

IZA DP No. 2945

**The Sexual Orientation Wage Gap:
The Role of Occupational Sorting,
Human Capital, and Discrimination**

Heather Antecol
Anneke Jong
Michael Steinberger

July 2007

The Sexual Orientation Wage Gap: The Role of Occupational Sorting, Human Capital, and Discrimination

Heather Antecol

*Claremont McKenna College
and IZA*

Anneke Jong

Unaffiliated

Michael Steinberger

Pomona College

Discussion Paper No. 2945

July 2007

IZA

P.O. Box 7240
53072 Bonn
Germany

Phone: +49-228-3894-0

Fax: +49-228-3894-180

E-mail: iza@iza.org

Any opinions expressed here are those of the author(s) and not those of the institute. Research disseminated by IZA may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit company supported by Deutsche Post World Net. The center is associated with the University of Bonn and offers a stimulating research environment through its research networks, research support, and visitors and doctoral programs. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

ABSTRACT

The Sexual Orientation Wage Gap: The Role of Occupational Sorting, Human Capital, and Discrimination

Using data from the 2000 U.S. Census, we document and explore three alternative explanations for the sexual orientation wage gap: occupational sorting, human capital differences, and discrimination. We find lesbian women earn more than their heterosexual counterparts irrespective of marital status while gay men earn less than their married heterosexual counterparts but more than their cohabitating heterosexual counterparts. Using a Oaxaca-Blinder decomposition we find that differences in human capital accumulation (particularly education) are the main reason behind the observed wage advantages, while discrimination and occupational sorting play a minimal role at best. Wage penalties, on the other hand, are largely explained by discrimination. Interestingly, while we do find there are some differences in the relative roles of our three alternative explanations across the wage distribution using a DiNardo, Fortin, Lemieux decomposition, the main conclusions from the Oaxaca-Blinder decomposition persist.

JEL Classification: J24, J31, J71

Keywords: sexual orientation wage gap, occupational sorting, human capital, discrimination

Corresponding author:

Heather Antecol
Department of Economics
Claremont McKenna College
500 E. Ninth Street
Claremont, CA 91711
USA
E-mail: hantecol@cmc.edu

I. Introduction

Gay and lesbian Americans have been at the forefront of public policy debate and legislation in the recent past. One specific area of acrimonious debate focuses on the expansion of civil rights protection to include sexual orientation as a protected group. Perhaps surprisingly, much of the debate has not been based on empirical evidence (Black et al. 2003). In order to inform policy makers, one needs to know the determinants of the sexual orientation wage gap based on quantitative evidence as opposed to casual observation.

The existing empirical literature in the United States documents the presence of a sexual orientation wage gap. In particular, gay men generally are found to earn less than heterosexual men (Badgett 1995; Klawitter and Flatt 1998; Clain and Leppel 2001; Alegretto and Arthur 2001; Berg and Lien 2002; Black et al. 2003; Blandford 2003; Carpenter 2007)¹ while lesbian women are generally found to earn more than heterosexual women (Klawitter and Flatt 1998; Clain and Leppel 2001; Berg and Lien 2002; Black et al. 2003; Blandford 2003).² The existing empirical literature, however, does not generally attempt to formally test why the sexual orientation wage gap exists.

Given some same-sex groups enjoy a wage advantage while others suffer a wage penalty relative to their heterosexual counterparts it seems unlikely that there is a simple explanation of the sexual orientation wage gap. In this paper, we explore three potential explanations. First, we examine occupational sorting. This explanation seems relevant if individuals in same-sex groups which enjoy (suffer) a wage advantage (penalty) are more likely to sort into male- (female-) dominated occupations than their heterosexual counterparts, as male- (female-) dominated

¹ The one exception is Carpenter (2005) who examines the sexual orientation wage gap in California. While he does not find a wage penalty for gay men relative to heterosexual men, he does generally find a wage disadvantage for bisexual men relative to heterosexual men.

² There are a number of exceptions. In particular, Badgett (1995) finds that lesbian women face a wage penalty relative to heterosexual women, but this is not statistically significant at conventional levels. Klawitter and Flatt (1998) find that the wage advantage lesbian women enjoy relative to their heterosexual counterparts becomes much smaller in magnitude and statistically insignificant when the sample is restricted to full-time, full-year workers. In California, there does not appear to be a wage advantage for lesbian women relative to heterosexual women, but bisexual women do tend to earn less than their heterosexual counterparts (Carpenter 2005).

occupations tend to pay higher (lower) wages. Second, we focus on differences in human capital accumulation. While this may be applicable for same-sex groups that enjoy a wage advantage, it is unlikely to explain the earnings differential for same-sex groups that suffer a wage penalty given the educational attainment of same-sex individuals (irrespective of gender) is higher than their heterosexual counterparts (Black et al. 2000; Black et al. 2007). Finally, we focus on labor market discrimination. This explanation, however, only seems pertinent for same-sex groups that suffer a wage penalty relative to their heterosexual counterparts.

We utilize data from the 2000 United States Census to estimate log wage equations by sexual orientation and gender. Unlike earlier studies which generally only include a dummy variable for sexual orientation, we use the standard Oaxaca-Blinder (1973) decomposition approach to analyze the determinants of the sexual orientation wage gap. The Oaxaca-Blinder decomposition approach permits us not only to allow for differential returns to observable characteristics by sexual orientation, but also to determine the relative importance of our three alternative explanations: occupational sorting, human capital differences, and discrimination. This approach, however, is an analysis of the mean sexual orientation wage gap which overlooks that the gap may not be uniform along the entire distribution of wages. Therefore, we further explore the determinants of the sexual orientation wage gap using a DiNardo, Fortin, Lemieux (1996) decomposition which allows one to decompose the sexual orientation wage gap along the entire distribution of wages.

We find lesbian women earn more than their heterosexual counterparts irrespective of marital status while gay men earn less than their married heterosexual counterparts but more than their cohabitating heterosexual counterparts. Using the Oaxaca-Blinder decomposition we find that differences in human capital (particularly education) accumulation are the main reason behind the observed wage advantages, while discrimination and occupational sorting play a minimal role at best. Wage penalties, on the other hand, are largely explained by discrimination. Interestingly, while we

do find there are some differences in the relative roles of our three alternative explanations across the wage distribution using the DiNardo, Fortin, Lemieux decomposition, the main conclusions from the Oaxaca-Blinder decomposition persist.

The next section reviews the literature. Section III discusses the data and Section IV presents the sexual orientation wage gap. Sections V and VI present the Oaxaca-Blinder and DiNardo, Fortin, Lemieux decompositions and results, respectively. The conclusions are presented in Section VII.

II. Literature Review

In her seminal paper, Badgett (1995) examines wage differences between heterosexual and behaviorally gay/lesbian (i.e., individuals who engage in sexual activity with individuals of their same gender) workers using an econometric framework. In particular, she uses General Social Survey (GSS) data from 1989-1991 to study the determinants (i.e., education, marital status, race, potential experience, geographic location, and occupation) of annual income. She finds that behaviorally gay and bisexual males earn between 11 and 27 percent less than their heterosexual counterparts depending on the definition of sexual orientation used (sexual orientation is defined a number of different ways depending on the presence of a same-sex partner).³ While she finds a similar wage penalty for behaviorally lesbian and bisexual women relative to heterosexual women, the results are statistically insignificant.

Badgett's work led to further detailed examinations of the sexual orientation wage gap. Specifically, a number of studies based on the GSS extended her analysis by including additional waves of data and considering alternative definitions of sexual orientation⁴ (Berg and Lien 2002,

³ The behavioral definitions of sexual orientation considered in Badgett (1995) are: (1) having one or more same-sex partners since the age of 18, (2) having had more than one same-sex partner since the age of 18, (3) having had at least as many same-sex partners as opposite sex-partners since the age of 18, and (4) having had either more than one same-sex partner or at least as many same-sex partners as opposite sex-partners since the age of 18.

⁴ Berg and Lien (2002) considered a respondent as behaviorally "homosexual" if the respondent reported having at least one same-sex partner in the past 5 years. The behavioral definitions of sexual orientation considered in Black et al.

Black et al. 2003, Blandford 2003). All of these studies confirm the results in Badgett for men, i.e., behaviorally gay men earn less than their heterosexual counterparts. Unlike Badgett, these studies find that behaviorally lesbian women earn more than their heterosexual counterparts. For example, Black et al. (2003) find behaviorally gay men (lesbian women) earn between 14 (20) to 16 (34) percent less (more) than their heterosexual counterparts depending on the definition of sexual orientation used.

Alternative data sources have also been used to examine the sexual orientation wage gap. The main alternative data source used is the 1990 United States Census. Unlike the GSS, the Census definition of sexual orientation is based on a new category, unmarried partner, which was added to the list of household relationships in 1990. For example, if one partner is designated as the household head, then the other partner can be identified as the unmarried partner. If that unmarried partner is of the same (opposite) sex, then the cohabitating couple is determined to be a same-sex (opposite-sex) unmarried couple. Moreover, married opposite-sex couples can be determined from the list of household relationships. While the assumption that the same-sex unmarried partners identified in the Census are truly gay or lesbian cannot be tested in the Census, it can be illustrated that this measure of sexual orientation is consistent with behaviorally based measures of sexual orientation using independent data sources (Carpenter 2004).

To date, three studies have utilized the 1990 U.S. Census to analyze the sexual orientation wage gap. The findings are generally in line with the results found in the GSS. Specifically, Klawitter and Flatt (1998) find that gay men earn less than their married heterosexual counterparts (but similar amounts relative to their unmarried heterosexual counterparts), while lesbian women

(2003) are: (1) having one or more same-sex partner since the age of 18, (2) having had at least as many same-sex partners as opposite sex-partners since the age of 18, (3) having had same-sex or both-sex partners during the last year, and (4) having had same-sex or both-sex partners in the past 5 years. Blandford (2003) considered a respondent “openly” gay/lesbian or bisexual if they had sex with same-sex or both-sex partners in the past twelve months (or past 5 years if the respondent did not have sex in the past 12 months) and are currently unmarried.

earn more than both their married and unmarried heterosexual counterparts (conditional on a broad set of control variables).⁵ Clain and Leppel (2001) also find that gay men (lesbian women) tend to earn less (more) than their heterosexual counterparts.⁶ Similarly, Alegretto and Arthur (2001) find that gay males earn 15.6 (2.4) percent less than heterosexual married (cohabitating) males after controlling for observable characteristics.⁷

Two other alternative data sources to the GSS have been employed. The findings from these studies relative to the results using the GSS are mixed. Carpenter (2007), using data from the Third National Health and Nutrition Examination Survey (NHANES III), confirms the results in the GSS for men, that is, that behaviorally gay men face a large wage penalty relative to their heterosexual counterparts.⁸ However, using data from the California Health Interview Survey (CHIS), Carpenter (2005) finds that self-identified gay men (lesbian women) do not earn significantly less (more) than their heterosexual counterparts. He does find evidence, however, that bisexual men and women earn less than their heterosexual counterparts. His results may be at odds with those in the GSS, NHANES III and the 1990 U.S. Census due to the fact that his data is based on California only, which is generally perceived to be a relatively “socially tolerant” state, and/or because this study relies on a definition of sexual orientation based on self-identification as opposed to behavior.

Overall, the existing literature generally finds that gay males face a wage penalty relative to heterosexual males while lesbian women enjoy a wage advantage relative to heterosexual females

⁵ However, Klawitter and Flatt (1998) find that if the sample is restricted to full-time, full-year workers, the wage advantage enjoyed by lesbians relative to their heterosexual counterparts is substantially reduced and is no longer statistically significant.

⁶ Clain and Leppel (2001) do not distinguish between married and unmarried heterosexual couples.

⁷ Interestingly, Alegretto and Arthur (2001) suggest that much of the wage disadvantage between gay males and heterosexual males can be explained by the marriage premium.

⁸ Carpenter (2007) considers three definitions of behaviorally gay: (1) any lifetime same-sex sexual behavior, (2) at least as many lifetime same-sex partners as opposite-sex partners, and (3) more lifetime same-sex partners than opposite-sex partners.

(although the magnitude of the penalty/advantage varies across studies).⁹ The interpretations of the patterns found vary. Some argue the wage penalty faced by men is due to discrimination (Badgett 1995). Others argue that non-conformity to traditional gender roles leads to differential pay for gays and lesbians relative to their heterosexual counterparts (Blandford 2003). Still others argue the level of effort exerted by gays and lesbians differs as a result of different budget constraints (Berg and Lien 2002). Finally, others suggest the wage penalty (advantage) of gays (lesbians) is due to the differential investment in human capital associated with household specialization theories (Black et al. 2003; Black, Sanders, and Taylor 2007). While these interpretations are intriguing, the existing studies do not formally test them.

