage penalty (Scheneebaum, 2013).¹³

The reasons behind these patterns are not easy to determine. Some argue that discrimination by sexual orientation may be playing a role, although it does not seem to affect gays and lesbians in the same way, as Klawitter (2015) points out. On the other hand, Antecol et al. (2008) show that lesbian women are more likely to be found in male-dominated occupations than their straight counterparts (either married or cohabitating), while gay men tend to be less concentrated in highly masculinized occupations than other men. Despite this finding, these authors conclude that the role played by occupational sorting in explaining the wage gap by sexual orientation is small; the wage advantages of some groups of lesbians and gays are explained, according to these authors, based on their higher human capital levels, while the penalties observed in other homosexual groups seem to arise from unobserved characteristics. We should note, however, that their analysis was based on a broad classification of occupations that accounts for only 21 categories, which makes it difficult to disentangle the effect of segregation from that of wage differences within occupations since a broad classification of occupations obscures the differences that may arise from suboccupations included in the same category.

However, there is strong evidence that occupational segregation explains a large part of the gender wage gap and also of the racial wage gap (Petersen and Morgan, 1995; Cotter et al., 1997; Cotter et al., 2003). On the other hand, Del Río and Alonso-Villar (2016) show that occupational sorting plays an important role in the gross earning advantages of partnered lesbian and gay workers, especially for the former, when using a classification that accounts for 453 titles. They also suggest that the higher educational achievements of these two groups seem to be behind those advantages, making it possible for them to have access to highly paid occupations. These occupational

¹³ To put things into perspective, we should bear in mind that same-sex couples are more likely to be poor than married different-sex couples after controlling for family characteristics that affect poverty (Albelda et al., 2009). Moreover, same-sex female couples also have a higher probability of being poor than similar unmarried different-sex couples, whereas this is not the case for same-sex male couples (Scheneebaum, 2013).

achievements would disappear, however, if the main characteristics of lesbian and gay workers (education, racial composition, immigration profile, English proficiency, and age) were the same as those of straight, partnered men.

The analyses that have also taken race into account are scarce, although there is evidence that sexual orientation does not affect all races equally. Using the 2000 Census and employing econometric techniques, Saunders et al. (2006) find that black men living in same-sex couples earn less than either their white counterparts or their straight counterparts. Black lesbian women, who earn less than their male counterparts, also earn less than white lesbian women. The wage penalty that these women have with respect to their straight counterparts does not appear, however, to be conclusive since it depends on the model specification. Douglas and Steinberger (2015) also find that the sexual-orientation wage gap varies significantly across races, calling for taking this variable into account when exploring the effects of sexual orientation on individuals' earnings. From all of the above, it follows that there is a gap in our knowledge about how sexual orientation affects the positions of racial groups in the labor market and, in particular, their occupational achievements. It seems, therefore, convenient to explore the occupational sorting of our target groups (where sexual orientation is the focus) by taking both sex and race/ethnicity into account.

In what follows, we quantify the segregation of each group, i.e., the extent to which it tends to be overrepresented in some occupations and underrepresented in others as compared to the occupational structure of the benchmark economy. For that purpose, we use the indices described in Section 2. Later on, in Section 4, we explore whether this unevenness is something good or bad for these groups, which depends on the "quality" of the occupations that each group tends to fill or not to fill.

3.2 Segregation by Sexual Orientation, Gender, and Race/Ethnicity

Using a classification of occupations that accounts for 453 titles and distinguishing just between whites and non-whites, we find that white lesbians have lower segregation than their straight counterparts, and this occurs when the benchmark is not only that of total employment but also the employment of those living with a partner (see Table 1).¹⁵ For

¹⁴ This helps to explain why Albelda et al. (2009) find that African-American same-sex couples have a larger probability of being poor than their white counterparts.

For simplicity, superindex g that stands for group g has been removed from all the indices.

men, the ranking between white gay and straight men is not so clear. It depends on the index used and also on the benchmark against which we compare the occupational distribution of these groups. In general, their segregation levels are not too different when the benchmark is that of total employment. With respect to non-whites, we also find that lesbian women have lower segregation than their straight counterparts. The different effect that sexual orientation has on whites and non-whites involves only men. The analysis reveals that non-white gay men have lower segregation than their straight counterparts.

