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Abstract

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JOHN M. BLANDFORD*

This analysis of 1989–96 General Social Survey data reveals how sexual orientation and gender jointly influence earnings outcomes. Gay and bisexual men experienced a 30–32% income disadvantage relative to heterosexual peers, while lesbian and bisexual women enjoyed a wage premium of 17–23%. The disparate earnings effects of sexual orientation across genders suggest that workplace discrimination may be only one factor accounting for measured wage differentials associated with sexual orientation. These findings qualify pioneering work on the subject that indicated that wage differentials were attributable largely to employer bias. A further analysis that distinguishes the separate effects of gender, marital status, and sexual orientation suggests that differentials long attributed to marital status may in part reflect previously unobserved effects of sexual orientation.

Public policy debates over the need for employment nondiscrimination policies that incorporate sexual orientation protections—including continuing debate over the proposed federal Employment Non-Discrimination Act (ENDA)—have raised discussion of the economic status of lesbian, gay, and bisexual workers. Groups opposing employment protections portray lesbians and gay men as an economically privileged group, while gay and lesbian rights organizations point to extensive anecdotal evidence to argue that workplace discrimination has pervasive, deleterious effects on non-heterosexual workers. Early empirical research revealing negative wage differentials associated with lesbian, gay, and bisexual orientations appears to lend additional support to the latter view.

This study, which analyzes pooled, cross-sectional General Social Survey data for the years 1989–96, estimates the income effects of sexual orientation and empirically examines explanations for those effects that go beyond one-dimensional portrayals of lesbian, gay, and bisexual workers as either an over-achieving minority or simple victims of bias. In particular, the empirical analysis focuses on the mediating role played by gender. The study thus informs both the recent interest in the labor implications of sexual orientation and the long-studied effects of gender on earnings outcomes.

Previous Research on the Economic Effects of Sexual Orientation

Research on the labor market effects of sexual orientation—in particular, the in-

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fluence of sexual orientation on earnings from work—is still in its early stages. Lee Badgett's groundbreaking work (Badgett 1995) stands as the first econometric study of earnings differentials associated with non-heterosexual orientations. Badgett observed that popular perceptions of lesbians and gays as notably affluent stem from inappropriate use of marketing research studies based on unrepresentative convenience samples. The biased samples mask evidence of sexual orientation's negative effect on the wages of lesbian, gay, and bisexual workers. Using 1989–91 General Social Survey data, Badgett found that gay and bisexual men face a significant wage penalty of between 11% and 27% relative to heterosexual men. The findings also suggested a wage penalty of 12% to 30% for lesbian and bisexual female workers, though parameter estimates fell short of statistical significance. The author viewed the measured differentials as attributable to employment discrimination based on sexual orientation.

Allegretto and Arthur (2001) employed the 1990 U.S. Census Public Use Microdata Sample (PUMS) to examine the earnings patterns of male workers in same-sex couple households relative to the earnings of male workers in households comprised of married and unmarried different-sex couples. While the authors found that gay men earned much less than married heterosexual men, they attributed the bulk of the earnings differential to the effects of marital status rather than sexual orientation.

In the context of an analysis of antidiscrimination policies' effect on earnings, Klawitter and Flatt (1998) found that the PUMS data yielded ambiguous findings about sexual orientation's influence on labor market structures. While male same-sex household couples apparently were wealthier than couples in either married households or different-sex unmarried households, the mean *individual* earnings of men in same-sex couples were lower than those of married men. Conversely, while female same-sex couples had lower household incomes than did married couples, the mean individual earnings of lesbian women were higher than those both of married women and of women in different-sex unmarried relationships.

While efforts to directly measure the earnings effects of sexual orientation are nascent, the long-developed literature assessing wage differentials attributable to gender may contain indications of the expected earnings effects of sexual orientation. In particular, the wage effects attributed to marital status likely incorporate and mask the previously unrecognized role of sexual orientation. Admittedly, non-heterosexual workers may compose a relatively small portion of the population: Laumann et al. (1994) estimated the percentage of the U.S. population with same-gender sexual identity at just 2.8% of men and 1.4% of women. As a percentage of the never-married population, however, the percentages of those with a same-gender identity increase two-and-a-half fold to 7.1% and 3.7%, respectively. Because lesbian, gay, and bisexual workers represent a substantial share of the never-married population—especially in older cohorts—the sign and magnitude of marital status as an explanatory variable may, in part, be attributable to its capturing the effects of sexual orientation in the workplace. Marital status controls may be expected to mask the underlying effects of sexual orientation and to distort the true influence of heterosexual marriage on expected earnings outcomes. In the present study I seek to disaggregate the effects of gender, marital status, and sexual orientation.

Theoretical Considerations Related to Sexual Orientation

Early econometric studies have emphasized employer bias as the primary factor thought to shape differential earnings patterns related to sexual orientation (Badgett 1995; Klawitter and Flatt 1998). This view is supported by other social scientific research detailing the existence of sexual orientation discrimination and its deleterious impact on non-heterosexual workers' well-being (Badgett, Donnelly, and Kibbe 1992; Herek 1991; Schneider 1986). Unlike its

treatment of discrimination based on race, gender, and disability, federal law does not proscribe sexual orientation discrimination by private employers, and just eleven states prohibit such discrimination (Human Rights Campaign 2000). Local protections for lesbian, gay, and bisexual workers remain spotty and are limited, for the most part, to the largest metropolitan areas. Further, the limited legal protections that have been enacted are of much more recent vintage than comparable protections based on race or gender. Indeed, as recently as 1991, just two states—Wisconsin and Massachusetts—explicitly prohibited sexual orientation discrimination by private employers (Rivera 1991). Moreover, effectively enforcing anti-discrimination laws—detecting discriminatory practices and punishing those responsible for them—is no easier in the case of sexual orientation discrimination than in the case of racial or gender discrimination.

The comparison to other characteristics that elicit bias must be qualified, however, by the lack of reliable phenotypic markers signaling sexual orientation. Unlike race or gender, sexual orientation is a characteristic that may be successfully hidden from others—albeit at some cost and with varying degrees of success—in order to mitigate negative effects in the workplace. Indeed, lesbian and gay workers have been shown to expend significant energy managing their sexual orientation on the job, attempting to control whether, when, and to whom it is disclosed (Schneider 1986; Woods 1993). Even when such efforts successfully prevent unintended disclosure or detection of sexual orientation, the expenditure of energy they entail may adversely affect productivity and thus depress earnings (Badgett 1995).

Occupational sorting driven by sexual orientation bias may further depress returns to human capital investments. Ellis and Riggle (1995) revealed that lesbian and gay workers make explicit choices between the greater job satisfaction that comes with the ability to be open in the workplace about their orientation and the higher pay expected in jobs that require passing as a heterosexual—suggesting that these workers treat a tolerant workplace as a compensating differential for lower wages. Exacerbating the negative earnings effect of these labor-supply decisions may be explicit employer-driven segregation of non-heterosexual workers into lower-paying job sites.

Absent other effects related to sexual orientation, the anticipated effect of sexual orientation on earnings would be negative, and (because of some workers' efforts to prevent disclosure of their sexual identity) measured differentials would likely understate the full extent of workplace bias. Other factors related to sexual orientation may indeed be relevant, however, and may further influence expected earnings outcomes. Specifically, sexual orientation may give rise to additional, indirect earnings effects through gender-mediated mechanisms that are distinct from the direct effects of any sexual orientation discrimination.