This paper expands on the literature in a number of ways. First, we use the 2000 U.S. Census, as opposed to the 1990 U.S. Census. Second, we not only document the mean sexual orientation wage gap, but we examine the variation in the sexual orientation wage gap across the entire wage distribution. Moreover, we explicitly account for differences in observable characteristics by using two decomposition approaches, the Oaxaca-Blinder (1973) decomposition which is evaluated at the mean of the wage distribution, and the DiNardo, Fortin, and Lemieux (1996) decomposition which is evaluated across the entire wage distribution. To the best of our knowledge, the literature does not attempt to explicitly examine the role of observable

⁹ The sexual orientation wage gap has also been examined in other countries. Arabsheibani et al. (2004) and Frank (2006) examine the sexual orientation wage gap in the United Kingdom. While the former finds that gay men earn less and lesbian women earn more than their heterosexual counterparts, the latter does not find any differences in salary by sexual orientation irrespective of gender. The results may differ because Arabsheibani et al. (2004) use a nationally representative sample while Frank (2006) examines faculty and staff at 6 British Universities. Plug and Berkhout (2004) examine the sexual orientation wage gap among young college-educated individuals in the Netherlands. They find a small earnings penalty (advantage) for gay men (lesbian women) relative to their heterosexual counterparts however they find no difference between bisexual and heterosexuals irrespective of gender. Carpenter (2006) examines the sexual orientation wage gap in Canada. He finds gay men, bisexual men, and bisexual women earn less than their heterosexual counterparts, while lesbian women earn more than their heterosexual counterparts. Finally, using an experimental approach Weichselbaumer (2001) finds that the interview call-back rates of lesbian women in Austria are substantially lower than their heterosexual counterparts, suggestive of discrimination against lesbian women.

characteristics.¹⁰ Specifically, the existing studies generally only include a gay/lesbian dummy variable in their wage regressions. This approach has two potential shortcomings: it does not allow for differential returns to observable characteristics, nor does it allow one to formally determine the relative importance of alternative theories of the sexual orientation wage gap.¹¹ Which leads to our final innovation, we explicitly examine the relative importance of three alternative explanations in explaining the sexual orientation wage gap: occupational sorting, differences in human capital accumulation, and discrimination.

III. Data

The data set used for the analysis is the 2000 United States Census 5 percent Public Use Microdata sample (Ruggles et al. 2004). This data set is ideal because it includes detailed variables on labor market outcomes (e.g., employment status, wages, weeks worked, occupation), sexual orientation groups (e.g., married, cohabitating, same-sex) and demographics (e.g., age, region, education) and the large sample size allows for reasonably precise results by sexual orientation group.

The sample includes white, 25 to 59 year-old, non-immigrants who are either married or cohabitating and are the head of the household or partners of the head of the household, and are employed for wages and salaries (i.e., not self-employed).¹² We restrict our analysis to white workers

¹⁰ We know of only one study, Berg and Lien 2002, which uses the Oaxaca-Blinder decomposition. However, the main focus of their analysis uses the dummy variable approach for sexual orientation. Furthermore, they simply look at the total portion of the sexual orientation wage gap attributable to differences in average observable characteristics and the total attributable to differences in returns to these characteristics using the decomposition approach, that is, they do not attempt to determine the relative importance of particular observable characteristics (such as, human capital factors).

¹¹ There are a number of studies that do allow for some differential returns to observable characteristics; however these studies do not attempt to formally determine the relative importance of alternative theories for the sexual orientation wage gap. In particular, Badgett (1995) allows for an interaction effect between an indicator for lesbian and potential experience. Klawitter and Flatt (1998) allow for interaction effects between sexual orientation status and policy variables and an indicator for urban. Clain and Leppel (2001) also allow for some interaction effects between sexual orientation status and observable characteristics (these interactions vary depending on gender). Finally, Alegretto and Arthur (2001) do estimate regressions separately by sexual orientation, yet when they turn to their analysis of the sexual orientation gap, they pool individuals by sexual orientation and simply include a dummy variable for gay male.

¹² We exclude employed individuals with estimated hourly wages (annual wages divided by [weeks worked in past calendar year times usual weekly hours]) less than \$2/hour or greater than \$250/hour. In addition, because of the

because we do not want to confound racial differences with sexual orientation differences.¹³ In mixed race relationships, the white partner is included in our sample. In addition, we exclude households with imputed values for sex, marital status, or relationship to head of household for either partner.¹⁴ We exclude households with imputed values because of misgivings about the accuracy of the 2000 U.S. Census data's identification of the same-sex cohabiting population due to coding errors.¹⁵ The elimination of potentially miscoded heterosexual couples from the same-sex couple data ensures estimates that are more reliable. Finally, we exclude individuals with imputed values for any of our variables of interest.

Respondents in the sample are in one of three mutually-exclusive couple types: married heterosexual, cohabiting heterosexual, or cohabiting same-sex couples. Henceforth, we refer to these couple types as married, cohabitating, and same-sex, respectively. We further distinguish same-sex couples as gay for males and lesbian for females. We define these variables using the respondent's relationship to the head of the household. For married respondents, we assign a value of one if the respondent indicates that he (she) is married to a female (male) partner, and zero otherwise. For cohabitating respondents, we assign a value of one if the respondent indicates that he (she) is in an unmarried partnership with a female (male) partner, and zero otherwise. Similarly, for gay (lesbian) respondents, we assign a value of one if the respondent indicates that he (she) is in an unmarried partnership with a male (female), and zero otherwise.¹⁶ There are 814,153 (701,900),

limited number of gays and lesbians working in farming, fishing and forestry and military occupations, workers in these two occupations are excluded from the sample.

¹³ For a discussion of the African American sexual orientation wage disadvantage see Badgett et al. 2005.

¹⁴ An alternative strategy would have been to exclude only households for which both partners are flagged. However, this does not guarantee a completely clean sample of gay and lesbian households, thus we err on the side of caution by eliminating all households with any partner flagged.

¹⁵ For a detailed discussion of coding errors in the 2000 U.S. Census see Black et al. (2002).

¹⁶ As it is unclear whether gay and lesbian couples more closely mirror married couples or cohabitating couples, or represent a combination of the two, we also considered a fourth couple type, heterosexual which takes a value of one if the individual is either married or cohabitating, and zero otherwise. The results for this group closely mirror those of the married group; therefore for descriptive ease we exclude this group from our analysis. Results for this group are available upon request.

57,825 (55,872), and 5,785 (6,205) married, cohabitating, and gay (lesbian) males (females), respectively.

To explore the potential role of occupational sorting in explaining sexual orientation wage differentials, we create an occupational measure which ranks occupations based upon the percentage of males that work in each of 21 mutually exclusive Standard Occupation Classification (SOC) major group occupation categories (See Table 2 for a complete list of occupation categories). Specifically, we create an occupational male density score which calculates the percentage of workers between the ages of 18 and 65 employed in a given occupation who are male.¹⁷ The male density score ranges between 11.8 percent in healthcare support occupations to 97.2 percent in construction and extraction occupations (See Table 2). We then create 7 indicator variables based upon the occupational male density score of the occupation ranging from an indicator variable for 10-19 percent male to an indicator variable for 90-100 percent male (See Table 1 for a complete list of occupational male density indicator variables). To further explore the role of occupational sorting, we include a more flexible measure of occupation based on the full set of 21 mutually exclusive occupational categories. We discuss differences in occupational sorting by sexual orientation in detail below.

IV. The Sexual Orientation Wage Gap

Lesbian women earn substantially more than both married and cohabitating women (See Table 1).^{18,19} However, the wage advantage is much larger between lesbian and cohabitating women (31.6%) than between lesbian and married women (19.7%). For gay males the story is very different.

¹⁷ Another way to calculate occupational male density is to define the percentage of hours worked by males in the occupation. While the percentages do vary slightly under the two definitions, the ordinal ranking of occupations by male density is nearly identical.

¹⁸ We base our analysis on the entire distribution of hours paid. Hence for all calculations we weight each observation by the product of usual weekly hours worked and the appropriate Census sampling weight.

¹⁹ The log hourly wage gap is calculated as the same-sex log hourly wage minus the heterosexual log hourly wage. Throughout the paper we convert log hourly wage gaps into percents using the formula $e^x - 1$ where x is the log hourly wage gap. While this conversion yields similar results for small wage gaps (i.e., the gap expressed in log terms is similar in magnitude to the gap expressed in percent terms), the same is not true for larger wage gaps.

While gay males suffer a small wage penalty relative to their married counterparts (4.5%), they actually enjoy a large wage advantage relative to their cohabitating counterparts (28.2%).²⁰

These raw wage gaps are generally consistent with those found using the 1990 U.S. Census (in 1989 dollars). In particular, Alegretto and Arthur (2001) find the average hourly earnings of married, cohabitating, and gay males are \$15.52, \$11.43, and \$14.53, respectively. Thus, gay men face a wage penalty (advantage) relative to their married (cohabitating) counterparts. This result for men is confirmed in Klawitter and Flatt (1998) based on average annual wages, while Clain and Leppel (2001) find that gay men earn the same as their cohabitating counterparts but less than their married counterparts on average. This difference however may be driven largely by the fact that Clain and Leppel (2001) only look at full-time, full-year workers. Moreover, Klawitter and Flatt (1998) find the average annual income of lesbian women is substantially higher (\$17,497) than their married (\$9,308) and cohabitating (\$11,857) female counterparts. Similarly, Clain and Leppel (2001) find lesbian women enjoy a wage advantage relative to their heterosexual counterparts irrespective of marital status.

What can account for these differences? It is unlikely that there will be a simple explanation for the sexual orientation wage gap given the patterns we observe. In fact, it seems likely that the reasons will differ depending on whether the same-sex group under consideration enjoys a wage advantage or suffers from a wage penalty relative to their heterosexual counterparts. Thus, we explore three potential explanations: occupational sorting, differences in human capital accumulation, and labor market discrimination. According to Table 1, it can be seen that gay males are much less likely to be in occupations that are over 80 percent male relative to their married and cohabitating counterparts. Specifically, gay men are less likely to be in the following occupations: protective, transportation, architecture/engineering, installation/repair, and construction/extraction

²⁰ Although the magnitude of the wage penalties/advantages vary somewhat by cohort (i.e., 25-34, 35-44, 45-59), the main patterns are the same (available upon request). Therefore, we focus on the overall sample.

(See Table 2). Alternatively, lesbian women are more (less) likely to be in male- (female-) dominated occupations than their married and cohabitating counterparts (See Table 1). For instance, lesbian women are 4.5 (17.4) percentage points more (less) likely to be in occupations that are 80-89 (20-29) percent male relative to their married counterparts. Interestingly, lesbian women are less likely to be in certain “pink-collar” occupations, including office administration and sales (See Table 2).²¹ Given male-dominated occupations tend to pay higher wages, this may help account for the wage disadvantage experienced by gay males relative to married males and the wage advantage experienced by lesbian females relative to their heterosexual counterparts (irrespective of marital status), but does not help explain the wage advantage gay males enjoy relative to cohabitating males.

Turning to differences in human capital accumulation, gay men and lesbian women have approximately 3 years less potential experience relative to their married counterparts, but roughly one more year of potential experience than their cohabitating counterparts (see Table 1).²² Differences in labor market experience may, therefore, help explain the wage advantage lesbian women enjoy relative to cohabitating females as lesbian women have more labor market experience, but it is unlikely to explain the wage advantage they have relative to married women given lesbian women have less labor market experience. On the other hand, for gay males, labor market experience may be a good explanation for the patterns we observe as gay males earn less (more) than married (cohabitating) males and also have less (more) labor market experience.

Moreover, both gay males and lesbian females acquire more education than their heterosexual counterparts, irrespective of marital status. For example, 33.6 (30.0) percent of gay males (lesbian females) have graduated college relative to 18.7 (21.1) and 23.7 (23.1) of cohabitating and married males (females), respectively. Thus, differences in human capital accumulation as measured by educational attainment may explain wage advantages enjoyed by same-sex groups

²¹ Summary statistics for all remaining variables are presented in Appendix Table 1.

²² Potential experience is calculated as age minus education minus 6.

relative to their heterosexual counterparts but are unlikely to be an explanation for wage penalties suffered by same-sex groups relative to their heterosexual counterparts. Overall, therefore it is unclear how big of a role differences in human capital accumulation will play given we observe conflicting levels of support for the hypothesis depending on the measure of human capital considered.