BENCHMARK: TOTAL EMPLOYMENT	$\Phi_{ ext{0.5}}$	Φ_1	Φ_{2}	D	G
White lesbian women	0.209	0.200	0.226	0.245	0.345
Non-white lesbian women	0.186	0.156	0.148	0.207	0.298
White straight women	0.338	0.291	0.276	0.302	0.416
Non-white straight women	0.291	0.249	0.240	0.269	0.376
White gay men	0.288	0.280	0.323	0.309	0.413
Non-white gay men	0.168	0.153	0.196	0.202	0.286
White straight men	0.337	0.292	0.269	0.309	0.416
Non-white straight men	0.279	0.256	0.255	0.299	0.397
Unpartnered individuals	0.045	0.045	0.046	0.125	0.170
BENCHMARK: WORKERS LIVING WITH A PARTNER	$\Phi_{ ext{0.5}}$	Φ_1	$\Phi_{ t 2}$	D	G
White lesbian women	0.186	0.175	0.191	0.216	0.315
Non-white lesbian women	0.241	0.211	0.215	0.253	0.354
White straight women	0.345	0.289	0.259	0.308	0.411
Non-white straight women	0.358	0.315	0.329	0.303	0.427
White gay men	0.234	0.227	0.265	0.277	0.369
Non-white gay men	0.183	0.167	0.220	0.211	0.300
White straight men	0.241	0.203	0.172	0.250	0.337
Non-white straight men	0.271	0.253	0.265	0.293	0.394

Table 1. Segregation levels [453 occupations, two benchmarks]

However, we should keep in mind that the category of non-whites is quite heterogeneous and, therefore, it seems convenient to explore the different races/ethnicities that comprise it in more detail. Different racial minorities have different positions in the labor market both due to differences in characteristics (age, educational achievement, citizenship status, etc.) and demand factors (some groups may be discriminated against with more intensity than others). ¹⁶

 $^{^{16}}$ See Canales (2007), Branch (2007), Broyles and Fennes (2010), and Reskin (2012), among others.

For these reasons, in what follows we explore the segregation by sexual orientation of the four largest racial/ethnic groups: blacks, Asians, Hispanics, and whites, taking sex into account as well. This type of analysis cannot be performed with the classification based on the 453 titles because the crossing of sexual orientation, sex, and race/ethnicity gives rise to some demographic groups with small observations in the sample, which may add bias to the estimation of segregation. This is why we now use a broader classification, resulting from grouping the above titles at a two-digit level, which accounts for 99 occupations. The use of this classification leads to underestimate the real unevenness of the groups, given that what happens within each broad occupation cannot be captured.¹⁷

Previous studies have shown that Hispanics and Asians tend to distribute across occupations much more unevenly than other groups (Alonso-Villar et al., 2012). However, that unevenness has different economic implications for Asians and Hispanics since the former tend to concentrate in highly paid occupations while the latter tend to fill low-paid jobs (Del Río and Alonso-Villar, 2015). The step that we take now is to investigate what happens when we take sexual orientation into account.

Let us consider first that the benchmark against which we compare the occupational distribution of a group is that of total employment (Table 2). The analysis shows that Asian gays and lesbians tend to have slightly higher segregation levels than do their heterosexual counterparts. ¹⁸ However, for Hispanic gays and lesbians, the pattern is the opposite. They tend to have much lower segregation that their straight counterparts and are among the groups with the lowest segregation levels. Thus, according to index *D* only 14% of either Hispanic gays or lesbians would have to switch occupations in order to achieve zero segregation. For Hispanic, straight women and men, the ratios are 26% and 35%, respectively. The segregation of black gays and lesbians is also lower than those of black straight men and women. For whites, the patterns with this broader classification of occupations are analogous to those shown above.

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¹⁷ Although the analysis is not shown in this document, we have calculated the segregation levels of four groups: straight women, straight men, lesbian women, and gay men using this broad classification and we have compared them with those obtained by Del Río and Alonso (2016), which were based on the finer classification that we used before. Although the values of the indices are lower with the broader classification, we find that, as expected, the ranking of the four groups remains the same.

¹⁸ The exception is Φ_2 , according to which Asian straight workers not only have higher segregation than their homosexual counterparts but also have the highest segregation levels, both in the case of men and women. This suggests a large concentration of straight Asians, mainly men, in a few occupations since this index pays especial attention to the occupations in which a group is overrepresented.