The adoption of a non-heterosexual identity *per se* implies nonconformity to traditional gender-role expectations, which prescribe heterosexual marriage as socially normative. Labor-supply explanations have emphasized household optimization to account for the differing earnings effects of marital status across genders (Becker 1991; Mincer and Polachek 1975; Polachek 1975b), but demand-side processes may also be relevant. Employers may view marriage as promoting job stability among male workers and may therefore provide a compensation premium to married men not afforded to unmarried men. In contrast, employers may penalize marriage in female workers based on a perception that married women's workplace productivity will be diminished by competing demands in the home. If demand-side discrimination based on marital status exists, the rejection of traditional gender norms (manifested as non-participation in heterosexual marriage) might benefit lesbian and bisexual female workers while further depressing the wages of gay and bisexual men. Thus, the effects of nonconformity may in part offset bias effects for lesbian and bisexual women, while exacerbating them for gay and bisexual men.

Occupational sorting patterns may have a gender component as well. Gay men have been shown to be more likely than other men to work in professions that are female-identified, seeking workplaces less identified with male heterosexual norms (Carmichael 1995; Ellis and Riggle 1995). Similarly, Dunne (1997) found British lesbian women to be highly over-represented in traditional male occupational strongholds—a result of both the higher wages and the greater job satisfaction associated with male-dominated occupations, as well as lesbian workers' apparent success in managing the sexual politics and harassment that typify these job sites. The forces driving these patterns might be seen as separable from the compensating differential arguments raised above. For non-heterosexual workers, gender-divergent occupational patterns may reflect a strategy of avoiding workplace cultures in which conformity to traditional gender norms, which include heterosexual marriage, is enforced for majority-gender workers. Again, divergence from expected gender patterns may be expected to benefit lesbian and bisexual female workers relative to their heterosexual peers. In contrast, an overrepresentation of gay and bisexual male workers in female-identified jobs should lower expected returns to human-capital characteristics for those workers, given the comparatively low compensation in most such jobs.

In sum, the direct effect of employer bias and the influence of bias-driven occupational sorting are expected to depress the earnings of lesbian, gay, and bisexual workers relative to their heterosexual peers. Nonconformity to gender norms—through nonmarriage and gender-atypical occupational patterns—may, however, introduce offsetting effects for lesbian and bisexual female workers. Therefore, the net expected effect of sexual orientation in the workplace is negative for gay and bisexual male workers and theoretically ambiguous for lesbian and bisexual female workers.

Database and Methods

The present study draws on pooled, cross-sectional data from the 1989–96 administrations of the General Social Survey (GSS), a national area probability sample of noninstitutionalized adults in the United States. While the GSS does not explicitly collect data on self-ascribed sexual identity, since 1989 it has included questions focused on a respondent's sexual behavior and the gender of sex partners. In the absence of actual information on a respondent's orientation, this study, like Badgett (1995), relies on a proxy. The criteria used here to impute sexual identity differ from those used by Badgett, however, by giving primacy to recent behavior and taking account of current marital status. The accurate identification of respondents as lesbian, gay, or bisexual is of special importance because of the relatively small size of the population and the bias that may be introduced through misidentification of respondents' sexual identity.

The method used in Badgett (1995) identifies as lesbian, gay, or bisexual those respondents who have had at least as many same-sex sex partners as opposite-sex sex partners since the age of eighteen. This method may be sub-optimal, especially with respect to female respondents. Studies of sexual behavior provide substantial evidence that sexual desire and activity are not static across a lifetime, and homosexual and bisexual activity is not uncommon in early adulthood (Kinsey, Pomeroy, and Martin 1948; Kinsey et al. 1953; Laumann et al. 1994). Relying on the entire history of each person's adult sexual behavior increases the likelihood of ascribing a nonheterosexual identity to a respondent who experiments sexually before settling into a monogamous heterosexual union. Further, this approach results in identifying as lesbian, gay, or bisexual a significant number of people who are heterosexually married. It seems unlikely that persons with the cover of heterosexual marriage—even if they are behaviorally homosexual or bisexual—would typically experience discrimination or other workplace effects related to sexual orientation.[1]

[1]That is, short of voluntary disclosure, there is no *a priori* expectation that the sexual practices of the

The present study relies on a different set of sexual behavior questions that target more recent sexual history. Specifically, I give priority to a respondent's sexual behavior during the preceding twelve months. Respondents whose sex partners have been exclusively of the same sex or of both sexes are considered behaviorally homosexual or bisexual.[2] If the respondent had no sex partners during the previous twelve months, sexual behavior during the five years prior to the interview is employed. Importantly, subsequent to a respondent's being identified as behaviorally homosexual or bisexual, marital status is taken into account in the ultimate attribution of a lesbian, gay, or bisexual identity. Unmarried persons who are behaviorally homosexual or bisexual are understood as those who are most likely to self-identify as lesbian, gay, or bisexual and who are most probably perceived as such by colleagues and superiors in the workplace.

The behaviorally homosexual/bisexual respondents who are currently unmarried are those identified as "open" gays, lesbians, and bisexuals, and they are the primary group of interest. Respondents who are behaviorally homosexual or bisexual but who remain in heterosexual marriages are considered "masked" in their sexual orientation. The masked group is not the primary focus of the study, and it represents just one-half of one percent of the sample; nonetheless, this group is treated as a discrete category rather than folded into another of the orientation groups.

Empirical tests of the respective proxy methods reveal the joint consideration of recent sexual behavior and current marital status to be the more reliable predictor of self-described sexual orientation (see Table 1). These tests are possible because the National Health and Social Life Survey (NHSLS) replicates verbatim the sexual behavior queries of the GSS, while also gathering information on respondents' self-ascribed sexual identity (Laumann et al. 1994). A discrete analysis of NHSLS data examines the accuracy of the proposed proxy relative to one based on the method described in Badgett (1995). Both proxies prove highly accurate in flagging self-described gay/bisexual men, but differences in accuracy become evident when lesbian/bisexual women are considered. In addition to being a more reliable predictor of orientation than proxies that rely solely on adult sexual behavior, the present study's proxy proves more parsimonious with already scarce data because of fewer missing values in the chosen sexual behavior questions. It should be noted that behavior-based proxies prove much more reliable in predicting male sexual identity than female sexual identity. Nonetheless, the proxy used in this study demonstrates a marked improvement in the accurate identification of openly lesbian and bisexual female workers.

Earnings data in the General Social Survey are reported in categorical form for annual wage and salary income from a respondent's primary occupation. Using Current Population Survey data, I derive an imputed value from the median annual earnings within a given categorical range for each race-gender subgroup, in a given income category and year. The data are converted to real terms (base = 1992) for use in OLS wage equations.

The pooled data offer an initial sample of 7,182 working adults, ages 18–64. Paring the dataset to those respondents for whom complete information is available on requisite sexual behavior and marital status questions reduces the total number of observations to 5,998. Of these, 3,039 are men and 2,959 are women. The primary group of interest—workers identified as open lesbians, gays, and bisexuals—consists of 78 male respondents (2.6% of the male sample)

masked group would become known to others. Consequently, it cannot be assumed that this group will face workplace discrimination; neither is it expected that labor market strategies for this group will differ from those of heterosexual workers.

[2]The precise wording of the relevant sexual behavior questions in the GSS was, "Have your sex partners in the last 12 months/five years been exclusively male, both male and female, exclusively female?" The responses to these questions correspond to the variables SexSex and SexSex5 in the GSS.