Labor market discrimination is the final explanation we examine. It is unclear how big of a role this will play given the sexual orientation wage gap tends to favor some same-sex groups but disfavor other same-sex groups. To more formally assess the relative roles of our three main determinants in explaining the sexual orientation wage gap, the remainder of the paper focuses on two types of wage decompositions, the Oaxaca-Blinder (1973) decomposition and the DiNardo, Fortin and Lemieux (1996) decomposition.

V. Determinants of the Sexual Orientation Wage Gap

As a first attempt to formally identify the underlying causes of the sexual orientation wage gap, we perform a Oaxaca-Blinder (1973) decomposition. Specifically, we estimate log hourly wage equations of the following form separately by sexual orientation group:

$$W_{ig} = \alpha_g + \beta_g X_{ig} + \varepsilon_{ig} \quad (1)$$

where W is log hourly wages, i and g represent individuals and sexual orientation groups (married, cohabitating, and same-sex), respectively, X is a vector of observable characteristics (defined below) and ε is an error term with the usual properties.

Before discussing the decomposition, we present the results from equation (1). We estimate two specifications. Specification 1 includes controls for education, potential experience, part-time status, metropolitan area, region, and 7 occupational male density categories while specification 2 includes specification 1 but replaces the 7 occupational male density categories with 21 detailed occupational categories. For ease, we present the results for education, potential experience, part-

time status, metropolitan area, and region based on specification 2 in Table 3, as the results are similar across specifications.²³ In addition, we present the results for our two measures of occupation in Tables 4 and 5, respectively.

Interestingly, for men there are generally no differences in the returns to observable characteristics by sexual orientation (See Table 3). The only discernable difference by sexual orientation in Table 3 relates to region. For example, relative to the Pacific, gay males earn 26.0 percent less in the East South Central region while married and cohabitating males earn 13.8 and 15.5 percent less in this region, respectively.²⁴ For women, we do observe more differences. Specifically, lesbian women earn lower returns to post-college degrees than their heterosexual counterparts, irrespective of marital status. For example, lesbian women earn 8.2 (18.6) percentage points less for a college (post-college) degree relative to a high school degree compared to their married counterparts (see Table 3). Moreover, lesbian women's experience-earnings profile has a very different shape from that of married or cohabitating women. Finally, there are generally no differences in returns to region for females by sexual orientation.²⁵

Focusing on the returns to occupational male density in Table 4, the returns to both female-dominated occupations (i.e., 10-19% and 20-29% male) and male-dominated occupations (i.e., 80-89% and 90-100% male) relative to evenly mixed occupations (i.e., 50-59% male) do not differ by sexual orientation for men. Interestingly, for occupations which are closer to evenly mixed gay men fare better than their married counterparts. That is, gay men face less of a wage penalty (6.7 percentage points) in occupations that have a slightly higher female concentration (i.e., 40-49% male) and earn more of a wage advantage (5.9 percentage points) in occupations that have a slightly higher

²³ Results from specification 1 are available upon request.

²⁴ As with the log hourly wage gap, the coefficient estimates for all indicator variables discussed in the text are converted into percents using $e^x - 1$ where x is the coefficient of interest.

²⁵ The main exception is that lesbian women face a larger wage penalty in the New England (relative to the Pacific) region than their married and cohabitating counterparts.

male concentration (i.e., 60-69% male) relative to evenly mixed occupations than their married counterparts. Moreover, these patterns generally persist when we break these coarser male density bins into our detailed occupation categories (see Table 5).²⁶ This suggests that gay men fare better in occupations that are closer to evenly mixed but do not face additional penalties for working in occupations that are less evenly mixed relative to their heterosexual counterparts.

Unlike for men, for women there are differences by sexual orientation in the returns to occupation across the entire male density distribution. Further the differences are more pronounced for lesbian and married women than for lesbian and cohabitating women. In female- (male-) dominated occupations relative to evenly mixed occupations lesbian women face (enjoy) a larger (smaller) wage penalty (advantage) than their heterosexual counterparts. Moreover, for closer to evenly mixed occupations lesbian women fare worse than their heterosexual counterparts. For example, lesbian women earn 11.1 (10.1) percentage points less in occupations that are 40-49% (60-69%) male relative to occupations that are 50-59% male than their married counterparts. These overall patterns persist when more detailed occupational categories are used (see Table 5). This is suggestive that lesbian women fare better in evenly mixed occupations relative to their heterosexual counterparts.

Taken together, these results seem to indicate that differences in returns to characteristics by sexual orientation play a bigger role for women than for men. Moreover, by not allowing the returns to differ by sexual orientation, as the previous studies generally do, one cannot fully discern the relative roles of each of the observable characteristics in explaining the sexual orientation wage gap.

The remainder of the paper presents the decomposition results.

²⁶ The main exceptions at the bottom of the distribution are personal care (23.4% male) and education (26.2% male) where gay males face a substantially smaller wage penalty (relative to sales, 49.5% male) than their married counterparts. The main exception at the top of the distribution is protective (80.6% male) where gay males enjoy a substantially larger wage advantage (relative to sales) than their married counterparts. Finally, the main exception in the middle of the distribution is gay men no longer fare better than their married counterparts in occupations that are between 60-69% male relative to an evenly mixed occupation.

Quantification of the sexual orientation earnings gap requires computing what same-sex workers would earn if they faced the same returns for their observable characteristics as heterosexual workers. Following Oaxaca-Blinder (1973), the decomposition can be given by:

$$\overline{W}^{SS} - \overline{W}^H = (\overline{X}^{SS} - \overline{X}^H)\hat{\beta}^H + \overline{X}^{SS}(\hat{\beta}^{SS} - \hat{\beta}^H) + (\hat{\alpha}^{SS} - \hat{\alpha}^H) \quad (2)$$

where SS and H represent same-sex (either gay or lesbian) and heterosexual (either married or cohabitating) respondents, respectively. Bars denote means and hats denote predicted values from equation (1). This equation uses heterosexual weights as opposed to same-sex weights; however, similar results are found using same-sex weights and are available upon request.

The decomposition results for specifications 1 and 2 are reported in Panels A and B of Table 6 for men and women, respectively. The first row of each panel reports the total log hourly wage gap. The second row reports the portion of the total log hourly wage gap attributable to differences in average observable characteristics and corresponds with the first term in equation (2). Rows 3 through 9 further decompose the portion due to differences in average observable characteristics into subcategories to illustrate the relative importance of particular observable characteristics. The final row of each panel reports the portion of the total log hourly wage gap attributable to differences in the returns to observable characteristics and corresponds with the last two terms in equation (2). Following the standard convention, we refer to this latter portion as discrimination. It should be noted however that one may incorrectly attribute a portion of the total log hourly wage gap to discrimination if some productivity related variables that are correlated with sexual orientation (e.g., work effort) are excluded from the analysis. Similarly, the portion of the total log hourly wage gap attributable to discrimination may be understated if endogenous productivity related variables that are negatively influenced by discrimination (e.g., occupation) are included in the analysis.

While differences in potential experience and occupational density help explain the log wage penalty for gay men relative to married men²⁷, accounting for all observable characteristics explains none of the log hourly wage gap. This is because if gay men had the same education levels as married men they would face an even larger log wage penalty.

The story is very different for same-sex groups that enjoy a wage advantage relative to their heterosexual counterparts. Specifically, observable characteristics account for almost the entire, or the entire log wage advantage that same-sex groups enjoy relative to their heterosexual counterparts, depending on the same-sex group and specification considered. The main driver is education (which explains between 59 to 75 percent and 62 to 69 [54 to 63] percent depending on the specification of the gay male wage advantage relative to their cohabitating counterparts and the lesbian wage advantage relative to their married [cohabitating] counterparts, respectively), although potential experience and occupation do play a small role as well.

The Oaxaca-Blinder decomposition results suggest that differences in human capital accumulation are the main reason behind the observed sexual orientation wage advantage, while discrimination and occupational sorting play only a minimal role. On the other hand, discrimination largely explains the observed sexual orientation wage penalty.²⁸

Unfortunately, analysis of the mean sexual orientation wage gap overlooks that the gap may not be uniform along the entire distribution of wages. Figure 1 shows the sexual orientation wage gap at each wage percentile by subtracting the married or cohabitating male (female) log hourly wage at that percentile from the gay male (lesbian female) log hourly wage at the same percentile within each sexual orientation group's wage distribution. Figure 1 allows us to compare earnings not only

²⁷ Interestingly, when detailed occupational categories are used, occupational sorting no longer plays a role.

²⁸ In order to determine how these results compare to those based on the estimation technique traditionally presented in the literature, we re-estimate equation (1) pooled by sexual orientation and include a dummy variable for same-sex partner. While we find the coefficient on the same-sex partner variable is roughly the same as the component attributable to differences in returns to observable characteristics using the Oaxaca-Blinder decomposition, the pooled approach does not allow one to determine the relative explanatory power of each of the observable characteristics.

at the median and quartiles, but for all wage percentiles between the 4th to the 96th.²⁹ As before, negative (positive) values denote a wage penalty (advantage) for gays/lesbians relative to heterosexuals at the same wage percentile within each respective wage distribution.

According to Figure 1, the median wage advantage between lesbian women and married (21.2 percent) and cohabitating (34.6 percent) women is slightly larger than the mean advantage (19.7 and 31.6 percent, respectively). While the wage advantage is fairly uniform along the entire distribution of earnings for cohabitating women, the wage advantage relative to married women declines by roughly a fifth in the top quartile of earnings. The pattern for gay males is quite different. Specifically, the median wage advantage (penalty) enjoyed (suffered) by gay men relative to cohabitating (married) men is smaller (larger) than the mean wage advantage (penalty), i.e., 26.6 vs. 28.2 percent (5.1 vs. 4.5 percent). The wage advantage enjoyed by gay men relative to cohabitating men is roughly forty percent larger in the top quarter of the earnings distribution than in the bottom three quarters (36.8 vs. 25.8 percent). In addition, the wage penalty suffered by gay men relative to married men falls to near zero for the top quarter of the earnings distribution indicating near parity in the log wages of top-earning gay and married men (i.e., it falls from an average of 4.9 percent for the bottom three quarters of earners to 0.8 percent for the top quarter).

The wage penalty or advantage experienced by each sexual orientation group is not a uniform phenomenon over the entire wage distribution. Thus, the remainder of the paper examines an alternative decomposition approach that allows us to examine the role of our three alternative explanations (i.e., occupational sorting, differences in human capital accumulation, and discrimination) along the entire distribution of the sexual orientation wage gap.

²⁹ Trimming the wage percentiles at the tails within each sexual orientation group decreases the influence of outliers.

V. Decomposition of the Sexual Orientation Wage Gap over the Distribution of Wages

To analyze the explanatory power of our three potential sources of the sexual orientation wage gap over the entire distribution of wages, we adopt a DiNardo, Fortin and Lemieux (1996) (DFL) decomposition approach. Specifically, the DFL technique constructs a counterfactual distribution of wages to estimate how differences in the distribution of observable characteristics contribute towards differences in the distribution of wages between two groups.

We are interested in creating a counterfactual distribution of wages for the same-sex (SS) group if that group had the same distribution of observable characteristics as the heterosexual (H) group. We start with the actual distribution of wages for the SS group:

$$\int_{X \in \Omega_X} dF(W, X | g = SS) = \int_{X \in \Omega_X} f(W | X, g = SS) dF(X | g = SS) \quad (3)$$

where $f(W | X, g = SS)$ denotes the distribution of wages conditional on observable characteristics for the SS group, $dF(X | g = SS)$ denotes the distribution of observable characteristics conditional on membership in the SS group, and Ω_X represents the universe of observable characteristics.

As we are interested in the relative roles of our three alternative explanations of the sexual orientation wage gap, it is necessary to estimate the DFL procedure in stages. Our preferred ordering first accounts for occupational sorting, then human capital differences (education and potential experience), followed by part-time status, metropolitan area, and region. Thus, in the first stage we isolate occupation (occ) from the other observable characteristics, $X_{\neq 1}$. We rewrite the actual distribution of wages for the SS group as:

$$f(W, X | g = SS) = \iint f(W | occ, X_{\neq 1}, g = SS) dF(occ | X_{\neq 1}, g = SS) dF(X_{\neq 1} | g = SS) \quad (4)$$

where $f(W | occ, X_{\neq 1}, g = SS)$ denotes the distribution of wages conditional on occupation and all other observable characteristics for the SS group, $dF(occ | X_{\neq 1}, g = SS)$ denotes the distribution of

occupation conditional on the other observable characteristics for the SS group, and $dF(X_{\neq 1} | g = SS)$ denotes the distribution of all other observable characteristics conditional on membership in the SS group.