	$\Phi_{0.5}$	$oldsymbol{\Phi}_1$	Φ_2	D	G
White lesbian women	0.155	0.149	0.157	0.210	0.299
Black lesbian women	0.167	0.142	0.134	0.194	0.281
Hispanic lesbian women	0.088	0.077	0.070	0.141	0.206
Asian lesbian women	0.398	0.322	0.335	0.309	0.429
White straight women	0.286	0.249	0.236	0.277	0.384
Black straight women	0.277	0.246	0.254	0.270	0.377
Hispanic straight women	0.255	0.224	0.214	0.255	0.363
Asian straight women	0.346	0.306	0.343	0.269	0.403
White gay men	0.203	0.203	0.228	0.265	0.355
Black gay men	0.109	0.099	0.103	0.161	0.235
Hispanic gay men	0.078	0.076	0.081	0.144	0.206
Asian gay men	0.374	0.364	0.459	0.344	0.462
White straight men	0.248	0.219	0.200	0.271	0.362
Black straight men	0.209	0.208	0.238	0.260	0.355
Hispanic straight men	0.366	0.357	0.419	0.354	0.463
Asian straight men	0.336	0.358	0.522	0.312	0.439

Table 2. Segregation levels [99 occupations, benchmark: total employment]

	$\Phi_{0.5}$	Φ_1	$oldsymbol{\Phi}_2$	D	G
White lesbian women	0.134	0.125	0.126	0.181	0.266
Black lesbian women	0.221	0.196	0.198	0.247	0.342
Hispanic lesbian women	0.132	0.122	0.123	0.202	0.272
Asian lesbian women	0.393	0.320	0.331	0.304	0.428
White straight women	0.289	0.244	0.220	0.274	0.378
Black straight women	0.312	0.280	0.306	0.278	0.399
Hispanic straight women	0.338	0.306	0.315	0.311	0.430
Asian straight women	0.357	0.305	0.322	0.285	0.410
White gay men	0.164	0.162	0.177	0.238	0.317
Black gay men	0.140	0.129	0.133	0.199	0.276
Hispanic gay men	0.105	0.103	0.113	0.172	0.246
Asian gay men	0.336	0.318	0.373	0.321	0.434
White straight men	0.181	0.157	0.134	0.216	0.296
Black straight men	0.216	0.215	0.249	0.267	0.359
Hispanic straight men	0.390	0.381	0.450	0.375	0.478
Asian straight men	0,302	0,311	0,416	0,291	0,416

Table 3. Segregation levels [99 occupations, benchmark: workers living with a partner]

Therefore, homosexual partnered workers from non-Asian races (and also whites in the case of men) tend to have lower segregation than their straight counterparts. The groups which are more evenly distributed across the 99 occupations are Hispanic homosexual women and men, black homosexual women and men, and white homosexual women. These findings remain when the benchmark is that of workers living with a partner (see Table 3).

4. Quantifying the Economic Consequences of Segregation

Any unevenness observed in the distribution of a group across occupations only reflects the group being overrepresented in some occupations and underrepresented in others. The next step is to explore whether that unevenness brings the group advantages or disadvantages, which is the question we address in this section.

From now on, the benchmark against which we compare the occupational sorting of our target groups is the occupational structure of individuals living in coupled partnerships, which makes groups more comparable since only homosexuals living with a partner are identified as either gays or lesbians in our dataset. This becomes particularly relevant here because, as shown in Del Río and Alonso-Villar (2016), uncoupled workers tend to be younger, with lower educational levels, and have large disadvantages due to their occupational sorting, both in the case of women and men. By using this benchmark, the level of advantage or disadvantage of a group will not arise from the losses that unpartnered workers have but from the situation of their peers.

4.1 Taking Race/Ethnicity into Account

We start the analysis by exploring the crossing of sexual orientation, gender, and whites/non-whites using the fine occupational classification (453 titles), see Table 4. When focusing on white women, we find that the straight group has losses both due to segregation and to wage disparities within occupations, with respect to other groups. The total monetary loss (EGap) of this group represents 13.54% of the average wage of the benchmark economy: 5.26% arising from their occupational sorting (Γ) and 8.28% from their wage disadvantages within occupations (Δ). When using well-being measures, we also find that these women have losses (see WAD_I), mainly stemming from what happens within occupations (see Ω_I); although the losses due to segregation

(see Ψ_1) are not negligible either. Unlike their straight counterparts, lesbian women do have gains due to their occupational sorting and these gains are large enough to compensate the losses that this group has within occupations. The monetary gain of this group due to its occupational sorting represents 4.27% of the average wage of the benchmark economy. The gains of gay white men are not too different from those of their straight counterparts both those arising for their occupational sorting or from what happens within occupations. The monetary gains due to their distributions across occupations, which are larger than their advantages inside them, are of 14.2% of the average wage of the benchmark economy for gay men and 11.1% for straight men, values which are much higher than those of lesbian women.