Table 1. Performance of Sexual Orientation Proxies.
(Percentages in Parentheses)

	Male NHSLS Respondents		*Female NHSLS Respondents*	
Measures of Proxy Performance	*Sexual Behavior since Age 18*	*Recent Behavior and Marital Status*	*Sexual Behavior since Age 18*	*Recent Behavior and Marital Status*
Self-Identified L/G/B Correctly Predicted (Sensitivity)	28 (75.7%)	34 (91.9%)	13 (50.0%)	20 (76.9%)
Self-Identified Heterosexual Mispredicted as L/G/B (False Positive)	4 (10.8%)	2 (5.4%)	3 (11.5%)	3 (11.5%)
Self-Identified L/G/B Mispredicted as Heterosexual (False Negative)	4 (10.8%)	3 (8.1%)	10 (38.5%)	6 (23.1%)
Self-Identified L/G/B Not Ascribed Sexual Identity Because of Missing Sexual Behavior Data	5 (13.5%)	0 (0.0%)	3 (11.5%)	0 (0.0%)
TOTAL Self-Identified G/L/B in NHSLS Sample	37	37	26	26

Source: National Health and Social Life Survey.

Notes: Measures of performance based on logit estimates of the ability of competing behavioral proxies to predict self-described sexual orientation. The proxy based on "Sexual Behavior since Age 18" identifies as L/G/B those respondents who have had at least as many same-sex as opposite-sex partners since the age of 18. The proxy based on "Recent (sexual) behavior and marital status" identifies as L/G/B those respondents who are currently unmarried and whose partners in the last twelve months/five years were exclusively of the same sex or both male and female.

and 61 female respondents (2.1% of the female sample). These rates of non-heterosexual identity are close to those generated by Laumann et al. (1994).[3]

The limited size of the samples of interest here is partly a problem inherent to the study of any relatively small subpopulation and partly due to the paucity of large national random probability samples that include questions concerning sexual orientation or behavior. Still, although the numbers of lesbian, gay, and bisexual respondents in this study are low enough to necessitate caution in interpreting any observed intragroup patterns, they are large enough to allow for meaningful comparisons between groups of workers based on sexual orientation. Recognizing this limitation, then, the pooled GSS data offer the best means to study how sexual orientation influences labor markets outcomes.[4]

Characteristics of the Male Subsample

The variable means for male respondents are reported in Table 2. Wide variation in mean annual income levels exists across the different sexual and marital status

[3]In the National Health and Social Life Survey, Laumann et al. (1994) reported rates of gay/bisexual identity of 2.8% for men and 1.4% for women. The apparent over-representation of lesbian and bisexual workers in the present sample is consistent with the relatively high labor-force participation rates of this subpopulation.

[4]The 1990 Census PUMS was used effectively by Klawitter and Flatt (1998) and Allegretto and Arthur (2001). While the sample of persons identifiable as living in cohabiting same-sex partnerships is quite large, non-partnered gays and lesbians are not identifiable, nor are partnered gays and lesbians if they do not share the same residence. Given the limited research in this area, it is not known to what extent partnered status is correlated with earnings or other labor market characteristics.

groups. Married heterosexual men, who represent 60% of the male subsample, reported a mean annual income of over $37,000 in constant 1992 dollars. The income level of this group was well above the overall mean of $32,864, and it greatly exceeded the mean income reported by any other group. Unmarried heterosexual men reported annual earnings of $26,184, a figure almost 30% lower than the earnings of their married counterparts. Some plainly observable differences in characteristics between the two groups no doubt partly explain this gap: the married heterosexual male respondents were substantially older than their unmarried peers, less likely to work part-time, more likely to belong to a union, and somewhat better educated.

For the group of primary interest, the men identified as openly gay and bisexual workers, the mean real annual earnings from work were $27,415, nearly $10,000 less than the earnings of married heterosexual men and $5,000 less than the average for the entire group of working men. Openly gay and bisexual workers were somewhat younger and better educated than the group as a whole; indeed, they were the best educated of any subgroup. They were only half as likely as heterosexual men in the sample to report union membership. Among the marital status/orientation subgroups, openly gay and bisexual men were the most likely to work part-time rather than full-time. They were twice as likely as all men to live in a large SMSA.[5]

The variable means reported in Table 2 also reveal patterns of occupational clustering related to sexual orientation. Occupational categories are reported at the one- and two-digit levels. While the relatively small size of the gay/bisexual sample implies the need for caution in the interpretation of apparent trends, some observations are merited.[6] Openly gay and bisexual male workers appear to have been heavily concentrated in managerial and professional specialty occupations. Some 45% of gay and bisexual workers were employed in this occupational category, compared to just under 30% of male workers as a whole. The over-representation of openly gay and bisexual men is evidenced at the two-digit level as well. Nearly one-quarter of these workers were employed in professional specialty occupations and one-fifth in executive, administrative, or managerial positions.

The disproportionately heavy concentration of the openly gay and bisexual workers in the executive, administrative, or managerial positions and in the professional specialty category—occupational sectors typically associated with higher average wages—might lead one to expect higher average incomes for these men than for the group of men as a whole, holding all else equal. There is evidence, however, that these workers were situated in the more poorly remunerated occupations within the higher-paying occupation categories. For example, case-level examination of the sample reveals that nearly two-thirds of the openly gay and bisexual men within the professional specialty category resided in jobs that were female-identified or in the arts.

Evidence of distinct occupational patterns related to sexual orientation emerges in other categories as well. The openly gay and bisexual male workers were concentrated in technical, sales, and administrative support occupations. 28% were represented in these occupations, compared to just over 20% of all men. This differential

[5]For the purposes of this study, living in a large SMSA is defined as residency in one of the twelve largest central cities or in a suburb of the twelve largest central cities.

[6]The group of open (unmarried) gay/lesbian/bisexual workers consists of 78 men and 61 women. The much smaller group of masked (married) homosexual and bisexual workers contains just 18 men and 15 women. Descriptive statistics for this latter group are reported in Tables 2 and 3, but the figures should be understood as suggestive at best.

Table 2. Variable Means and Percentages for Male Workers, by Orientation and Marital Status.

	Heterosexual		*Gay/Bisexual*		
Variable	*Married*	*Unmarried*	*Masked*	*Open*	*TOTAL*
N	1,828	1,115	18	78	3,039
Percent of All Male Workers	60.2%	36.7%	0.6%	2.6%	100.0%
Mean Annual Earnings (constant 1992$)	$37,179	$26,184	$22,954	$27,415	$32,864
Education (years)	14.0	13.6	12.6	14.5	13.8
Age	41.1	34.8	38.1	36.9	38.7
Potential Experience	22.2	16.3	20.4	17.4	19.9
Race:					
Black	6.5%	12.4%	27.9%	10.3%	8.9%
Other	4.5%	4.9%	11.1%	6.4%	4.7%
Resides in Large SMSA	17.7%	18.1%	22.2%	38.5%	18.4%
Part-Time	4.6%	14.7%	0.0%	16.7%	8.6%
Union Member	18.6%	13.4%	0.0%	7.7%	16.5%
Occupation:					
Managerial & Professional Specialty	31.7%	24.1%	27.8%	44.9%	29.2%
Exec., Admin., Managerial	16.0%	12.2%	5.6%	20.5%	14.6%
Professional Specialty	15.7%	11.9%	22.2%	24.4%	14.6%
Technical, Sales, & Admin. Support	19.4%	20.8%	22.2%	28.2%	20.1%
Technician & Related Support	3.8%	3.6%	5.6%	2.6%	3.7%
Sales Occupations	9.8%	10.4%	11.1%	11.5%	10.1%
Administrative Support (incl. clerical)	5.7%	6.8%	5.6%	14.1%	6.3%
Service	8.5%	13.0%	0.0%	10.3%	10.1%
Private Household	0.0%	0.5%	0.0%	0.0%	0.2%
Protective Service	2.9%	3.5%	0.0%	2.6%	3.1%
Armed Forces	1.4%	0.7%	0.0%	0.0%	1.1%
Service, except Protective Serv. & Household	4.3%	8.3%	0.0%	7.7%	5.8%
Farming, Fishing, & Forestry	2.7%	2.6%	0.0%	0.0%	2.6%
Precision Prod., Craft, & Repair	21.1%	18.6%	11.1%	2.6%	19.6%
Mechanics and Repairers	8.2%	6.3%	0.0%	0.0%	7.2%
Construction Trades	8.4%	7.8%	11.1%	2.6%	8.1%
Extractive Occupations	0.3%	0.2%	0.0%	0.0%	0.2%
Precision Production	4.2%	4.3%	0.0%	0.0%	4.1%
Operators, Fabricators, & Laborers	16.7%	20.9%	38.9%	14.1%	18.3%
Machine Operators, Assemblers	6.8%	7.1%	0.0%	5.1%	6.8%
Transport., Material Moving	6.3%	6.3%	27.8%	3.8%	6.4%
Haulers, Helpers, Laborers	3.6%	7.5%	11.1%	5.1%	5.1%