What would the distribution of SS wages be if the SS group had the same distribution of occupational sorting as the H group, but the distribution of all other observable characteristics remains unchanged? If we assume that the conditional distribution of wages does not depend on the conditional distribution of observable characteristics, using equation (4) we can construct this counterfactual distribution of wages as:

$$\iint f(W | occ, X_{\neq 1}, g = SS) dF(occ | X_{\neq 1}, g = H) dF(X_{\neq 1} | g = SS) = \iint f(W | occ, X_{\neq 1}, g = SS) \psi_{occ|X_{\neq 1}}(X) dF(occ | X_{\neq 1}, g = SS) dF(X_{\neq 1} | g = SS) \quad (5)$$

where $\psi_{occ|X_{\neq 1}}(X) = \frac{dF(occ | X_{\neq 1}, g = H)}{dF(occ | X_{\neq 1}, g = SS)}$, the reweighting function for occupation, defines a unique

weighting factor for each individual based on their unique set of observable characteristics.³⁰

Specifically, the reweighting function decreases (increases) the weight of SS individuals who are in occupations that are relatively less (more) common in the H group than the SS group, but does not change the distribution of the remaining $X_{\neq 1}$ characteristics.³¹ By weighting each SS observation's wage by the product of its reweighting factor and its sample weight, we construct the counterfactual distribution of wages if the SS group had the same conditional distribution of occupational sorting as the H group. The counterfactual sexual orientation wage gap is the difference between the counterfactual wage distribution of the SS group (equation 5) and the actual wage distribution of the H group.

³⁰ Following the methods of DFL, we estimate the reweighting function using logistic regression.

³¹ For example, 26.3 (5.3) percent of 35 year-old, Pacific metropolitan area, full-time, college graduate gay males work in management (sales) occupations, while 23.5 (14.6) percent of 35 year-old, Pacific metropolitan area, full-time, college graduate married males work in management (sales) occupations. Thus for this subgroup of workers, management (sales) occupations are over-represented (under-represented) in the same-sex male sample relative to the married male sample by a reweighting factor of roughly 0.89 [~~0.235~~/0.263] (2.75 [~~0.146~~/0.053]).

In the second stage of the DFL, we now isolate occupation (occ) and education (ed) from the other observable characteristics, $X_{\neq 2}$. The counterfactual distribution of wages if the SS group had the same occupational sorting and education of the H group, but the distribution of all other observable characteristics remains unchanged, can now be expressed as:

$$\begin{aligned} & \int \int \int f(W | occ, ed, X_{\neq 2}, g = SS) dF(occ | ed, X_{\neq 2}, g = H) dF(ed | X_{\neq 2}, g = H) dF(X_{\neq 2} | g = SS) \\ &= \int \int \int f(W | occ, ed, X_{\neq 2}, g = SS) \psi_{occ|ed, X_{\neq 2}}(X) \psi_{ed|X_{\neq 2}}(X)^* \\ & \quad dF(occ | ed, X_{\neq 2}, g = SS) dF(ed | X_{\neq 2}, g = SS) dF(X_{\neq 2} | g = SS) \end{aligned} \quad (6)$$

where $\psi_{occ|ed, X_{\neq 2}}(X) = \frac{dF(occ | ed, X_{\neq 2}, g = H)}{dF(occ | ed, X_{\neq 2}, g = SS)}$ and $\psi_{ed|X_{\neq 2}}(X) = \frac{dF(ed | X_{\neq 2}, g = H)}{dF(ed | X_{\neq 2}, g = SS)}$ are the

reweighting functions for occupation and education, respectively. Notice the reweighting function obtained here for occupation is the same as the one obtained above. By weighting each SS observation's wage by the product of both reweighting factors and its sample weight, we construct the counterfactual distribution of wages if the SS group had the same distribution of occupational sorting and education as the H group. The counterfactual sexual orientation wage gap is the difference between the counterfactual wage distribution of the SS group (equation 7) and the actual wage distribution of the H group. We continue this process to control for differences in all observable characteristics in the order specified above. After controlling for the total effect of all characteristics, if a counterfactual sexual orientation wage gap persists then this portion of the total log hourly wage gap cannot be attributed to differences in observable characteristics. As in the mean decomposition analysis, we refer to this remaining portion as discrimination.³²

The sequential DFL is somewhat sensitive to the order in which individual characteristics are selected for decomposition. While the total effect of controlling for all characteristics will be the same, a single characteristic's estimated influence on the counterfactual distribution of wages tends

³² Once again the exclusion (inclusion) of productivity related variables that are correlated with sexual orientation (discrimination) from the analysis could lead one to overstate (understate) the importance of discrimination.

to be larger the later it is accounted for in the sequential DFL. This is because the relative distribution of characteristics at each stage is conditioned on all characteristics not selected in previous stages; hence later stages hold fewer characteristics constant. Our main findings concerning the relative roles of occupational sorting and human capital accumulation are generally robust to the ordering of the sequential DFL.³³ In fact, the patterns always hold as long as we condition on education when we control for occupation. We argue this is the preferred order because one's choice of occupation is constrained by prior choices about educational attainment whereas educational attainment is not constrained by occupation. Thus, we must account for occupational sorting conditional on education or the estimated reweighting function for occupation will not hold the distribution of education constant and will confound occupational sorting and educational differences between the groups. Our preferred ordering (described above) gives a conservative estimate of the relative influence of occupational sorting and human capital accumulation on the counterfactual distribution of wages.

For expositional ease, we plot each stage's counterfactual sexual orientation wage gap over the distribution of wages for males (females) from our sequential DFL decomposition in Panels A through G of Figures 2 and 3 (Figures 4 and 5). Panel A of each figure shows the actual raw log hourly wage gap as a solid line (replicated from Figure 1). Negative (positive) values denote a wage penalty (advantage) for gays/lesbians relative to heterosexuals at the same wage percentile within each respective wage distribution. Panel A also shows the counterfactual log hourly wage gap (dashed line), if conditional upon all other factors, the distribution of occupational sorting of the

³³ For men there is some variation in the relative roles of occupational sorting vs. human capital accumulation if education is adjusted for before occupation. While this variation is less important for gay males relative to their married counterparts as discrimination continues to play the largest role, for gay males relative to their cohabitating counterparts the relative roles of the two explanations are at times reversed.

same-sex group is changed such that it is equivalent to that of their heterosexual counterparts.³⁴ If occupational sorting is the primary determinant of the sexual orientation wage gap, then the counterfactual log hourly wage gap would be zero and the dashed line would lie along the X-axis.

According to Panel A of Figures 2-5, the dashed line generally never overlaps with the X-axis along the entire wage distribution irrespective of gender. Further, while the relative role of occupational sorting does vary somewhat across the distribution of wages for both males and females (e.g., occupational sorting explains somewhat more of the wage advantage lesbian women enjoy relative to married women at the top of the distribution than at the bottom of the distribution), the differences across the distribution are generally insignificant. Thus, for both males and females we find a limited role for occupational sorting in explaining the sexual orientation wage gap.

Panels B and C of each figure explore the role human capital factors (education and potential experience) play in explaining the sexual orientation wage gap. We again show the pre- (post-) adjustment counterfactual log hourly wage gap as a solid (dashed) line. The dashed line in Panel A becomes the solid line in Panel B. Similarly, the dashed line in Panel B becomes the solid line in Panel C. For regions along the wage distribution where the dashed line is closer to the X-axis than the solid line, the human capital factor plays a role in explaining the sexual orientation wage gap at that percentile.

We find that differences in educational attainment, after accounting for occupational sorting, play a large role in explaining the wage advantage enjoyed by same-sex groups relative to their heterosexual counterparts across the entire wage distribution. Specifically, we can explain virtually the entire wage advantage enjoyed by gay males relative to cohabitating males after controlling for

³⁴ The DFL decompositions are based on our detailed measure of occupation (i.e., 21 SOC occupation categories listed in Table 2), as similar results are found with the occupational male density measure (i.e., 7 occupational male density categories listed in Table 1). Results are available upon request.

occupational sorting and differences in educational attainment (see Panel B of Figure 3); and we can explain anywhere from a half to three-quarters of the wage advantage enjoyed by lesbian females relative to their heterosexual counterparts (depending on the marital status of the comparison group) after controlling for occupational sorting and differences in educational attainment (see Panel B of Figures 4 and 5). Occupational sorting and human capital differences in educational attainment, however, cannot explain the wage penalty suffered by gay males relative to married males (see Panel B of Figure 2). Accounting for differences in occupation and education between the gay and married male groups would actually lead us to expect a much larger wage penalty than we find empirically.

Turning to our second human capital measure, we find that accounting for differences in potential experience plays a limited role in explaining the sexual orientation wage gap. However, we do find that potential experience has more of an effect for explaining the wage differential for high-earning workers (see Panel C of Figures 2-5). This may be a result of a higher premium for experience in higher-earning, human capital-intensive jobs than in lower-earning, less human capital-intensive jobs.

For completeness, Panels D, E and F of Figures 2-5 adjust sequentially for differences in part-time status, metropolitan area, and region between same-sex and heterosexual workers. While differences in working part-time do not play a significant role in explaining the sexual orientation wage gap for either gender, adjusting for differences in living in a city or regional differences leads to a decrease in gay male (lesbian female) counterfactual wages and increases (decreases) the counterfactual sexual orientation wage penalty (advantage) observed.

The final panel of each figure, (Panel G), shows the role discrimination plays in explaining the log hourly wage gap. Panel G shows the actual raw log hourly wage gap at each percentile as a solid line (replicated from Panel A) followed by the counterfactual log hourly wage gap after

controlling for occupational sorting, human capital differences, and differences in part-time status, metropolitan area, and region as a dashed line. The distance between the solid line (the dashed line) and the dashed line (the X-axis) shows the role of observable characteristics (discrimination) in explaining the sexual orientation wage gap at that wage percentile.

Discrimination is most important for same-sex groups that suffer a wage penalty relative to their heterosexual counterparts. In particular, discrimination accounts for more than the entire wage penalty suffered by gay men relative to their married counterparts, that is, the dashed line lies below the X-axis and the solid line (see Panel G of Figure 2). Moreover, discrimination plays a larger role in explaining the wage penalty gay men suffer relative to their married counterparts below the median than above the median. Discrimination generally plays a more limited role for same-sex groups that enjoy a wage advantage relative to their heterosexual counterparts. We do find, however, that discrimination contributes more towards the wage advantage enjoyed by lower-earning lesbian women relative to higher earners (see Panel G of Figures 4 and 5).

Taken together, these results imply that despite differences in the size of the sexual orientation wage gap and small differences in the relative roles of our three explanations across the distribution of wages, the main findings of the mean decomposition analysis continue to hold. Specifically, human capital factors (discrimination) largely explain the sexual orientation wage advantage (penalty) enjoyed (suffered) by same-sex couples relative to their heterosexual counterparts.

VII. Conclusion

Recent public and legislative debate has focused on earnings differentials between gay and lesbian Americans relative to their heterosexual counterparts. Sound policy must be based on addressing the underlying causes of these wage differentials. Using the 2000 U.S. Census we show that gay men face a wage penalty relative to their married counterparts, but enjoy a wage advantage

relative to their cohabitating counterparts. Moreover, lesbian women enjoy a wage advantage relative to their heterosexual counterparts irrespective of marital status.

Given these patterns, it is unlikely that there will be a simple explanation for the sexual orientation wage gap. In fact, the explanations likely differ depending on whether the sexual orientation group under consideration enjoys a wage advantage or suffers from a wage penalty relative to their heterosexual counterparts. Therefore, we explore three potential explanations—occupational sorting, differences in human capital accumulation, and labor market discrimination—using an analysis of the mean wage gap. Specifically, using the Oaxaca-Blinder (1973) decomposition, we find that differences in human capital accumulation, particularly education, are the main reason behind the observed wage advantage enjoyed by lesbian females relative to their heterosexual counterparts (irrespective of marital status) and gay males and their cohabitating counterparts, while occupational sorting and discrimination play only a modest role. However, we find that the entire wage penalty suffered by gay males relative to their married counterparts is driven by discrimination.