	Γ	Δ	EGap	Ψ_1	Ω_1	WAD ₁
White lesbian women	4.27	-1.48	2.79	4.87	-1.47	3.40
Non-white lesbian women	-9.69	-9.12	-18.81	-10.34	-11.27	-21.61
White straight women	-5.26	-8.28	-13.54	-4.46	-7.82	-12.28
Non-white straight women	-13.77	-8.31	-22.09	-15.93	-9.25	-25.18
White gay men	14.21	10.91	25.12	13.73	8.43	22.16
Non-white gay men	0.28	-1.82	-1.54	-1.15	-2.55	-3.70
White straight men	11.12	10.18	21.30	11.30	8.80	20.10
Non-white straight men	-6.66	-1.45	-8.12	-7.08	-2.01	-9.08

Table 4. Monetary and well-being losses or gains due to segregation (Γ and Ψ_1), to discrepancies within occupations (Δ and Ω_1), and total losses or gains (EGap and WAD_1). [453 occupations, benchmark: workers living with a partner]

Non-white women, especially the straight ones, are the groups with the largest losses due to segregation. The losses that lesbians have within occupations are only faintly larger than those of their heterosexual counterparts. Non-white gay men have gains close to zero due to their sorting, while their straight counterparts have a loss of 6.6% of the average wage of the benchmark economy. Within occupations, the losses of both groups are similar.

However, given that the group of non-whites is quite heterogeneous, in what follows, we explore each race/ethnicity separately. Once again, the analysis is based on the broad occupational classification that accounts for 99 categories. Figure 1 (see also Table A3) reveals that, as also happens with the finer occupational classification, white lesbian women have monetary gains associated with their occupational sorting (4.69% of the average wage of the benchmark economy), while their straight counterparts have losses (3.22%). The losses of the latter within occupations are also much larger than those of the former. The chart also displays that Asian lesbian women have greater gains due to their occupational sorting (7.12%) than do their straight counterparts (5.44%), and they have more advantages within occupations as well. In addition, the losses of Hispanic straight women associated with their segregation (19.41%) are much larger than those of lesbians (8.96%). The losses of this ethnicity within occupations follow the same pattern. However, the losses for black women due to segregation do not seem to be affected by their sexual orientation (11% for heterosexuals versus 11.79% for homosexuals), ¹⁹ although the losses within occupations harm lesbians more.

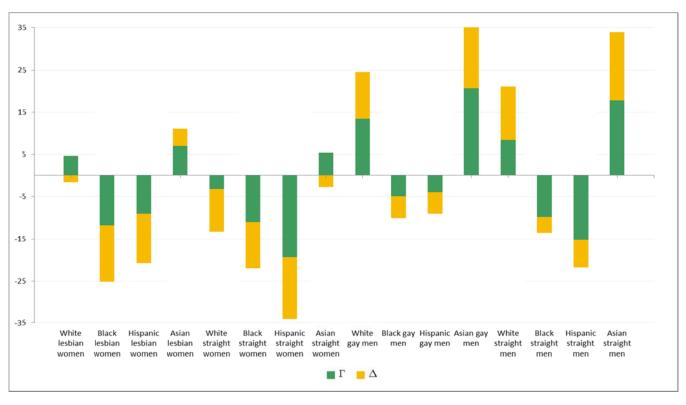


Figure 1. Monetary losses or gains due to segregation (Γ) and discrepancies within occupations (Δ) [99 occupations, benchmark: workers living with a partner]

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¹⁹ This may be due to the fact that there are no differences in educational achievements between lesbian and straight black women (see Figure A2 in the Appendix).

To conclude, except in the case of blacks, the occupational sorting of lesbians is better than that of their straight counterparts. The situation within occupations also seems to be more damaging for straight women. It is important to note that black lesbian women have larger losses than their straight counterparts not only due to their distribution across occupations but also because of the wage disadvantage that this group has within occupations. These patterns are also found when using well-being indices rather than the monetary ones (see Table A3 in the Appendix). Note that the advantages of Asian women due to segregation, either lesbian or straight, are not so intense when using the well-being index. This fact arises from the heterogeneity of this group, so that when accounting for the inequality that stems from disparities in the quality of occupations filled by its members, as index Ψ_1 does, the advantages of the group are of a lower magnitude. This heterogeneity is not so strong for women of other races.