Notes: Variable means for respondents ages 18–64 working part-time or full-time, based on author's calculations from GSS data. Reported occupational categories and subcategories represent the one- and two-digit divisions of Census Bureau coding. Owing to the limited number of respondents, subcategory detail is not shown for farming, fishing, and forestry workers.

appears largely attributable to gay and bisexual men's employment in administrative and clerical positions at rates double those that would be expected. In contrast, gay and bisexual men were largely absent from precision production, craft, and repair jobs. Other working men were seven and one-half times more likely to be employed in these occupations than were the openly gay and bisexual men. Under 3% of openly gay and bisexual men were employed in the construction trades, a rate one-third that of male workers as a whole.

Characteristics of the Female Subsample

The role of marital status and sexual orientation in influencing wage outcomes is evident as well among female workers (see Table 3). While married workers' average annual incomes were marginally

higher than those of unmarried heterosexuals, they were also on average three years older and more likely to be white, with a resultant wage advantage. On the other hand, the group of married heterosexual women was also more likely to work part-time and to reside outside a large metropolitan area, characteristics associated with lower wages. These findings are consonant with previous studies of wage determination focusing on the effects of gender and marital status.

The mean annual income of the group of openly lesbian and bisexual women, at $23,689, was $3,600 higher than that of the group of all women. They were somewhat better educated and, at the same time, younger—at a mean age of 34.3 years, four years younger—than other female workers. The unmarried lesbian and bisexual women were much more likely to belong to labor unions than were other groups of women. Fully one-fourth of the openly lesbian and bisexual workers in the sample held union membership, a rate more than double that of women as a whole. They were also somewhat more likely to reside in a large metropolitan area.

As with the male workers, an analysis of broad occupational patterns reveals evidence of distinct clustering corresponding to sexual orientation. At the one-digit categorical level, the clearest points of divergence in occupational patterns occur in service work and in precision production, craft, and repair occupations. Thirty-one percent of openly lesbian and bisexual women were employed in service occupations, compared to 17% of all working women. The bulk of this difference is evident at the two-digit subcategory level. Just under 10% of the open lesbian and bisexual women—6 of the 61 in the sample—worked in protective service occupations. This rate was ten times the rate for all women and, perhaps even more remarkable, three times that for all men.

The high rate of representation in service jobs was offset by relatively low representation of unmarried lesbian and bisexual women in jobs belonging to the technical, sales, and administrative support category. Of women as a whole, nearly 42% held positions within the latter category. This pattern of employment held without regard to marital status; married and unmarried heterosexual women were present at comparable rates not only in the category as a whole, but also within each of its three occupational subcategories. In contrast, just 23% of the openly lesbian and bisexual women were employed in technical, sales, or support jobs. Again, the source of the divergent rate of occupational representation becomes apparent at the two-digit level. Less than 10% of the openly lesbian and bisexual workers were employed in administrative support and clerical jobs, an occupational subcategory that included one-fourth of all working women.

Finally, while the 31% employment rate of lesbian and bisexual women in managerial and professional specialty careers is statistically indistinguishable from the rate for the group of women as a whole, there appears to be evidence of clustering at the two-digit level. The bulk of the positions were occupied within the professional specialty subcategory. At the same time, open lesbians and bisexuals were underrepresented in executive, administrative, and managerial positions. Just 7% of these women fell into that subcategory, compared to 11% of all women. It is possible, however, that some of this difference is attributable to the relative youth of the lesbian and bisexual women, assuming that executive, administrative, and managerial positions may be more likely to be offered to older and more experienced workers.

Income Distribution Patterns Related to Sexual Orientation

Further evidence of the association between sexual orientation and economic standing is shown by income distribution patterns (see Table 4).[7] The distribution of

[7]Reporting of income distribution is here limited to full-time workers to control partly for the effects of different rates of part-time status across sexual orientation groups. Because the only earnings informa-

Table 3. Variable Means and Percentages for Female Workers, by Orientation and Marital Status.

	Heterosexual		*Gay/Bisexual*		
Variable	*Married*	*Unmarried*	*Masked*	*Open*	*Total*
N	1,567	1,316	15	61	2,959
Percent of All Female Workers	53.0%	44.5%	0.5%	2.1%	100.0%
Mean Annual Earnings (constant 1992$)	$20,107	$19,851	$18,859	$23,689	$20,068
Education (years)	13.8	13.8	12.9	14.4	13.8
Age	39.8	36.5	40.5	34.3	38.2
Potential Experience	21.1	17.7	22.6	14.8	19.5
Race:					
Black	7.5%	20.3%	0.0%	11.5%	13.2%
Other	4.4%	4.6%	6.7%	8.2%	4.6%
Resides in Large SMSA	17.8%	22.6%	20.0%	24.6%	20.1%
Part-Time	26.2%	19.1%	40.0%	16.4%	22.9%
Union Member	10.5%	12.9%	0.0%	25.0%	11.6%
Ever Borne Children	84.0%	61.7%	80.0%	24.6%	72.8%
Occupation:					
Managerial & Professional Specialty	32.4%	28.6%	20.0%	31.1%	30.6%
Exec., Admin., Managerial	12.3%	10.3%	13.3%	6.6%	11.3%
Professional Specialty	20.1%	18.3%	6.7%	24.6%	19.3%
Technical, Sales, & Admin. Support	41.7%	42.7%	20.0%	23.0%	41.6%
Technician & Related Support	4.3%	4.6%	0.0%	4.9%	4.4%
Sales Occupations	11.8%	11.9%	13.3%	8.2%	11.8%
Administrative Support (incl. clerical)	25.6%	26.3%	6.7%	9.8%	25.5%
Service	14.8%	19.1%	13.3%	31.1%	17.1%
Private Household	1.2%	1.7%	0.0%	0.0%	1.4%
Protective Service	0.6%	0.8%	0.0%	9.8%	0.9%
Armed Forces	0.1%	0.2%	0.0%	1.6%	0.1%
Service, except Protective Serv. & Household	12.9%	16.5%	13.3%	19.7%	14.6%
Farming, Fishing, & Forestry	0.7%	0.2%	0.0%	0.0%	0.4%
Precision Prod., Craft, & Repair	2.1%	2.1%	6.7%	6.6%	2.2%
Mechanics and Repairers	0.3%	0.5%	0.0%	3.3%	0.5%
Construction Trades	0.4%	0.2%	6.7%	1.6%	0.3%
Extractive Occupations	0.0%	0.0%	0.0%	0.0%	0.0%
Precision Production	1.4%	1.4%	0.0%	1.6%	1.4%
Operators, Fabricators, & Laborers	8.3%	7.4%	40.0%	8.2%	8.0%
Machine Operators, Assemblers	5.7%	4.8%	20.0%	3.3%	5.3%
Transport., Material Moving	1.2%	0.9%	6.7%	1.6%	1.1%
Haulers, Helpers, Laborers	1.4%	1.7%	13.3%	3.3%	1.6%