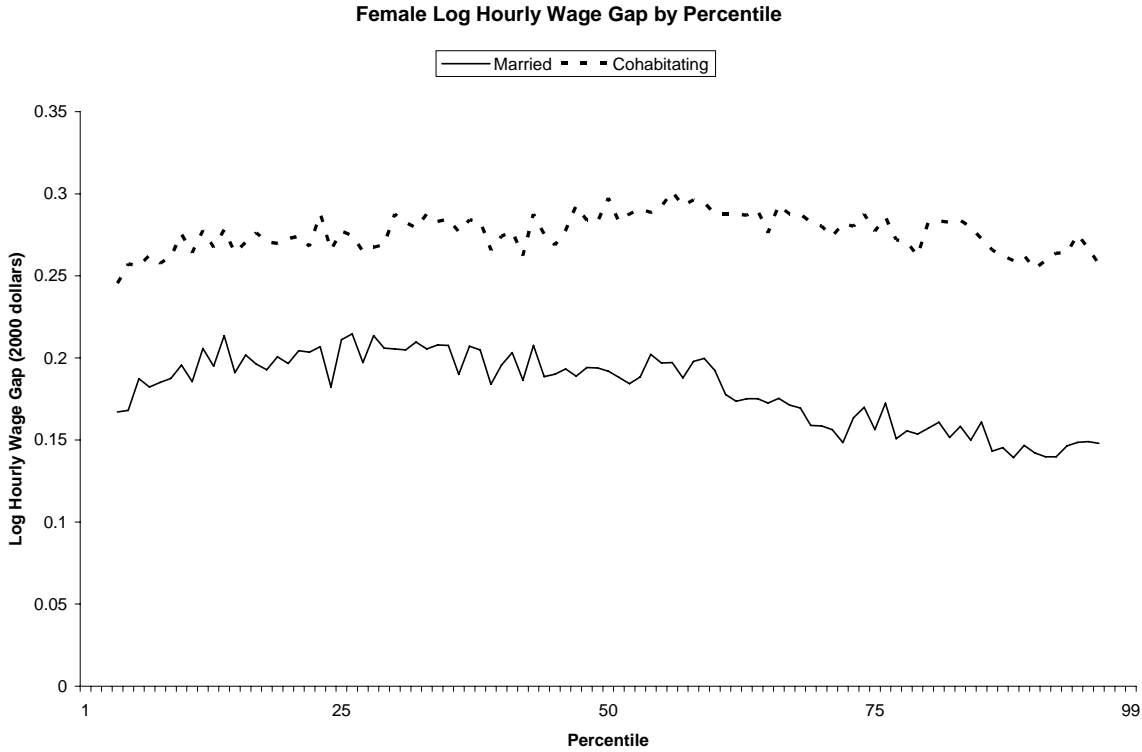
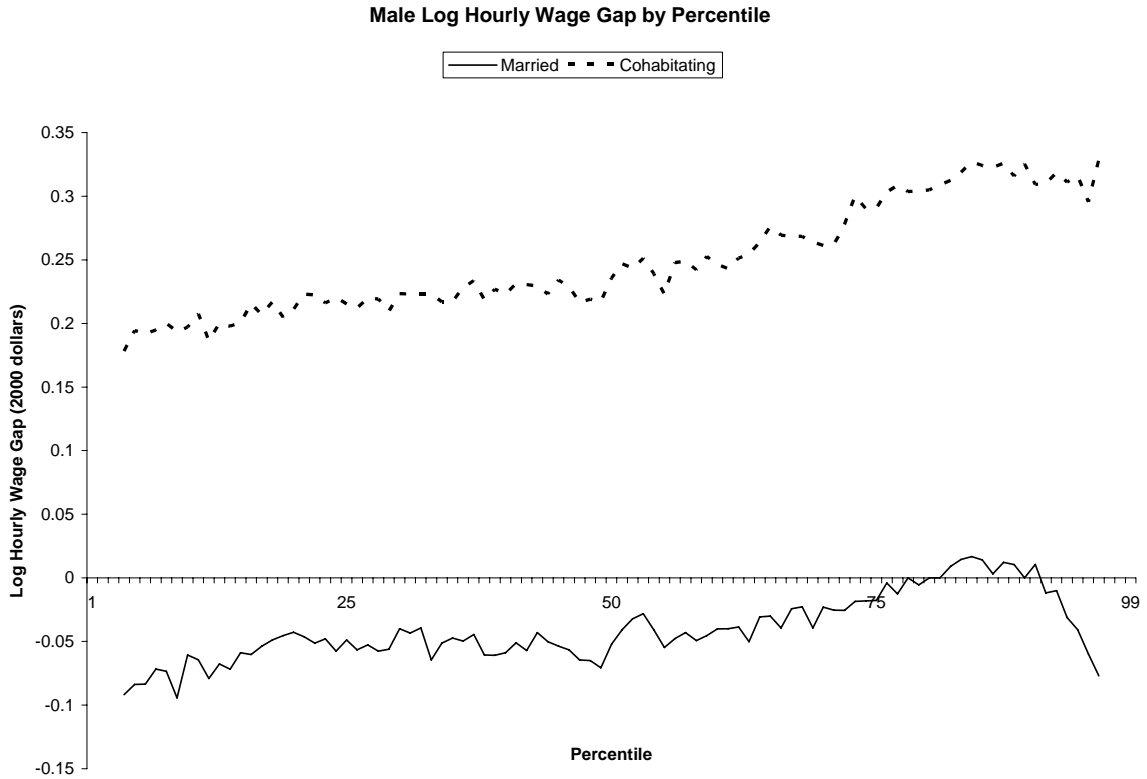
Unfortunately, analysis of the mean sexual orientation wage gap overlooks that the gap is not uniform along the entire distribution of wages, thus we expand our analysis by examining the determinants of the sexual orientation wage gap along the entire wage distribution using a DiNardo, Fortin, Lemieux (DFL) decomposition. We find that while gay males experience an average wage penalty relative to married males, top-earning gay males earn wages nearly identical to their married counterparts. In addition, the wage advantage of top-earning lesbian females relative to their married counterparts is smaller than the average advantage. While the non-uniformity in the sexual orientation wage gap along the distribution of wages does lead to some small differences in the relative roles of our three alternative explanations across various portions of the wage distribution, the main conclusions from the analysis of the mean wage gap persist.

References

- Allegretto, Sylvia A. and Michelle M. Arthur. 2001. "An Empirical Analysis of Homosexual/Heterosexual Male Earnings Differentials: Unmarried and Unequal?" *Industrial and Labor Relations Review*, Vol. 54, No. 3 (April), pp. 631-46.
- Arabsheibani, G. Reza, Alan Marin, and Jonathan Wadsworth. 2004. "In the Pink: Homosexual-Heterosexual Wage Differentials in the UK." *International Journal of Manpower*, Vol. 25, No. 3, pp. 343-54.
- Badgett, M.V. Lee. 1995. "The Wage Effects of Sexual Orientation Discrimination." *Industrial and Labor Relations Review*, Vol. 48, No. 4 (July), pp. 726-39.
- Badgett, M.V. Gary Gates, and Lisa Saunders. 2005. "Double Disadvantage? African American Same-Sex Couples: Evidence from Census 2000." Working Paper (available at: <http://www.law.ucla.edu/williamsinstitute/publications/DoubleDisadvantage.pdf>).
- Berg, Nathan and Donald Lien. 2002. "Measuring the Effect of Sexual Orientation on Income: Evidence of Discrimination?" *Contemporary Economic Policy*, Vol. 20, No. 4, pp. 394-414.
- Black, Dan, Gary Gates, Seth Sanders, and Lowell Taylor. 2000. "Demographics of the Gay and Lesbian Population in the United States: Evidence from Available Systematic Data Sources." *Demography*, Vol. 37, No. 2 (May), pp. 139-54.
- _____. 2002. "Same-Sex Unmarried Partner Couples in Census 2000: How many are Gay and Lesbian?" Working Paper (available at: <http://www-cpr.maxwell.syr.edu/faculty/black/sscouplesin2000census081102.pdf>).
- Black, Dan A., Hoda R. Makar, Seth G. Sanders, and Lowell J. Taylor. 2003. "The Earnings Effects of Sexual Orientation." *Industrial and Labor Relations Review*, Vol. 56, No. 3 (April), pp. 449-69.
- Black, Dan A., Seth G. Sanders, and Lowell J. Taylor. 2007. "The Economics of Lesbian and Gay Families." *Journal of Economic Perspectives*, Forthcoming.
- Blandford, John M. 2003. "The Nexus of Sexual Orientation and Gender in the Determination of Earnings." *Industrial and Labor Relations Review*, Vol. 56, No. 4 (July), pp. 622-42.
- Blinder, Alan S. 1973. "Wage Discrimination: Reduced Form and Structural Estimates." *Journal of Human Resources*, Vol. 8, No. 4 (Autumn), pp. 436-455.
- Carpenter, Christopher. 2004. "New Evidence on Gay and Lesbian Household Incomes." *Contemporary Economic Policy*, Vol. 22, No. 1, pp. 78-94.
- _____. 2005. "Self-Reported Sexual Orientation and Earnings: Evidence from California." *Industrial and Labor Relations Review*, Vol. 58, No. 2 (January), pp. 258-273.

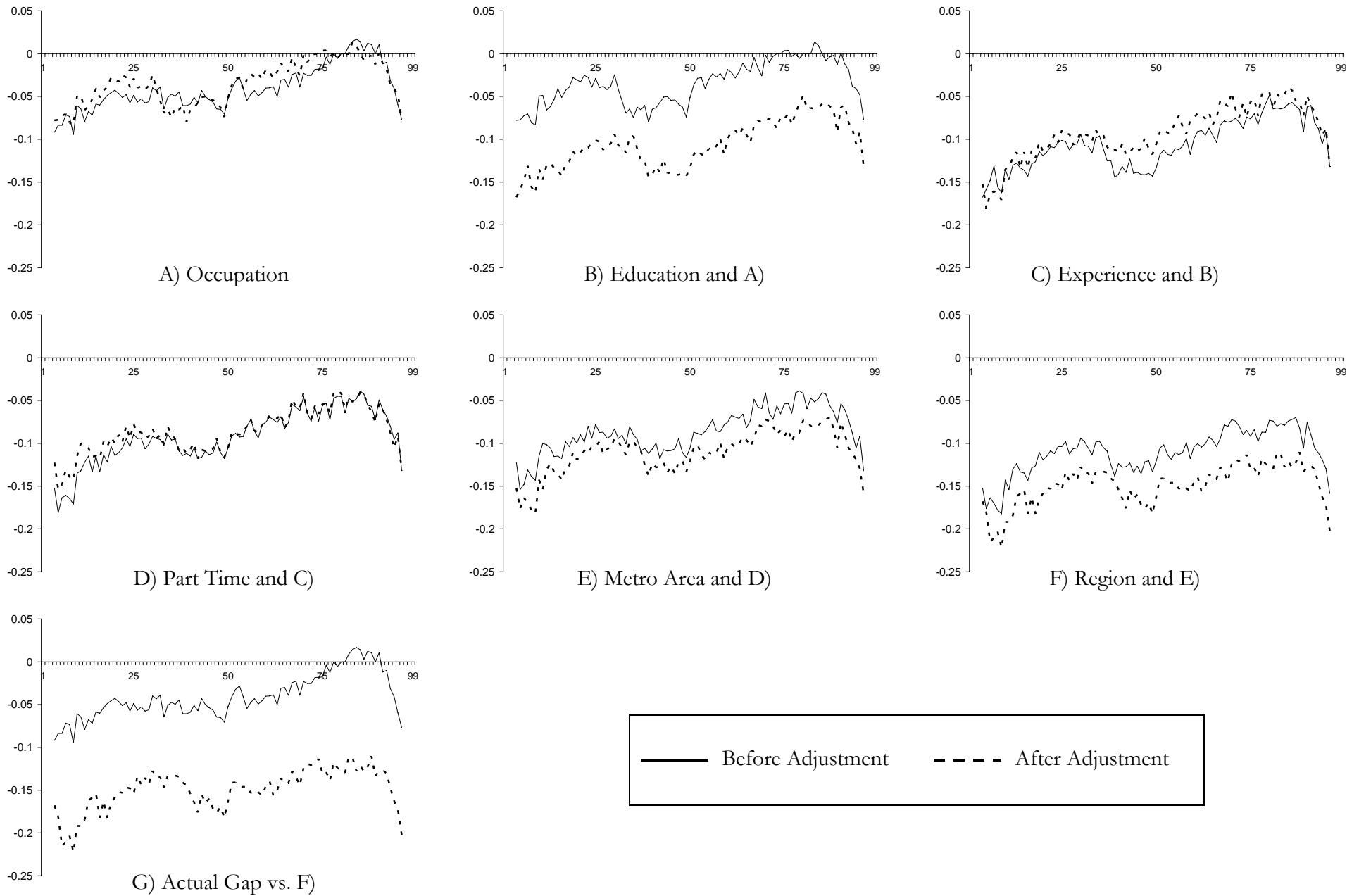
- _____. 2006. "Sexual Orientation and Economic Well-Being in Canada." University of California Irvine, Working Paper (available at: <http://web.gsm.uci.edu/~kittc/CarpenterCanadaGLB.pdf>).
- _____. 2007. "Revisiting the Income Penalty for Behaviorally Gay Men: Evidence from NHANES III." *Labour Economics*, Vol. 14, pp. 25-34.
- Clain, Suzanne Heller and Karen Leppel. 2001. "An Investigation into Sexual Orientation Discrimination as an Explanation for Wage Differences." *Applied Economics*, Vol. 33, pp. 37-47.
- DiNardo, John, Nicole Fortin and Thomas Lemieux. 1996. "Labor Market Institutions and the Distribution of Wages, 1973-1992 : A Semiparametric Analysis", *Econometrica*, Vol. 64, (September), pp. 1001-1044.
- Frank, Jeff. 2006. "Gay Glass Ceilings." *Economica*, Vol. 73, (August), pp. 485-508.
- Klawitter, Marieka M. and Victor Flatt. 1998. "The Effects of State and Local Antidiscrimination Policies on Earnings for Gays and Lesbians." *Journal of Policy Analysis and Management*, Vol. 17, No. 4, pp. 658-686.
- Oaxaca, Ronald. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review*, Vol. 14, No. 3, pp. 693-709.
- Plug, Erik and Peter Berkhout. 2004. "Effects of Sexual Preferences on Earnings in the Netherlands." *Journal of Population Economics*, Vol. 17, No. 1 (February), pp. 117-31.
- Ruggles, Steven, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. 2004. *Integrated Public Use Microdata Series: Version 3.0* [Machine-readable database]. Minneapolis, MN: Minnesota Population Center [producer and distributor] (available at: <http://usa.ipums.org/usa/>).
- Weichselbaumer, Doris. 2001. "Sexual Orientation Discrimination in Hiring." University of Linz Working Paper No. 0021 (available at SSRN: <http://ssrn.com/abstract=305140>).