With respect to males, the group with the greatest gains associated with their occupational sorting is that of Asian gay men (20.56%), followed by their straight counterparts (17.73%). The gains of Asian men are of a lower magnitude when using the well-being index Ψ_1 (Table A3), which suggests a certain level of heterogeneity in this group as well. White gay men also have higher gains associated with their occupational sorting than heterosexuals do (13.37% vs. 8.51%). However, both Asian and white gay men have lower gains within occupations than their straight counterparts. The losses of black gay men associated with their segregation are lower than those of black straight men (4.97% vs. 9.79%), while the opposite happens within occupations. The male group with the largest losses due to segregation is that of Hispanic straight men (15.12%), who overcome, by far, the losses of their gay counterparts (3.96%). For this ethnicity, the losses within occupations are only slightly larger for heterosexuals. The analysis also reveals that the losses of Hispanic and black gay men due to segregation are quite similar, while the discrepancies between the losses of Hispanic and black heterosexual men are remarkable (perhaps because the latter have a much higher educational level, see Figure A2).

To sum up, the occupational sorting of gay men seem to be better than that of their straight counterparts, independently of their race/ethnicity. However, within occupations gay men tend to have disadvantages when compared to heterosexual men

(except in the case of Hispanics). These findings remain true when using the well-being indices (Table A3).

4.2 Adding Education Achievements into the Analysis

Given that there are important discrepancies in educational levels among groups (see Figure A2 in the Appendix), in what follows we repeat the previous analysis in two different scenarios, one in which the economy consists only of people who have bachelor's degrees (apart from living with a partner) and another in which the economy consists of individuals who hold a high school diploma at most. In other words, we explore whether the previous results remain when controlling for education.

Figure 2 shows the monetary gains or losses of the groups when each group comprises only those members who have bachelor's degrees (the benchmark against which we compare them consists of partnered workers who hold bachelor's degrees). The chart shows that the ranking of female groups with bachelor's degrees is analogous to that shown before. The main differences, with respect to the previous analysis, are that the gains associated with the occupational sorting of Asian women, either lesbian or straight, are now very small and also that white lesbian women no longer have gains associated with their occupational sorting (in fact, they have a monetary loss, see Table A4 in the Appendix). Note, as well, that sexual orientation does not seem to have any impact on the monetary losses that black women with bachelor's degrees have associated with their occupational sorting (their losses represent nearly 10% of the average wage of the benchmark economy).

Therefore, when compared with their peers in education, the occupational discrepancies in favor of lesbian women tend to concentrate in Hispanics and whites, although it is important to notice that all female groups have losses due to their occupational distributions (or gains close to zero in the case of Asians). The monetary losses of white lesbians associated with its occupational sorting are of 4.25% of the average wage of the benchmark economy while those of their Hispanic counterparts are 7.62%.

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 $^{^{20}}$ These patterns also remain when using the well-being index (see Table A4 in the Appendix).

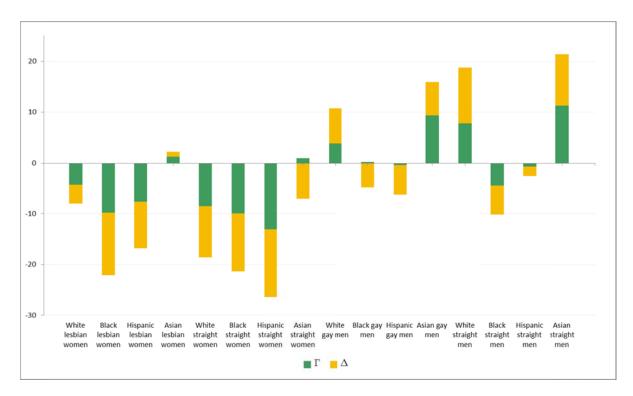


Figure 2. Monetary losses or gains due to segregation (Γ) and to discrepancies within occupations (Δ) [99 occupations, benchmark: workers living with a partner and having bachelor's degrees]

With respect to men, some discrepancies also appear when working only with those having bachelor's degrees. Asian gay men have now lower gains associated with their occupational sorting than their straight counterparts (this happens also with the wellbeing index, see Table A4). This pattern is even more noticeable in the case of white men. On the contrary, black gay men remain better than their straight counterparts. Moreover, the former have no longer losses due to their occupational sorting. The losses of Hispanic gay men are also lower than those of straight men, although both of them are close to zero. Therefore, the only group of men with important losses associated with segregation is that of black heterosexual men (in monetary terms they account for 4.34% of the average wage of the benchmark economy). White and, especially, Asian men continue to be the groups with the largest gains due to their occupational sorting, although these gains are lower for gay men when comparing with their peers in education.