Notes: Variable means for female respondents ages 18–64 working part-time or full-time, based on author's calculations from GSS data. Reported occupational categories and subcategories represent the one- and two-digit divisions of Census Bureau coding. Owing to the limited number of respondents, subcategory detail is not shown for farming, fishing, and forestry workers.

income based on gender is largely consistent with expectations. The earnings of the aggregated group of male workers were highly skewed toward the higher earnings groups. The obverse of male income patterns is evident in the distribution of women's earnings; female workers were clustered in the lower income quintiles and least likely to be in the higher groupings. There is little difference in the patterns between married and unmarried heterosexual women. It should be recalled, how-

tion available in the General Social Survey is annual income rather than hourly wage, the inclusion of part-time workers becomes somewhat complicated. Not only would wage rates be expected to be lower among the part-time workers, but there would likely be great variation in the number of hours worked in any given period.

ever, that married women were on average three years older than women in the unmarried group; thus, estimates controlling for age might indicate that married women were relatively worse off.

The income distributions of lesbian, gay, and bisexual workers diverge from the expected patterns for workers of their respective sexes. In general, the distribution patterns of both gay/bisexual men and lesbian/bisexual women roughly parallel the quintile breakdown for full-time workers as a whole. Thus, among the openly lesbian and bisexual women, 40% were in the two lowest income quintiles, and 38% were in the highest two. Four percent of these women were among the top 5% of earners. In the corresponding group of gay and bisexual men, the pattern is similar, if not quite so smooth: 43.5% of these workers fell into the bottom 40% of earners, 40.3% into the top two-fifths, and 3.2% into the top 5%.

The median salary of $24,212 for open gay and bisexual men is just slightly higher than the $23,807 figure for lesbian and bisexual women, and the difference is not statistically significant ($p = .27$). Further, the group of lesbian/bisexual female workers was younger than the gay/bisexual male workers, resulting in lower levels of potential work experience. Nor did the median earnings of either group differ significantly from those for all full-time workers of both sexes. Indeed, the lesbian, gay, and bisexual workers appear to have been near-median figures in the income hierarchy. The earnings pattern was better than that of most women, but it fell short of the higher earnings typical of male workers as a whole.

Among all full-time workers, women's mean annual income and median annual income were, respectively, just 66% and 70% of men's. The picture changes substantially, however, when full-time lesbian and bisexual female workers are compared to full-time gay and bisexual male workers: mean and median full-time earnings of this group of women are 93% and 98% of men's, respectively. Clearly, the large wage differential that has come to be expected in female-male comparisons does not necessarily obtain when we focus on open lesbians, gays, and bisexuals.

Primary Earnings Determination Models

The primary regression analyses create a model for examining the role of sexual orientation as a determinant of worker earnings, controlling for other factors that predict worker income. The pooled GSS data are analyzed as two discrete pools in recognition of the differing labor market processes faced by male and female workers. This study employs models based on standard OLS wage-determination models, with logged real annual earnings from work as the dependent variable. As independent variables, the models incorporate several measures of human capital investment: years of education, potential experience,[8] and the square of potential experience. Demographic and occupational controls consist of dummy variables for race, residence in one of the twelve largest cities or a suburb of those cities, geographic region, and occupational category. A trend variable is included to capture any secular effects introduced into the dataset by the pooling of data over a seven-year period; for example, it might be expected that changes in real wages occurred in the 1988–95 period that the income data describe. The effects of sexual orientation on earnings are captured by dummy variables for status as an unmarried heterosexual; a masked gay, lesbian, or bisexual; and an open gay, lesbian, or bisexual. In the models, married heterosexuals are specified as the default group.

For the separate male and female subgroups, regression results from the two primary specifications of the earnings model are reported. The first model specification most closely resembles that tested in Badgett (1995), in which one-digit occupational

[8]Where potential experience equals age – years of education – 5.

Table 4. Income Distribution Patterns for Full-Time Workers, by Gender, Orientation, and Marital Status.

	Male Workers				*Female Workers*				
	Heterosexual				*Heterosexual*				
Income Category	*Married*	*Un-married*	*Gay/ Bisexual*	*All Men*	*Married*	*Un-married*	*Lesbian/ Bisexual*	*All Women*	*All Workers*
Income Quintile									
I < = $13,999	8.9%	19.3%	19.4%	**12.7%**	28.6%	27.4%	22.0%	**27.9%**	**20.0%**
II $14,000–$21,249	13.6%	17.8%	24.1%	**15.5%**	24.3%	25.9%	18.0%	**24.9%**	**20.0%**
III $21,250–$28,249	17.7%	21.0%	16.2%	**18.8%**	20.8%	21.2%	22.0%	**22.0%**	**19.9%**
IV $28,250–$39,999	24.8%	24.0%	17.7%	**24.3%**	16.3%	17.0%	20.0%	**16.7%**	**20.4%**
V > = $40,000	35.0%	17.9%	22.6%	**28.7%**	10.0%	8.5%	18.0%	**9.5%**	**19.7%**
Wealthiest 5%,									
> = $63,325	11.9%	5.0%	3.2%	**9.3%**	2.3%	0.7%	4.0%	**1.6%**	**5.0%**
Median Income (1992$)	$31,700	$25,042	$24,212	**$28,937**	$20,216	$20,216	$23,807	**$20,216**	**$24,618**

Source: Author's calculations from General Social Survey data, 1989–96.

Notes: Income quintile distribution patterns for paid full-time workers by gender and orientation, referenced to pool of paid full-time workers by gender and to paid full-time workers of both sexes. Figures are denominated in constant 1992 dollars.

controls are employed to address the effects of disproportionate representation in occupations. The data sample is limited to full-time workers. This restriction is intended to limit the variability of hours worked, for which the GSS does not provide data. The second model introduces two-digit occupational controls to account better for the evident sub-clustering of open gays, lesbians, and bisexuals within occupational categories.

Primary Econometric Results for Male Workers

The OLS regression results for the sample of male workers are reported in Table 5, columns (1) and (2). For each of the models, the coefficient estimates on the human capital, demographic, and occupational category variables have the customary and expected sign. Most of the estimated coefficients are significant at the 1% level. The primary exception to this pattern of statistical significance and consistency with prior expectations is the coefficients on the race dummy variables. In none of the four model specifications do parameter estimates for either of the race controls satisfy the criteria for statistical significance. While the signs of the estimates are largely consistent with a pattern of racial bias penalizing non-white workers, the estimates' magnitude is less than might be expected. For both models, the estimate for the black race dummy variable is –0.06, which implies a wage penalty of just 5.8% compared to white workers.[9]

For male workers, the regression analysis demonstrates consistency with previous studies that have shown single men to have lower earnings than their married peers (Hill 1979). The parameter estimates for both model specifications are significant at the 1% level in a two-tailed test and imply a wage penalty in the range of 13.9% for unmarried heterosexual workers. Masked gay and bisexual men also appear to have faced a wage penalty. Parameter estimates on the dummy variable for this group suggest a wage penalty between 17.3% and

[9]The failure of the race dummy to return statistically significant estimates parallels the findings of Badgett (1995).