Figure 1: Sexual Orientation Wage Gap by Gender



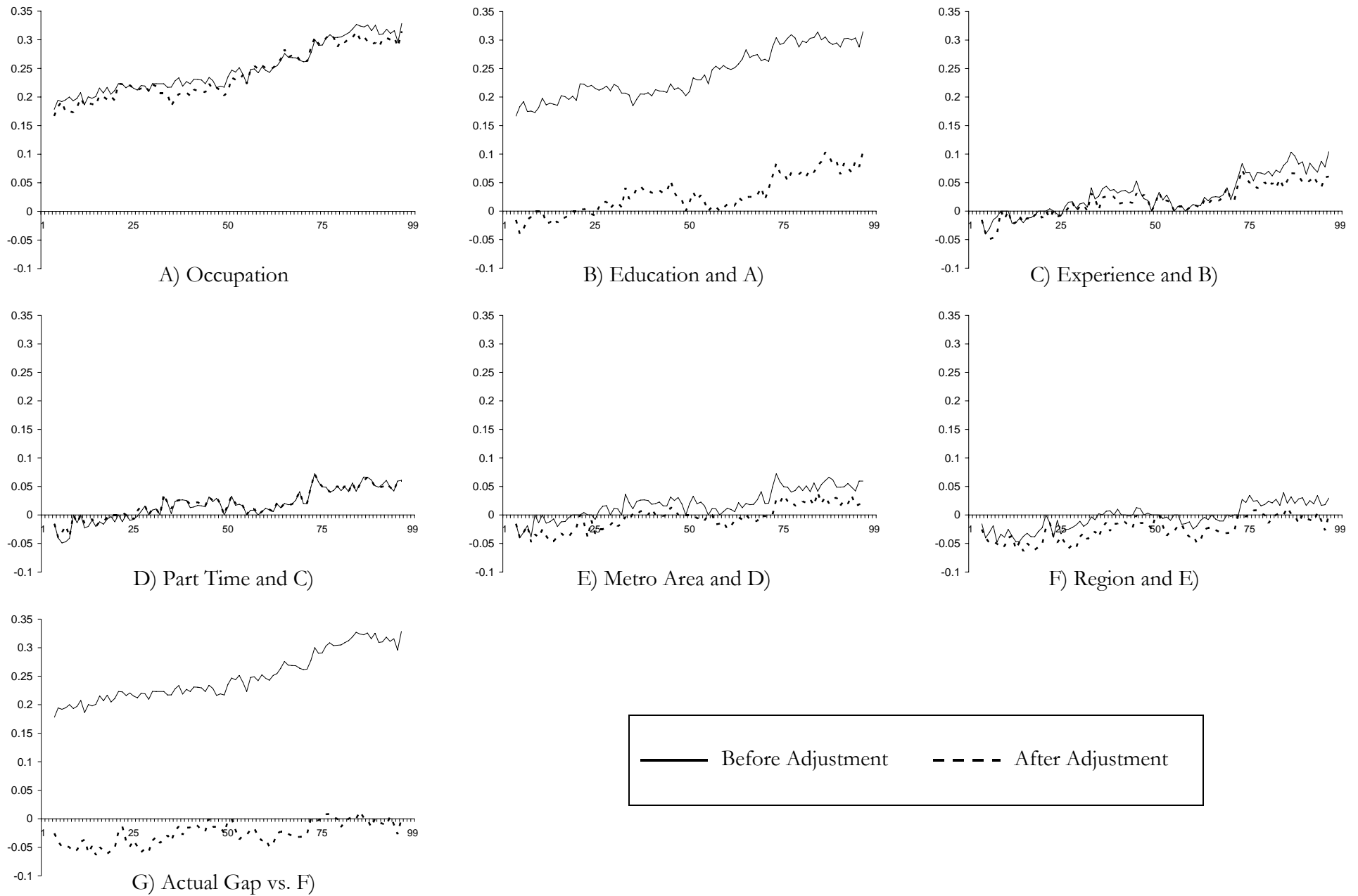
Notes: The log hourly wage gap at each wage percentile is calculated as the same-sex log hourly wage at that percentile minus the heterosexual log hourly wage at the same percentile within each sexual orientation group's wage distribution. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. The sample sizes are 814,153 for married, 57,825 for cohabitating, and 5,785 for gay men and 701,900 for married, 55,872 for cohabitating, and 6,205 for lesbian women, respectively.

Figure 2: DiNardo, Fortin, Lemieux Decomposition Results: Gay vs. Married Males



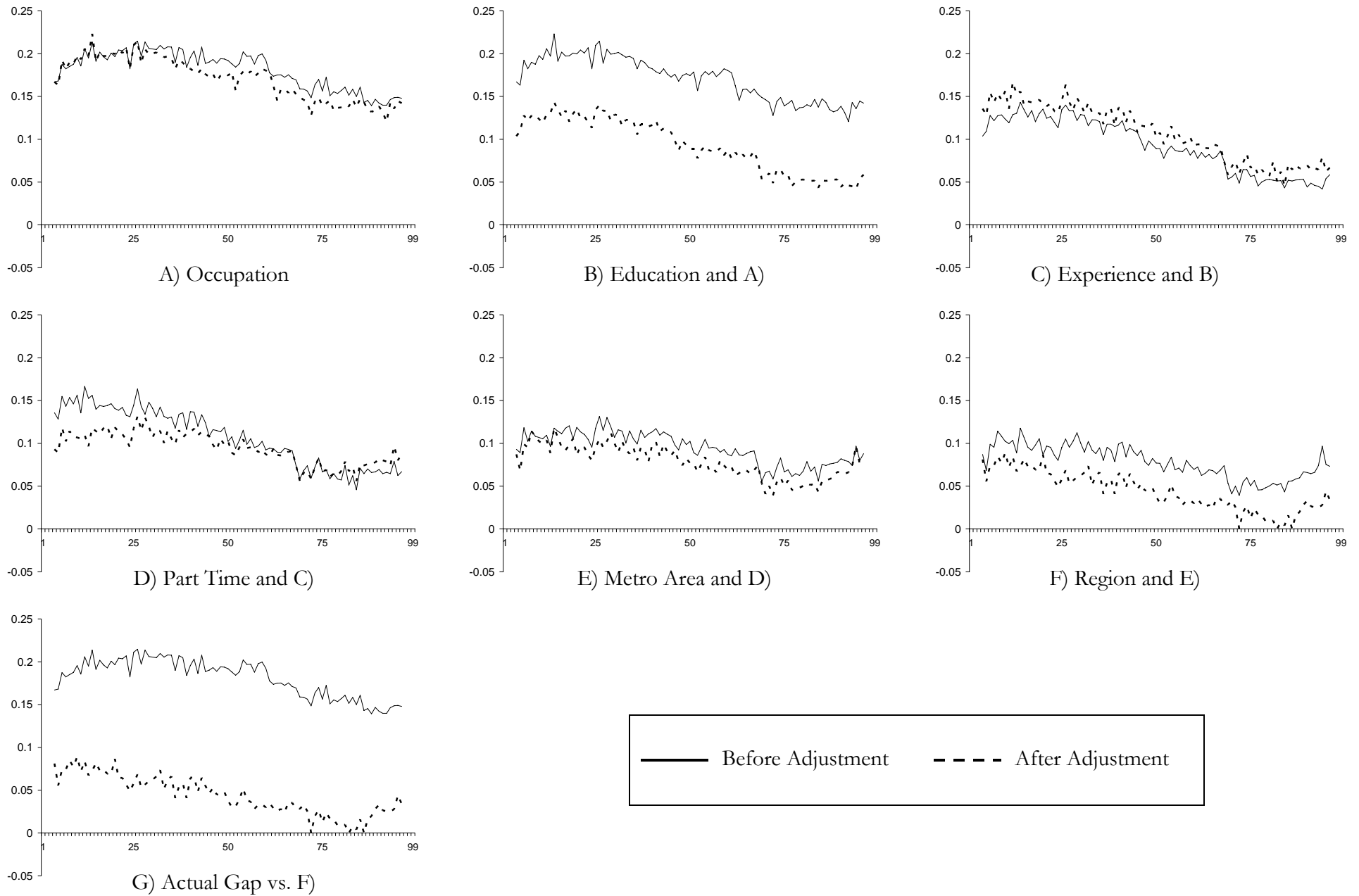
Notes: The log hourly wage gap (y-axis) at each wage percentile (x-axis) is defined as the counterfactual gay male log hourly wage at that percentile (i.e., the conditional distribution of indicated characteristics of gay males are changed so they are equivalent to their married male counterparts) minus the actual married male log hourly wage at the same percentile. The sample sizes are 814,153 for married men and 5,785 for gay men.

Figure 3: DiNardo, Fortin, Lemieux Decomposition Results: Gay vs. Cohabiting Males