When the economy consists only on partnered individuals with a high school diploma at most (see Figure 3 and Table A5 in the Appendix), only gay, and especially straight, white men have gains associated with their occupational sorting (they also have

important gains within occupations). Lesbian women of any race/ethnicity have lower losses associated with their occupational segregation than their straight counterparts do. For gay men the result is the reverse, the occupational sorting is more advantageous for straight men, whatever their race/ethnicity. Among gay men, only whites have gains associated with their distribution across occupations but they are much lower than those of straight white men (3.45% versus 9.64% according to index Γ).

Therefore, among those having a low educational level, lesbian women tend to have lower losses due to segregation than their straight counterparts whatever their race/ethnicity, while gay men seem to be worse than straight men.

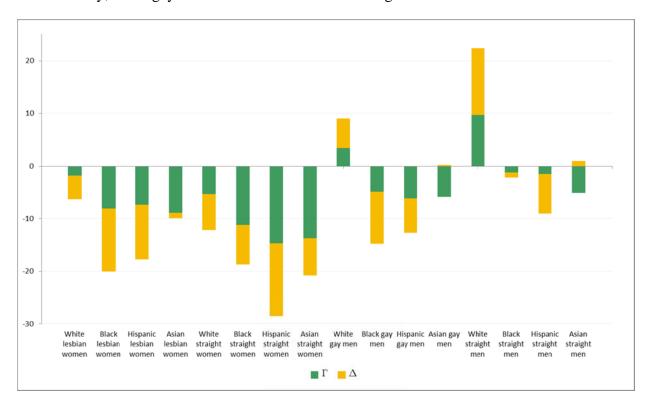


Figure 3. Monetary losses or gains due to segregation (Γ) and to discrepancies within occupations (Δ) [99 occupations, benchmark: workers living with a partner and having a high school diploma at most]

5. Conclusions

This paper has shown that the occupational sorting of racial-gender groups varies by sexual orientation. Except in the case of Asians, women in same-sex couples are clearly

²¹ The results for Asian homosexual women and men with a low educational level may be less accurate than for other races given that they have fewer observations in the sample (see Table A2).

more evenly distributed across occupations than women in different-sex couples. In the case of men, black and Hispanic men in same-sex couples also have less segregation than their straight counterparts do while the pattern for Asians and whites is less conclusive; although the distributions of gays in these two races tend to be slightly more uneven.

What are the economic consequences for each of these groups regarding their occupational sorting? To answer this question, this paper has assessed the distribution of each group across occupations taking occupational wages into account. The analysis has revealed that, except for black women (whose monetary losses associated with their sorting do not seem to be affected by sexual orientation), for the remaining female groups, the occupational achievements of lesbians are larger than those of their straight counterparts. The monetary gains of Asian and white lesbian women associated with their occupational sorting represent 7.1% and 4.7%, respectively, of the average wage of partnered workers. Asian straight women also have gains (5.4%), while white straight women have losses (3.2%). Hispanic and black women have losses associated with their occupational sorting. The losses of Hispanic lesbian women are much lower than those of straight women (9% vs. 19.4%) while the losses of black women, either straight or lesbian, are around 11%.

For men, the analysis also has shown that the occupational attainments of gays are higher than those of straight men of the same race/ethnicity. Asian gay men are the group with the largest gains associated with their occupational sorting, which represent 20.6% of the average wage of coupled workers, closely followed by their straight counterparts, whose gains are 17.7%. White gay and straight men also have monetary gains (13.4% and 8.5%, respectively). On the contrary, black men have losses due to their sorting, although these losses are larger for straight men than for gay men (9.8% vs. 5%). As in the case of women, the losses of Hispanic straight men are much larger than those of their gay counterparts (15.1% vs. 4%).

In order to control for differences in education, which seems to be an important variable to explain the occupational advantages of workers in same-sex couples (Del Río and Alonso-Villar, 2016), we have undertaken the previous analysis separately for workers having bachelor's degrees and those who have a high school diploma or less. For women having bachelor's degrees, we have found the same ranking as before; although the gains of Asian women, either lesbian or straight, almost disappear when comparing

them with their peers in education (including both women and men). In addition, white lesbian women no longer have gains associated with their occupational sorting. With respect to men, the analysis has revealed that Asian and white gay men with bachelor's degrees no longer have an occupational advantage compared to their corresponding straight counterparts. However, black and Hispanic gay men do remain better off than their straight counterparts.

For those having a high school diploma at most, the study has shown that the only groups with gains associated with their sorting, compared to their peers in education, are now white straight and gay men, especially the former. Lesbians have larger occupational attainments than straight women of the same race/ethnicity, while the opposite holds between gay and straight men.