Table 5. Primary OLS Regression Results on Logged Real Annual Income, Full-Time Workers. (Absolute t-Values in Parentheses)

	(1)		*(2)*		*(3)*		*(4)*	
	Male Workers				*Female Workers*			
	One-Digit Occup.		*Two-Digit Occup.*		*One-Digit Occup.*		*Two-Digit Occup.*	
Variable	*Coeff.*		*Coeff.*		*Coeff.*		*Coeff.*	
Intercept	8.39***	(92.1)	8.25***	(85.9)	7.56***	(72.7)	7.54***	(70.8)
Orientation:								
Unmarried Heterosexual	–0.15***	(6.1)	–0.15***	(6.0)	0.02	(0.9)	0.02	(0.7)
Masked Gay/ Bisexual	–0.20	(1.5)	–0.19	(1.5)	–0.01	(0.0)	0.01	(0.1)
Open Gay/ Bisexual	–0.38***	(5.1)	–0.36***	(4.9)	0.21**	(2.4)	0.16*	(1.9)
Human Capital:								
Education (years)	0.08***	(14.4)	0.07***	(14.0)	0.09***	(14.0)	0.09***	(13.8)
Potential Experience	0.05***	(13.5)	0.05***	(13.2)	0.04***	(9.8)	0.04***	(9.8)
Squared Potential Experience	0.00***	(9.4)	0.00***	(9.2)	0.00***	(7.0)	0.00***	(7.0)
Race:								
Black	–0.06	(1.5)	–0.06	(1.5)	0.01	(0.2)	0.01	(0.3)
Other	–0.04	–(0.8)	–0.02	(0.4)	–0.11*	(1.8)	–0.11*	(1.8)
Resides in Large Metropolitan Area	0.19***	(6.2)	0.18***	(5.9)	0.15***	(4.6)	0.15***	(4.6)
Geographic Region:								
Northeast	0.12***	(3.7)	0.12***	(3.9)	0.17***	(4.6)	0.18***	(4.7)
Midwest	0.10***	(3.3)	0.09***	(3.2)	0.06*	(1.8)	0.06*	(1.8)
West	0.04	(1.3)	0.04	(1.4)	0.10***	(2.8)	0.10***	(2.9)
Occupation:								
Managerial & Professional Specialty	0.27***	(6.2)			0.50***	(10.9)		
Exec., Admin., Managerial			0.47***	(7.9)			0.55***	(10.3)
Professional Specialty			0.40***	(6.5)			0.46***	(8.8)
Technical, Sales, & Admin. Support	0.13***	(2.8)			0.36***	(9.0)		
Technician & Related Support			0.41***	(5.4)			0.50***	(7.0)
Sales Occupations			0.31***	(4.9)			0.30***	(5.5)
Admin. Support (incl. clerical)			0.19***	(2.8)			0.37***	(8.3)
Service	†				†			
Private Household			0.26	(0.5)			–0.34**	(2.0)
Protective Service			0.37***	(4.7)			0.22*	(1.7)
Armed Forces			0.23**	(2.1)			0.37	(1.1)
Service, except Protective Serv. & Household			†				†	
Farming, Fishing, & Forestry	–0.10	(1.2)	0.06	(0.7)	0.09	(0.4)	0.10	(0.4)

Continued

Table 5. Continued

	(1)		(2)		(3)		(4)	
	Male Workers				*Female Workers*			
	One-Digit Occup.		*Two-Digit Occup.*		*One-Digit Occup.*		*Two-Digit Occup.*	
Variable	*Coeff.*		*Coeff.*		*Coeff.*		*Coeff.*	
Precision Prod., Craft, & Repair	0.18***	(4.1)			0.42***	(4.8)		
Mechanics and Repairers			0.39***	(6.0)			0.71***	(4.3)
Construction Trades			0.26***	(4.0)			0.06	(0.3)
Extractive Occupations			0.73***	(3.1)			††	
Precision Production			0.41***	(5.6)			0.39***	(3.5)
Operators, Fabricators, & Laborers	0.06	(1.3)			0.29***	(5.3)		
Machine Operators, Assemblers			0.26***	(4.0)			0.32***	(5.2)
Transport., Material Moving			0.30***	(4.5)			–0.01	(0.1)
Haulers, Helpers, Laborers			0.05	(0.7)			0.38***	(3.4)
Trend Variable	–0.01**	(2.1)	–0.01**	(2.1)	0.01*	(1.8)	0.01*	(1.8)
Adjusted R-Square	0.31		0.33		0.29		0.29	
N	2,566		2,566		2,064		2,064	

*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level.
†Default occupational dummy for OLS regression.
††No relevant observations in occupational category.

18.1%, but neither of the estimates satisfies criteria for statistical significance.

For the primary group of interest, openly gay and bisexual workers, OLS regressions return coefficients that are strongly significant and negative. The first model—employing one-digit occupational controls—generates a parameter estimate of –0.38, statistically significant at the 1% level. The estimate implies that a wage penalty of 31.6% is associated with non-normative sexual orientation. Introducing more refined occupational controls into the second model reduces the parameter estimate slightly and suggests a wage penalty of 30.2%. The incorporation of two-digit occupational controls also improves goodness of fit, with the adjusted R-squared increasing to 0.33.

Primary Econometric Results for Female Workers

As with the subset of male workers, OLS regressions on the two primary model specifications return coefficient estimates on human capital, demographic, and occupational control variables largely consistent in sign and magnitude with expectations (Table 5, columns 3 and 4). Additionally, the estimates are mostly significant at the 1% level. Once again, however, the estimates on the race variables counter expectations; indeed, the estimate on the black race dummy is near zero, and statistically it must be considered as such, with absolute t-values no greater that 0.3 in either of the regressions. Of the occupational variables for which estimates fail reasonable mea-

sures of statistical confidence, all represent categories that comprise 1.1% or less of the female worker pool.

The regression results on the subset of female workers reveal a sharp departure from findings typically reported in literature on the role of gender in the determination of wages. Specifically, the anticipated wage effect of marital status—that unmarried women will, *ceteris paribus,* earn more than married women—cannot be demonstrated in this study with any confidence. In neither primary regression is there evidence that the parameter estimate on the variable for unmarried women differs significantly from zero.

For the group of openly lesbian and bisexual workers, in contrast, the parameter measures are more consistent in their statistical significance. Using the basic model with one-digit occupational controls, the OLS regressions yield an estimate of the coefficient on the lesbian/bisexual proxy that is positive and significant at the 5% level. The marginal effect of an openly lesbian or bisexual orientation is a wage premium of 23.4%. The parameter estimate declines in magnitude and significance with the introduction of two-digit occupational controls. Still significant, though at the 10% level,[10] the parameter value of 0.16 suggests a wage premium of 17.4% for openly lesbian or bisexual orientation. The diminished marginal effect of a non-normative sexual orientation associated with the introduction of more nuanced occupational controls suggests that openly lesbian and bisexual women's wage advantage may stem partly from disproportionate representation in better-paying occupational categories.

Supplemental Econometric Tests

One of the challenging tasks in building a satisfactory earnings determination model for the group of female workers is to explicitly incorporate such productivity-related factors as labor-force attachment. Because only women can bear children, and because they retain primary responsibility for child-rearing, human capital considerations suggest that part of the wage differential attributed to gender may in fact measure differing levels of labor-force attachment (Becker 1991; Polachek 1975b). Also, it has been argued that because women with children often take breaks from market work to concentrate solely on domestic labor, they suffer a deterioration of human capital that results in lower productivity and wages when they return full-time to the paid labor pool (Polachek 1975a).