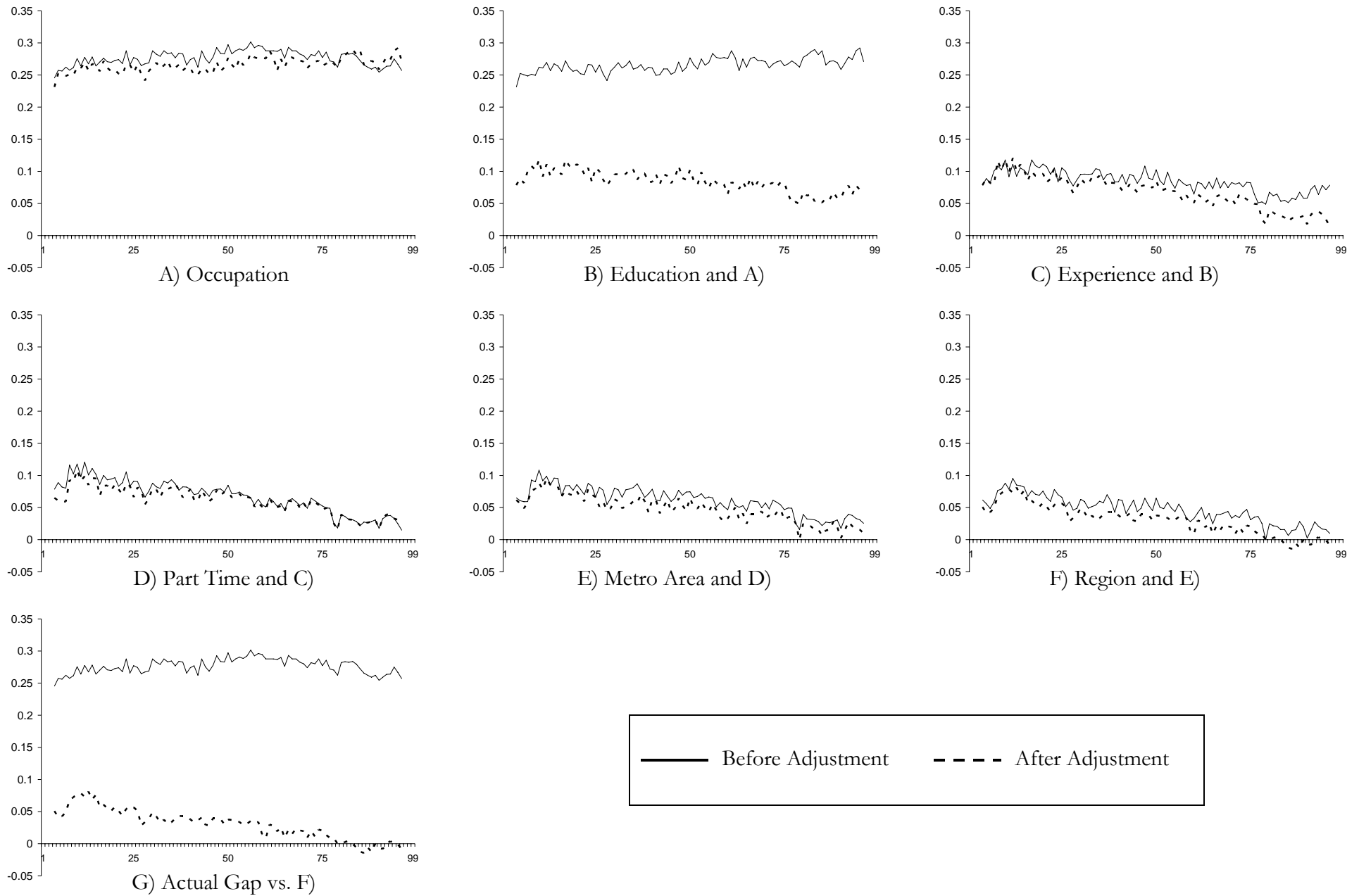
Notes: The log hourly wage gap (y-axis) at each wage percentile (x-axis) is defined as the counterfactual gay male log hourly wage at that percentile (i.e., the conditional distribution of indicated characteristics of gay males are changed so they are equivalent to their cohabitating male counterparts) minus the actual cohabitating male log hourly wage at the same percentile. The sample sizes are 57,825 for cohabitating men and 5,785 for gay men.

Figure 4: DiNardo, Fortin, Lemieux Decomposition Results: Lesbian vs. Married Females



Notes: The log hourly wage gap (y-axis) at each wage percentile (x-axis) is defined as the counterfactual lesbian female log hourly wage at that percentile (i.e., the conditional distribution of indicated characteristics of lesbian females are changed so they are equivalent to their married female counterparts) minus the actual married female log hourly wage at the same percentile. The sample sizes are 701,900 for married women and 6,205 for lesbian women.

Figure 5: DiNardo, Fortin, Lemieux Decomposition Results: Lesbian vs. Cohabiting Females



Notes: The log hourly wage gap (y-axis) at each wage percentile (x-axis) is defined as the counterfactual lesbian female log hourly wage at that percentile (i.e., the conditional distribution of indicated characteristics of lesbian females are changed so they are equivalent to their cohabiting female counterparts) minus the actual cohabiting female log hourly wage at the same percentile. The sample sizes are 55,872 for cohabiting women and 6,205 for lesbian women.

Table 1. Log Hourly Wages, Experience, Education, and Occupational Male Density by Gender and Sexual Orientation

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
Log Hourly Wage	2.976 (0.602)	2.681 (0.564)	2.930 (0.609)	2.636 (0.572)	2.541 (0.554)	2.816 (0.570)
Log Hourly Wage Gap	-0.046	0.249		0.180	0.275	
Experience	21.692 (9.135)	16.705 (8.971)	18.032 (7.927)	21.415 (9.371)	16.689 (9.260)	17.919 (7.910)
<i>Education</i>						
Less than HS Grad	0.042 (0.201)	0.076 (0.266)	0.012 (0.107)	0.026 (0.158)	0.046 (0.209)	0.016 (0.124)
HS Grad	0.259 (0.438)	0.341 (0.474)	0.115 (0.320)	0.262 (0.440)	0.286 (0.452)	0.114 (0.318)
Some College	<u>0.239</u> (0.427)	0.257 (0.437)	0.250 (0.433)	0.244 (0.429)	0.272 (0.445)	0.219 (0.414)
Associates Degree	0.081 (0.273)	0.074 (0.262)	0.080 (0.272)	0.103 (0.304)	0.098 (0.297)	0.087 (0.283)
College Grad	0.237 (0.425)	0.187 (0.390)	0.336 (0.472)	0.231 (0.422)	0.211 (0.408)	0.300 (0.458)
Post-College	0.142 (0.349)	0.065 (0.246)	0.207 (0.405)	0.135 (0.341)	0.087 (0.283)	0.264 (0.441)
<i>Occupational Male Density</i>						
10-19% Male	0.002 (0.046)	0.003 (0.058)	0.009 (0.092)	0.025 (0.157)	0.033 (0.180)	0.014 (0.119)
20-29% Male	0.126 (0.331)	0.110 (0.313)	0.260 (0.439)	0.525 (0.499)	0.403 (0.491)	0.352 (0.478)
40-49% Male	0.082 (0.275)	0.072 (0.259)	0.150 (0.357)	0.128 (0.335)	0.151 (0.358)	0.147 (0.354)
50-59% Male	0.133 (0.340)	0.136 (0.343)	0.197 (0.398)	0.111 (0.314)	0.151 (0.358)	0.134 (0.340)
60-69% Male	0.329 (0.470)	0.286 (0.452)	0.310 (0.462)	0.177 (0.382)	0.211 (0.408)	0.251 (0.434)
80-89% Male	0.171 (0.377)	0.175 (0.380)	0.051 (0.220)	0.027 (0.163)	0.040 (0.196)	0.072 (0.259)
90-100% Male	0.156 (0.363)	0.218 (0.413)	0.024 (0.153)	0.005 (0.074)	0.010 (0.101)	0.030 (0.172)
Observations	814,153	57,825	5,785	701,900	55,872	6,205

Notes: Means with standard errors in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. The log hourly wage gap is calculated as the same-sex log hourly wage minus the heterosexual log hourly wage. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in means at the 5% (10%) level relative to column 3. Occupational male density categorizes the percentage of workers 18-65 who are male in 21 Standard Occupational Classification (SOC) major group occupations (see Table 2 for detailed occupations).

Table 2. Occupation Category by Gender and Sexual Orientation

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
<i>Occupation Categories (Percent Male in Occupation)</i>						
Healthcare Support (11.8%)	0.002 (0.046)	0.003 (0.058)	0.009 (0.092)	0.025 (0.157)	0.033 (0.180)	0.014 (0.119)
Healthcare (21.8%)	0.025 (0.156)	0.018 (0.133)	0.053 (0.225)	0.100 (0.300)	0.069 (0.254)	0.098 (0.298)
Personal Care (23.4%)	0.004 (0.063)	0.007 (0.086)	0.022 (0.147)	0.019 (0.137)	0.023 (0.151)	0.018 (0.133)
Office Admin (24.4%)	0.059 (0.235)	0.064 (0.245)	0.131 (0.337)	0.273 (0.445)	0.257 (0.437)	0.133 (0.340)
Education (26.2%)	0.038 (0.191)	0.021 (0.142)	0.054 (0.226)	0.133 (0.340)	0.054 (0.226)	0.102 (0.302)
Social Service (39.6%)	0.016 (0.124)	0.006 (0.075)	0.019 (0.135)	0.022 (0.146)	0.018 (0.133)	0.049 (0.215)
Food/Serving (40.7%)	0.007 (0.083)	<u>0.025</u> (0.156)	0.029 (0.169)	0.026 (0.159)	0.054 (0.225)	0.020 (0.139)
Business/Financial (43.3%)	0.048 (0.213)	0.033 (0.179)	0.080 (0.272)	0.066 (0.248)	0.063 (0.242)	0.057 (0.231)
Legal (43.7%)	0.012 (0.108)	0.008 (0.092)	0.022 (0.146)	0.014 (0.119)	0.017 (0.130)	0.022 (0.146)
Sales (49.5%)	0.105 (0.307)	0.105 (0.306)	0.133 (0.340)	0.088 (0.283)	0.117 (0.321)	0.079 (0.269)
Arts (52.1%)	0.015 (0.121)	0.020 (0.140)	0.048 (0.215)	0.015 (0.121)	0.023 (0.149)	0.032 (0.175)
Science (59.4%)	0.013 (0.114)	0.011 (0.106)	0.015 (0.120)	0.009 (0.093)	0.011 (0.106)	0.023 (0.151)
Management (60.1%)	0.163 (0.369)	0.098 (0.297)	0.203 (0.402)	0.103 (0.304)	0.104 (0.305)	0.155 (0.362)
Maintenance (62.4%)	0.018 (0.133)	0.025 (0.155)	0.010 (0.101)	0.009 (0.093)	0.014 (0.118)	0.008 (0.089)
Production (68.0%)	0.109 (0.312)	0.125 (0.331)	0.030 (0.172)	0.045 (0.207)	0.071 (0.256)	0.048 (0.213)
Computer/Math (69.4%)	0.039 (0.195)	0.038 (0.192)	0.066 (0.248)	0.020 (0.139)	0.023 (0.148)	0.040 (0.197)
Protective (80.6%)	0.039 (0.194)	0.034 (0.180)	0.007 (0.082)	0.006 (0.077)	0.009 (0.092)	0.027 (0.161)
Transportation (83.9%)	0.083 (0.276)	0.107 (0.309)	0.023 (0.149)	0.014 (0.119)	0.023 (0.148)	0.029 (0.169)
Architecture/Eng. (86.4%)	0.049 (0.216)	0.034 (0.182)	0.021 (0.145)	0.007 (0.083)	0.009 (0.094)	0.016 (0.126)
Install/Repair (95.0%)	0.081 (0.273)	0.093 (0.290)	0.015 (0.120)	0.004 (0.061)	0.005 (0.073)	0.015 (0.122)
Construction/Ext. (97.2%)	0.075 (0.263)	0.125 (0.331)	0.009 (0.096)	0.002 (0.042)	0.005 (0.069)	0.015 (0.123)
Observations	814,153	57,825	5,785	701,900	55,872	6,205

Notes: Means with standard errors in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in means at the 5% (10%) level relative to column 3.

Table 3. Selected OLS Coefficients (Dependent Variable: Log hourly wages)

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
Less than HS grad	-0.185 (0.003)	-0.196 (0.009)	-0.206 (0.081)	<u>-0.163</u> (0.004)	-0.212 (0.012)	-0.254 (0.050)
Some College	0.100 (0.002)	0.093 (0.006)	0.097 (0.025)	0.106 (0.002)	0.127 (0.006)	0.119 (0.023)
Associates degree	0.139 (0.002)	0.137 (0.009)	0.117 (0.032)	0.195 (0.002)	0.206 (0.008)	0.191 (0.030)
College Grad	0.404 (0.002)	0.365 (0.009)	0.403 (0.026)	0.428 (0.002)	0.439 (0.008)	0.373 (0.025)
Post-College	0.600 (0.003)	0.552 (0.015)	0.567 (0.031)	0.670 (0.003)	0.634 (0.012)	0.570 (0.028)
Experience	0.108 (0.002)	0.091 (0.007)	0.091 (0.024)	0.083 (0.002)	0.068 (0.006)	0.050 (0.021)
Experience ² /100	-0.512 (0.017)	-0.495 (0.058)	-0.375 (0.202)	-0.470 (0.017)	<u>-0.386</u> (0.055)	-0.062 (0.180)
Experience ³ /1000	0.113 (0.005)	0.129 (0.020)	0.070 (0.069)	0.116 (0.005)	0.108 (0.019)	-0.025 (0.063)
Experience ⁴ /10000	-0.009 (0.001)	-0.012 (0.002)	-0.005 (0.008)	-0.010 (0.001)	-0.011 (0.002)	0.005 (0.008)
Part Time	-0.062 (0.006)	-0.105 (0.015)	-0.061 (0.041)	-0.125 (0.002)	-0.074 (0.008)	-0.112 (0.028)
Metropolitan Area	0.156 (0.002)	0.135 (0.006)	0.142 (0.030)	0.156 (0.002)	0.179 (0.006)	0.122 (0.021)
New England	-0.029 (0.003)	-0.029 (0.010)	-0.074 (0.032)	<u>-0.037</u> (0.003)	-0.025 (0.010)	-0.087 (0.029)
Middle Atlantic	-0.001 (0.003)	-0.023 (0.009)	-0.012 (0.030)	<u>-0.037</u> (0.003)	-0.032 (0.008)	0.007 (0.026)
East North Central	-0.048 (0.002)	-0.046 (0.008)	-0.210 (0.025)	-0.109 (0.003)	-0.088 (0.008)	-0.083 (0.024)
West North Central	-0.141 (0.003)	-0.124 (0.011)	-0.259 (0.035)	-0.171 (0.003)	-0.125 (0.010)	-0.139 (0.031)
South Atlantic	-0.122 (0.003)	-0.135 (0.009)	-0.158 (0.023)	-0.132 (0.003)	-0.113 (0.008)	-0.105 (0.020)
East South Central	-0.149 (0.003)	-0.168 (0.013)	-0.301 (0.037)	-0.198 (0.003)	-0.186 (0.013)	-0.132 (0.040)
West South Central	-0.138 (0.003)	-0.149 (0.011)	-0.179 (0.028)	-0.189 (0.003)	-0.152 (0.011)	-0.150 (0.031)
Mountain	-0.123 (0.003)	-0.122 (0.011)	-0.190 (0.033)	-0.153 (0.003)	-0.121 (0.010)	-0.145 (0.033)
Constant	1.910 (0.010)	1.942 (0.031)	1.911 (0.102)	1.838 (0.009)	1.825 (0.027)	1.975 (0.091)
Observations	814,153	57,825	5,785	701,900	55,872	6,205
R-Squared	0.29	0.25	0.32	0.32	0.31	0.29

Notes: Robust standard errors are in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in estimated coefficients at the 5% (10%) level relative to column 3. In addition to the variables listed, each regression contains controls for the 21 SOC major group occupation categories listed in Table 2.