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Appendix

Observations in the s	Observations in the sample								
	Whites	Blacks	Hispanics	Asians	Native Americans	Other races	Total		
Lesbian women	21,328	1,685	2,722	690	181	552	27,158		
Straight women	1,459,107	116,441	193,618	106,998	12,284	25,222	1,913,670		
Unpartnered women	872,026	224,023	195,977	68,978	12,658	30,344	1,404,006		
Gay men	20,135	1,131	2,995	1,050	104	459	25,874		
Straight men	1,752,645	136,421	272,357	116,937	13,343	29,836	2,321,539		
Unpartnered men	811,605	131,782	210,838	67,138	10,212	26,332	1,257,907		
Total	4,936,846	611,483	878,507	361,791	48,782	112,745	6,950,154		

Table A1. Number of observations in the sample by sex, race/ethnicity, and sexual orientation

Observations in the sample							
	Less than High School	High School	Some College	Bachelor's Degree	Total		
White lesbian women	534	3,033	6,232	11,529	21,328		
Black lesbian women	127	386	676	496	1,685		
Hispanic lesbian women	314	552	994	862	2,722		
Asian lesbian women	45	84	160	401	690		
White straight women	40,506	334,634	490,043	593,924	1,459,107		
Black straight women	7,635	28,305	43,764	36,737	116,441		
Hispanic straight women	43,110	46,865	58,877	44,766	193,618		
Asian straight women	10,033	14,113	21,390	61,462	106,998		
White gay men	432	2,683	5,816	11,204	20,135		
Black gay men	91	250	384	406	1,131		
Hispanic gay men	402	571	948	1,074	2,995		
Asian gay men	55	77	201	717	1,050		
White straight men	87,350	449,572	526,539	689,184	1,752,645		
Black straight men	12,518	42,477	47,394	34,032	136,421		
Hispanic straight men	93,347	70,512	64,737	43,761	272,357		
Asian straight men	10,118	13,627	21,361	71,831	116,937		
Unpartnered individuals	307,717	707,497	940,184	706,515	2,661,913		
Total	620,201	1,734,763	2,259,562	2,335,628	6,950,154		

Table A2. Number of observations in the sample by sex, race/ethnicity, sexual orientation, and educational level.

	Γ	Δ	EGap	Ψ_{1}	$\Omega_{\mathtt{1}}$	WAD ₁
White lesbian women	4.69	-1.65	3.04	4.89	-0.81	4.07
Black lesbian women	-11.79	-13.41	-25.20	-11.77	-16.63	-28.40
Hispanic lesbian women	-8.96	-11.88	-20.85	-9.62	-13.03	-22.65
Asian lesbian women	7.12	4.03	11.15	4.90	-0.55	4.36
White straight women	-3.22	-10.07	-13.29	-3.01	-9.32	-12.33
Black straight women	-11.00	-11.01	-22.01	-11.21	-11.64	-22.84
Hispanic straight women	-19.41	-14.76	-34.17	-21.35	-19.08	-40.44
Asian straight women	5.44	-2.77	2.67	2.57	-3.21	-0.64
White gay men	13.37	11.16	24.53	12.62	9.63	22.24
Black gay men	-4.97	-5.06	-10.04	-5.70	-6.74	-12.44
Hispanic gay men	-3.96	-5.02	-8.98	-4.86	-5.27	-10.12
Asian gay men	20.56	15.21	35.77	16.60	10.93	27.53
White straight men	8.51	12.62	21.13	8.95	10.85	19.80
Black straight men	-9.79	-3.77	-13.56	-9.04	-2.86	-11.90
Hispanic straight men	-15.12	-6.75	-21.88	-14.96	-7.95	-22.92
Asian straight men	17.73	16.19	33.92	14.75	11.12	25.87

Table A3. Monetary and well-being losses or gains due to segregation (Γ and Ψ_1), discrepancies within occupations (Δ and Ω_1), and total losses or gains (*EGap* and *WAD*₁). [99 occupations, benchmark: workers living with a partner]