These issues typically are raised in the context of discussions of the persistence of a gap in wages attributed to gender. The present study focuses on income differentials *within* a gender group. Nonetheless, the issue of the effect of children on labor-force attachment, and on expected productivity and compensation, remains relevant. Precisely because differential rates of motherhood are evident between openly lesbian/bisexual women and heterosexual women, as well as between unmarried and married heterosexual women (see Table 3), a concern emerges that some portion of the income differentials attributed to orientation actually results from differences in unmeasured productivity factors. After all, 84% of married heterosexual female workers have borne a child, compared to only 62% of unmarried heterosexuals and just a quarter of the openly lesbian and bisexual workers. Because women with children are more likely than other women to take time off from the paid work force, a divergence between actual experience and the proxy measure of potential experience is likely. To address the potential of unobserved human capital and productivity issues being wrongly attributed to sexual orientation, several supplemental OLS model specifications were tested. The estimates generated from these specifications are reported in Table 6.

The first method is to incorporate a Heckman correction into the standard

[10]Specifically, the t-value of 1.875 implies that the likelihood of the true value of the parameter estimate's not differing from zero is 6% in a two-tailed test.

Table 6. Supplemental OLS Regression Results, Full-Time Female Workers. (Absolute t-Values in Parentheses)

	(1) Heckman-Corrected		*(2) Workers without Own Children*		*(3) Workers without Own Children*	
	Two-Digit Occup.		*One-Digit Occup.*		*Two-Digit Occup.*	
Variable	*Coeff.*		*Coeff.*		*Coeff.*	
Intercept	6.75***	(8.0)	7.75***	(39.5)	7.79***	(39.2)
Orientation:						
Unmarried Heterosexual	0.13	(1.1)	–0.03	(0.6)	–0.04	(0.9)
Masked Gay/Bisexual	–0.15	(0.6)	–0.04	(0.1)	–0.03	(0.1)
Open Gay/Bisexual	0.32*	(1.7)	0.23**	(2.2)	0.21**	(2.0)
Human Capital:						
Education (years)	0.11***	(5.5)	0.07***	(5.7)	0.07***	(6.0)
Potential Experience	0.07***	(2.9)	0.07***	(8.0)	0.07***	(7.6)
Squared Potential Experience	0.00**	(2.6)	0.00***	(5.2)	0.00***	(4.7)
Race:						
Black	0.04	(0.8)	0.14	(1.5)	0.11	(1.3)
Other	–0.08	(1.1)	–0.10	(0.8)	–0.09	(0.8)
Resides in Large Metropolitan Area	0.13***	(3.5)	0.18***	(3.1)	0.17***	(3.0)
Geographic Region:						
Northeast	0.04	(0.3)	0.11*	(1.7)	0.11*	(1.7)
Midwest	–0.07	(0.5)	0.06	(0.9)	0.03	(0.5)
West	0.00	(0.0)	–0.01	(0.2)	–0.01	(0.1)
Occupation:						
Managerial & Professional Specialty			0.61***	(6.9)		
Exec., Admin., Managerial	0.54***	(10.3)			0.56***	(5.5)
Professional Specialty	0.46***	(8.8)			0.49***	(4.9)
Technical, Sales, & Admin. Support			0.48***	(5.7)		
Technician & Related Support	0.50***	(7.0)			0.47***	(3.7)
Sales Occupations	0.30***	(5.5)			0.44***	(4.2)
Admin. Support (incl. clerical)	0.37***	(8.3)			0.36***	(4.0)
Service			†			
Private Household	–0.34**	(2.0)			–1.30***	(3.9)
Protective Service	0.22*	(1.7)			–0.12	(0.5)
Armed Forces	0.38	(1.1)			††	
Service, exc. Protective Serv. & Household	†				†	
Farming, Fishing, & Forestry	0.10	(0.5)	††		††	
Precision Prod., Craft, & Repair			0.27	(1.6)		
Mechanics and Repairers	0.72***	(4.3)			0.54**	(2.0)
Construction Trades	0.06	(0.3)			–0.01	(0.0)
Extractive Occupations	††				††	
Precision Production	0.39***	(3.6)			–0.01	(0.0)
Operators, Fabricators, & Laborers			0.10	(0.8)		
Machine Operators, Assemblers	0.32***	(5.2)			0.26*	(1.8)
Transport., Material Moving	–0.01	(0.1)			–0.56*	(1.9)
Haulers, Helpers, Laborers	0.38***	(3.4)			–0.29	(1.4)
Trend Variable	0.01*	(1.8)	0.00	(0.2)	0.01	(0.5)
Lambda	0.92	(0.9)				
Adjusted R-square	0.29		0.33		0.35	
N	2,064		584		584	

*Statistically significant at the .10 level; ** at the .05 level; ***at the .01 level.
†Default occupational dummy for OLS regression.
††No relevant observations in occupational category.

model to address problems of selection bias. Because implicit and unmeasured factors may be affecting the determination of income correlated with orientation—in particular, openly lesbian and bisexual women may show greater attachment to the full-time labor force than other women do—the OLS regression estimates may be biased. The Heckman correction used here first models the likelihood of a respondent's being in the full-time labor force, then introduces a correction term into the OLS income determination model. The results of the Heckman-corrected OLS regression are reported in column (1) of Table 6.

As can be seen by comparing the bias-corrected model and the model on which it is based (see Table 5, column 4), the introduction of the selection-bias correction term has little effect on the parameter estimates. Some of the parameter estimates do change signs, but these estimates were not significantly different from zero in the original model, and they continue to be insignificant in the corrected model. The parameter estimate for openly gay or bisexual orientation does double in magnitude (implying a marginal effect of 37.7%), but concerns over the stability of the Heckman procedure suggest a need for some care in the interpretation of this result.

A more straightforward method is available with which to address concerns that income differentials attributed to orientation may be in part determined by unmeasured differences in labor-force attachment. Because the core of this concern relates to the presence and demands of minor children on a woman's labor energy, supplemental models are tested in which the data sample is limited only to those women without own children. The results of these supplemental regressions are reported in columns (2) and (3) of Table 6. The smaller sample size of 584 full-time female workers reduces significance levels in many cases, but the parameter estimates are remarkably consistent with those produced by the same models using the less restrictive dataset (see Table 5). In the model using the group of full-time workers and one-digit occupational controls, the coefficients on the proxies for unmarried heterosexuals and masked lesbians and bisexuals are, as before, statistically indistinguishable from zero. The estimated parameter for openly lesbian and bisexual orientation increases to 0.23, implying a marginal effect of 25.9%, and retains significance at the 5% level.

The consistency of results between the regressions using all full-time female workers and those using only full-time female workers without own children remains, as well, when the two-digit occupational controls are used. Again, the parameters for unmarried heterosexuals and masked lesbians and bisexuals are small and statistically insignificant. The coefficient estimate of 0.21 for openly lesbian/bisexual orientation is again significant at the 5% level, and it is markedly larger in magnitude than the estimate of 0.16 derived from the comparable primary regression.

The supplemental regressions essentially confirm the findings of the primary model specifications for female workers. If the Heckman bias-corrected model differs in any substantial way from the primary model on which it is based, it is to suggest even greater influence for openly lesbian or bisexual orientation. The restriction of the sample to women without own children also confirms the primary results. In each of the models targeting full-time workers, the supplemental regressions return parameter estimates on the proxy for openly lesbian or bisexual orientation that are somewhat larger than those in the primary models. Further, the estimates for this variable in the supplemental regressions are significant at the 5% level. Overall, it may be asserted that the primary regressions on female workers appear reliable and free from manifest bias.