Table 4. Occupational Male Density OLS Coefficients (Dependent Variable: Log hourly wages)

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
<i>Occupational Male Density</i>						
10-19% Male	-0.342 (0.014)	-0.232 (0.039)	-0.338 (0.061)	<u>-0.136</u> (0.004)	-0.141 (0.014)	-0.224 (0.051)
20-29% Male	-0.126 (0.003)	-0.100 (0.011)	-0.091 (0.024)	-0.008 (0.003)	-0.007 (0.008)	-0.092 (0.024)
40-49% Male	-0.085 (0.004)	-0.063 (0.013)	-0.015 (0.028)	0.021 (0.003)	<u>-0.038</u> (0.009)	-0.094 (0.029)
50-59% Male						
60-69% Male	0.082 (0.002)	0.084 (0.009)	0.135 (0.024)	0.151 (0.003)	0.101 (0.009)	0.060 (0.026)
80-89% Male	-0.037 (0.003)	0.001 (0.009)	-0.010 (0.038)	<u>0.069</u> (0.005)	0.048 (0.013)	0.010 (0.031)
90-100% Male	0.022 (0.003)	0.048 (0.009)	0.054 (0.049)	0.164 (0.010)	0.120 (0.026)	0.003 (0.049)
Observations	814,153	57,825	5,785	701,900	55,872	6,205

Notes: Robust standard errors are in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in estimated coefficients at the 5% (10%) level relative to column 3. In addition to the variables listed, each regression contains a constant, a quartic in potential experience and indicator variables for 7 education categories, 9 regions, part-time status, and lives in a metropolitan area.

Table 5. Occupation Category OLS Coefficients (Dependent Variable: Log hourly wages)

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
<i>Occupation Categories (Percent male in Occupation)</i>						
Healthcare Support (11.8%)	-0.377 (0.014)	-0.266 (0.039)	-0.377 (0.065)	-0.136 (0.005)	-0.155 (0.014)	-0.268 (0.055)
Healthcare (21.8%)	0.117 (0.006)	0.037 (0.026)	0.182 (0.042)	0.234 (0.004)	0.187 (0.012)	0.056 (0.040)
Personal Care (23.4%)	<u>-0.294</u> (0.011)	-0.211 (0.031)	-0.184 (0.060)	-0.206 (0.006)	-0.145 (0.019)	-0.297 (0.057)
Office Admin (24.4%)	-0.155 (0.003)	<u>-0.119</u> (0.012)	-0.177 (0.029)	-0.006 (0.003)	-0.004 (0.009)	-0.160 (0.035)
Education (26.2%)	-0.259 (0.004)	-0.149 (0.020)	-0.122 (0.040)	-0.068 (0.004)	-0.077 (0.013)	-0.162 (0.039)
Social Service (39.6%)	-0.557 (0.006)	-0.244 (0.028)	-0.301 (0.047)	-0.115 (0.005)	-0.100 (0.016)	-0.247 (0.042)
Food/Serving (40.7%)	-0.433 (0.008)	-0.388 (0.016)	-0.341 (0.046)	-0.299 (0.005)	-0.305 (0.013)	-0.460 (0.059)
Business/Financial (43.3%)	0.040 (0.004)	0.140 (0.017)	0.060 (0.035)	0.189 (0.004)	0.177 (0.012)	0.028 (0.044)
Legal (43.7%)	0.255 (0.009)	0.270 (0.037)	0.414 (0.061)	0.254 (0.007)	0.215 (0.022)	0.205 (0.057)
Sales (49.5%)						
Arts (52.1%)	-0.100 (0.006)	-0.003 (0.022)	0.018 (0.046)	<u>0.053</u> (0.007)	0.084 (0.019)	-0.032 (0.051)
Science (59.4%)	-0.072 (0.006)	-0.105 (0.027)	-0.170 (0.069)	0.105 (0.008)	0.015 (0.026)	-0.056 (0.050)
Management (60.1%)	0.153 (0.003)	0.175 (0.013)	0.170 (0.031)	0.243 (0.004)	0.202 (0.011)	0.098 (0.037)
Maintenance (62.4%)	-0.332 (0.005)	-0.270 (0.016)	-0.363 (0.068)	-0.251 (0.007)	-0.260 (0.022)	-0.361 (0.068)
Production (68.0%)	-0.057 (0.003)	-0.040 (0.011)	-0.077 (0.051)	-0.014 (0.004)	-0.026 (0.011)	-0.171 (0.042)
Computer/Math (69.4%)	0.143 (0.004)	<u>0.263</u> (0.015)	0.197 (0.035)	0.375 (0.005)	0.359 (0.015)	0.160 (0.046)
Protective (80.6%)	-0.069 (0.004)	0.057 (0.014)	0.113 (0.075)	0.123 (0.009)	0.160 (0.023)	0.057 (0.046)
Transportation (83.9%)	-0.174 (0.003)	-0.145 (0.011)	-0.230 (0.053)	<u>-0.047</u> (0.006)	-0.085 (0.018)	-0.139 (0.048)
Architecture/Eng. (86.4%)	0.085 (0.003)	0.184 (0.013)	0.138 (0.054)	0.275 (0.008)	0.254 (0.020)	0.064 (0.051)
Install/Repair (95.0%)	-0.052 (0.003)	-0.011 (0.011)	0.057 (0.055)	0.196 (0.011)	0.195 (0.029)	-0.025 (0.073)
Construction/Ext. (97.2%)	-0.022 (0.003)	-0.016 (0.011)	-0.090 (0.086)	0.111 (0.021)	0.012 (0.043)	-0.075 (0.064)
Observations	814,153	57,825	5,785	701,900	55,872	6,205

Notes: Robust standard errors are in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in estimated coefficients at the 5% (10%) level relative to column 3. In addition to the variables listed, each regression contains a constant, a quartic in potential experience and indicator variables for 7 education categories, 9 regions, part-time status, and lives in a metropolitan area.

Table 6. Oaxaca-Blinder Decomposition Results

Panel A: Males				
	Married vs. Gay		Cohabiting vs. Gay	
	Specification 1	Specification 2	Specification 1	Specification 2
Total Log Hourly Wage Gap	-0.046	-0.046	0.249	0.249
Attributable to Differences in Characteristics	0.073	0.078	0.208	0.225
<i>Education</i>	0.102	0.085	0.187	0.146
<i>Experience</i>	-0.038	-0.039	0.030	0.030
<i>Part Time</i>	-0.003	-0.001	-0.001	-0.001
<i>Metropolitan Area</i>	0.024	0.021	0.018	0.015
<i>Region</i>	0.012	0.011	0.004	0.002
<i>Male Density</i>	-0.025		-0.029	
<i>Occupation</i>		0.002		0.033
Attributable to Differences in Returns to Characteristics	-0.119	-0.125	0.041	0.023
Panel B: Females				
	Married vs. Lesbian		Cohabiting vs. Lesbian	
	Specification 1	Specification 2	Specification 1	Specification 2
Total Log Hourly Wage Gap	0.180	0.180	0.275	0.275
Attributable to Differences in Characteristics	0.188	0.182	0.235	0.233
<i>Education</i>	0.123	0.112	0.174	0.149
<i>Experience</i>	-0.011	-0.012	0.024	0.024
<i>Part Time</i>	0.013	0.012	0.004	0.002
<i>Metropolitan Area</i>	0.019	0.017	0.015	0.013
<i>Region</i>	0.021	0.020	0.007	0.006
<i>Male Density</i>	0.022		0.011	
<i>Occupation</i>		0.034		0.039
Attributable to Differences in Returns to Characteristics	-0.008	-0.002	0.039	0.041

Notes: The total log hourly wage gap, which is calculated as the same-sex log hourly wage minus the heterosexual log hourly wage, is decomposed into a portion attributable to differences in average observable characteristics and differences in returns to these characteristics. We further decompose the portion due to differences in average observable characteristics into subcategories to illustrate the relative importance of particular observable characteristics. Within each specification, the heterosexual OLS coefficients from Tables 3 through 5 are used to weight the mean differences in observable characteristics between same-sex and heterosexuals groups. The sample sizes are 814,153 for married, 57,825 for cohabitating, and 5,785 for gay men and 701,900 for married, 55,872 for cohabitating, and 6,205 for lesbian women, respectively.

Appendix Table 1. Selected Descriptive Statistics by Gender and Sexual Orientation

	Males			Females		
	Married (1)	Cohabiting (2)	Gay (3)	Married (1)	Cohabiting (2)	Lesbian (3)
Age	41.880 (8.919)	36.113 (8.661)	39.151 (7.917)	41.596 (8.947)	36.473 (8.769)	39.210 (7.931)
Part Time	0.013 (0.114)	0.028 (0.164)	0.037 (0.188)	0.145 (0.352)	0.079 (0.269)	0.052 (0.221)
Metropolitan Area	0.825 (0.380)	0.845 (0.362)	0.959 (0.199)	0.814 (0.389)	0.851 (0.356)	0.922 (0.268)
New England	0.057 (0.232)	0.073 (0.260)	0.059 (0.236)	0.059 (0.235)	0.074 (0.262)	0.086 (0.280)
Middle Atlantic	0.132 (0.339)	0.141 (0.348)	0.135 (0.342)	<u>0.131</u> (0.338)	0.145 (0.352)	0.123 (0.328)
East North Central	0.193 (0.395)	0.184 (0.388)	0.140 (0.347)	0.190 (0.392)	0.186 (0.389)	0.136 (0.343)
West North Central	0.090 (0.287)	0.080 (0.272)	0.049 (0.217)	0.100 (0.300)	0.080 (0.272)	0.068 (0.252)
South Atlantic	0.177 (0.382)	0.178 (0.382)	0.209 (0.407)	0.182 (0.386)	0.176 (0.380)	0.188 (0.391)
East South Central	0.066 (0.248)	0.041 (0.199)	0.031 (0.174)	0.066 (0.248)	0.039 (0.194)	0.028 (0.166)
West South Central	0.102 (0.303)	0.074 (0.261)	0.093 (0.290)	0.100 (0.300)	0.069 (0.253)	0.077 (0.267)
Mountain	0.068 (0.251)	0.075 (0.263)	0.066 (0.249)	<u>0.064</u> (0.245)	0.075 (0.264)	0.071 (0.256)
Pacific	0.115 (0.319)	0.154 (0.361)	0.217 (0.413)	0.109 (0.311)	0.156 (0.363)	0.223 (0.416)
Observations	814,153	57,825	5,785	701,900	55,872	6,205

Notes: Means with standard errors in parentheses. Observations are weighted by the product of usual weekly hours and the appropriate Census sampling weight. To facilitate comparisons between sexual orientation groups, bolded (underlined) values in columns 1 and 2 represent a statistically significant difference in means at the 5% (10%) level relative to column 3.