	Γ	Δ	EGap	Ψ_1	Ω_1	WAD ₁
White lesbian women	-4.25	-3.77	-8.02	-4.14	-2.70	-6.84
Black lesbian women	-9.76	-12.31	-22.07	-10.24	-15.79	-26.04
Hispanic lesbian women	-7.62	-9.19	-16.81	-8.65	-10.01	-18.67
Asian lesbian women	1.26	0.97	2.23	0.82	-2.27	-1.45
White straight women	-8.52	-10.08	-18.60	-8.78	-9.85	-18.63
Black straight women	-9.92	-11.38	-21.30	-10.13	-11.22	-21.35
Hispanic straight women	-13.05	-13.37	-26.42	-14.46	-14.92	-29.37
Asian straight women	0.97	-6.97	-6.00	0.21	-6.85	-6.64
White gay men	3.90	6.94	10.84	4.27	6.52	10.78
Black gay men	0.25	-4.71	-4.46	0.49	-7.75	-7.27
Hispanic gay men	-0.36	-5.79	-6.14	-0.73	-6.21	-6.94
Asian gay men	9.34	6.64	15.98	8.32	5.01	13.33
White straight men	7.81	11.04	18.85	8.24	9.36	17.60
Black straight men	-4.34	-5.82	-10.16	-4.45	-4.89	-9.34
Hispanic straight men	-0.65	-1.88	-2.53	-1.22	-1.99	-3.20
Asian straight men	11.40	9.97	21.38	11.73	7.77	19.50

Table A4. Monetary and well-being losses or gains due to segregation (Γ and Ψ_1), discrepancies within occupations (Δ and Ω_1), and total losses or gains (*EGap* and WAD_1). [99 occupations, benchmark: workers living with a partner and having bachelor's degrees]

	Γ	Δ	EGap	Ψ_1	Ω_1	WAD ₁
White lesbian women	-1.78	-4.44	-6.22	-1.87	-4.92	-6.79
Black lesbian women	-8.11	-11.94	-20.05	-8.15	-15.88	-24.02
Hispanic lesbian women	-7.26	-10.47	-17.73	-7.54	-12.94	-20.47
Asian lesbian women	-8.89	-1.05	-9.93	-10.12	-8.62	-18.74
White straight women	-5.25	-6.90	-12.15	-5.33	-7.08	-12.41
Black straight women	-11.22	-7.48	-18.70	-11.50	-8.51	-20.01
Hispanic straight women	-14.72	-13.84	-28.57	-15.40	-17.26	-32.66
Asian straight women	-13.73	-7.09	-20.82	-14.44	-8.91	-23.35
White gay men	3.45	5.58	9.03	2.82	4.75	7.58
Black gay men	-4.82	-9.96	-14.78	-5.00	-11.97	-16.97
Hispanic gay men	-6.11	-6.56	-12.67	-6.41	-8.15	-14.56
Asian gay men	-5.76	0.21	-5.55	-6.59	-5.74	-12.33
White straight men	9.64	12.73	22.37	9.76	11.24	21.00
Black straight men	-1.15	-0.96	-2.11	-0.62	-0.46	-1.07
Hispanic straight men	-1.49	-7.59	-9.08	-1.27	-7.01	-8.28
Asian straight men	-5.01	0.95	-4.06	-5.28	0.92	-4.36

Table A5. Monetary and well-being losses or gains due to segregation (Γ and Ψ_1), discrepancies within occupations (Δ and Ω_1), and total losses or gains (*EGap* and *WAD*₁). [99 occupations, benchmark: workers living with a partner and having a high school diploma at most]



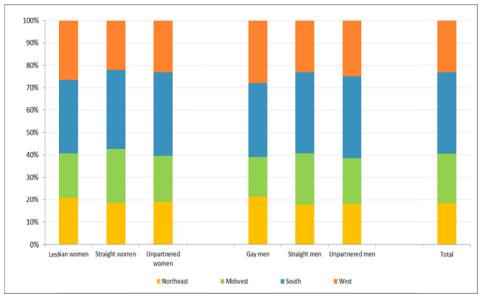


Figure A1. Basic demographics of our population: Race, age, educational achievements, and location

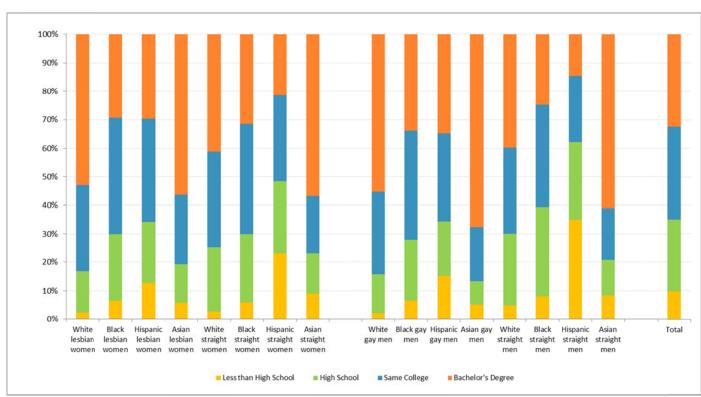


Figure A2. Educational achievements of our target groups, together with the distribution of total U.S. workers by educational level.