Discussion

The evidence described in this study strains the credibility of the argument that measured wage differentials between heterosexual workers and gay, lesbian, and bisexual workers are owing solely to workplace attitudes about homosexuality. Defending that explanation would require

explaining how workplace attitudes could penalize non-heterosexual male workers with wages substantially below those of heterosexual workers while simultaneously awarding lesbian and bisexual female workers with a substantial earnings premium. Certainly, workplace attitudes toward sexual orientation may have a gender component; that is, bias against homosexuality and bisexuality may be more strongly expressed against persons of one gender than of another. Nonetheless, it seems unlikely that the wage effects would differ in sign rather than merely in magnitude.

A more probable explanation for the disparate earnings effects of sexual orientation across genders may be found in treating workplace bias as but one orientation-related factor influencing earnings outcomes. Workplace bias that might negatively affect the wages of lesbian and bisexual women appears to be offset by other labor market factors. Most influential among these factors are subtle occupational clustering effects not adequately captured by the two-digit controls in this study or by the one-digit controls employed elsewhere (Badgett 1995). Case-level analysis of occupational patterns associated with sexual orientation points to trends that are both highly nuanced and gender-specific, suggesting that parameter estimates may overestimate the direct effect of orientation on earnings. Lesbian and bisexual women are revealed to be unusually successful in gaining employment in largely male-dominated—and typically better-remunerated—occupational categories. For gay and bisexual men, in contrast, overrepresentation in female-identified occupations likely further depresses returns to human capital attributes relative to other male workers. The full extent of these clusters may not be adequately captured by two-digit occupational controls. A more thorough accounting of the occupational effects related to sexual orientation requires incorporation of measures that capture the orientation and gender composition of occupations at the three-digit level—requiring a substantially larger sample than that available with the General Social Survey.

Household division-of-labor arguments may provide a partial explanation for the occupational sorting patterns and the positive earnings differential of lesbian/bisexual women. Because the openly lesbian/bisexual women in the sample are much less likely than other women to have their own children—a key factor driving specialization in nonmarket activities (Becker 1991)—both partners in a same-sex cohabiting relationship may choose to specialize in market labor. Women in traditionally conceived heterosexual marriage, or unmarried women who anticipate such marriage, may have an incentive to concentrate investment in nonmarket human capital and, therefore, to pursue jobs with lower penalties for breaks in job tenure and lessened skill depreciation caused by these breaks (Polachek 1975a). In contrast, lesbian/bisexual women may be more likely to specialize in market activities and to be disproportionately represented in otherwise male-dominated occupations. Consequently, differential human capital investment in market and household production by sexual orientation would result in differential returns to market labor.

Household division-of-labor explanations seem less adequate for explaining gay/bisexual men's large earnings disadvantage relative to married men, as well as the smaller but still statistically significant gap relative to unmarried heterosexual men. With gay/bisexual male workers exhibiting greater-than-average investment in education and being far less likely than heterosexual men to shoulder responsibility for the care of dependents, there seems little ground for presupposing that they will have lower levels of market specialization. Should both partners specialize in nonmarket production, there will be heightened reliance on purchased market equivalents for household goods (meals, cleaning services, and so on), but this need not imply lower productivity and wages in the market. Neither do household allocation arguments provide the basis for an *a priori* expectation that gay and bisexual men will seek employment in feminized occupations. Thus, while it might be argued that gay/bisexual men's

total household income (that is, both monetary and nonmonetary income) could be on average lower than that of heterosexual men, there seems little basis for expecting differential occupational patterns and returns to market labor based solely on human capital arguments.

Additional factors may be considered in explaining the sharply different effect of sexual orientation on male and female earnings. In particular, there may be rewards to gender attributes that, in essence, become associated with particular sexual orientations. As non-participants in the institution of heterosexual marriage, lesbian women and gay men may be perceived as rejecting socially normative roles. To the extent that the labor market returns to marriage are gender-specific, non-heterosexual workers' apparent nonconformity with societal norms may have disparate payoffs across genders. Non-marriage of male workers may be penalized by the labor market while non-marriage of female workers may be treated more ambivalently. Additionally, it may be that employers reward adherence to ideals of masculinity, but penalize adherence to ideals of femininity. Earnings outcomes and occupational patterns may reveal both current forces and historical patterns of employment that were established well before the adoption of anti-discrimination statutes.

Importantly, the inclusion of sexual orientation in the earnings-determination model appears to eliminate marital status as a significant predictor of earnings from work for women, and it significantly reduces the predictive value of marriage for male workers. This result suggests that the role long attributed to marital status in studies of gender-related wage differentials may need be qualified. Disaggregation of the effects of gender, marital status, and sexual orientation reveals that the predictive role of sexual orientation has wrongly been subsumed under the guise of marital status. The long-described earnings hierarchy that placed married men at the top, followed by unmarried men, unmarried women, and finally married women, is modified with the introduction of sexual orientation. Married heterosexual men continue to enjoy the greatest earnings advantage, but they are now followed by unmarried heterosexual men; then by gay, lesbian, and bisexual men and women; and finally by all heterosexual women. The econometric evidence produced in this study reveals the importance of sexual orientation in shaping the earnings patterns of workers in the United States.

Conclusion

The econometric evidence presented in this study demonstrates the existence of a strong relationship between sexual orientation and earnings from work. Supplemental tests of the results for both male and female workers reveal the estimated parameters for unmarried lesbian, gay, and bisexual persons to be quite robust. For men, a persistently significant, large, and negative wage differential is associated with an openly gay or bisexual orientation. Other things being equal, openly gay and bisexual men are predicted to earn 30% to 32% less than married heterosexual men. These results should be seen to confirm the finding of a negative wage differential associated with a gay or bisexual orientation for male workers first reported by Badgett (1995), though the magnitude of the differential is larger yet.

For women, in contrast, the net effect of sexual orientation in the labor market is revealed to be positive. Relative to comparable married heterosexual women, openly lesbian and bisexual women report earnings 17% to 38% higher, with the most reliable estimates of the marginal effect of orientation falling in the range of 17% to 26%. These results are statistically significant and relatively constant across a wide array of model specifications. The findings reported here for lesbian and bisexual women stand in sharp contrast to those reported by Badgett. The statistically significant findings for lesbian and bisexual female workers in this study likely result from more accurate identification of lesbian and bisexual female workers and from the availability of a larger database. It must

be recalled, of course, that the measured wage premium comes on top of wages previously diminished by the impact of gender; that is, lesbian women appear to earn more than other female workers but continue to earn less than the group of men as a whole.

The sexual orientation proxy's strong predictive value within groups of workers by gender marks this variable as an important one, even as the disparity of its effect across genders makes it Janus-faced. The demonstrable income disadvantage experienced by openly gay and bisexual men needs to be reconciled with the apparent relative success of lesbian and bisexual women. Evidently, earlier arguments about the effects of sexual orientation discrimination must be qualified. Preliminary evidence from analysis of the descriptive statistics suggests that a large—and largely unexplained—component of the income differentials may be attributable to highly nuanced occupational clustering related to sexual orientation and gender. Attribution of the earnings differentials primarily to the effects of employer bias becomes questionable; other factors shaping earnings outcomes must be considered. While it is likely that employment discrimination based on sexual orientation is an important factor shaping the labor market experiences and earnings outcomes of nonheterosexual workers, the concurrent influence of other, gender-associated factors complicates reliance on measured earnings differentials to promote adoption of anti-discrimination statutes that include sexual orientation protections.

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