IZA DP No. 8935

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March 2015

Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

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Discussion Paper No. 8935 March 2015

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IZA Discussion Paper No. 8935 March 2015

ABSTRACT

Sexual Identity, Earnings, and Labour Market Dynamics: New Evidence from Longitudinal Data in Australia^{*}

Using newly collected data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey, this study presents new estimates of the earnings effects of sexual orientation in Australia and offers the first empirical investigation of the labour market trajectories of lesbian/gay/bisexual individuals. Our results show that gay males are: (i) less likely to be continuously employed than their heterosexual counterparts, and (ii) face an earnings penalty of approximately 20 percent, driven, in part, by a longer-run earnings growth penalty relative to heterosexuals. Individual fixed effects estimates show that males entering into same-sex partnerships experience earnings declines relative to those entering into opposite-sex partnerships. For lesbians, we find evidence of an earnings premium, explained largely by increased labour supply on the intensive margin and, to a lesser extent, greater earnings growth over time.

JEL Classification: J31, J71

Keywords: sexual orientation, labour market dynamics, earnings trajectories, HILDA Survey

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^{*} This paper uses unit record data from Release 12.0 of the Household, Income and Labour Dynamics in Australia (HILDA) Survey, a project initiated and funded by the Australian Government Department of Social Services and managed by the Melbourne Institute of Applied Economic and Social Research, University of Melbourne. The authors thank Richard V. Burkhauser and Christopher Carpenter for useful comments and suggestions on an earlier draft of this paper. They also thank the Faculty of Business and Economics, University of Melbourne, for funding to support this collaboration, and Thanh Tam Nguyen for outstanding research assistance.

I. Introduction

Twenty years of research examining the effect of sexual orientation on labour market outcomes have produced a consensus that gay males earn less than their heterosexual counterparts, while lesbians earn more (Badgett 1995; Klawitter 2015). A recent meta-analysis of these studies estimates the magnitude of the gay male/bisexual earnings penalty to be approximately 12 percent and the lesbian earnings premium to be of similar size (Klawitter 2015), though there is substantial variance around these estimates. Evidence that sexual minorities may face differential treatment in the labour market has been found in the United States (Allegretto and Arthur 2001; Badgett 1995; Berg and Lien 2002; Black et al. 2007; 2003; Blandford 2003; Carpenter 2005, 2007, 2008; Clain and Leppel, 2001; Cushing-Daniels and Yeung 2009; Klawitter 2011; Sabia 2014, 2015), Sweden (Ahmed and Hammarstedt, 2010), Canada (Carpenter 2008a), the Netherlands (Plug and Berkhout 2004, 2008), the United Kingdom (Aksoy, Carpenter, and Frank 2015; Arabsheibani et al. 2004, 2005; Frank 2006), Greece (Drydakis 2015), and Australia (Carpenter 2008b; Plug, Webbink, and Martin 2014; La Nauze 2015).

Despite this growing literature, an important challenge faced by labour economists in this literature is the paucity of data on sexual orientation in large, nationally representative longitudinal datasets.¹ This has impeded the ability of researchers to (i) control for potentially important confounders that may be associated with revelation of sexual identity and earnings, such as family background characteristics, personality, religiosity, and risky health behaviours; and (ii) study work histories of sexual minorities, which is important for examining whether labour supply and earnings trajectories for sexual minorities differ from heterosexuals.

¹ The National Longitudinal Study of Adolescent to Adult Health (NLSAAH) is one exception. However, there is only one wave of NLSAAH data that includes information on labor market outcomes of young adults.

Differences in earnings growth could exist between lesbian, gay or bisexual (LGB) individuals and heterosexuals for a number of reasons. Discrimination-induced occupation segregation might result in differential productivity growth between sexual minorities and heterosexuals. In addition, changes in government policies toward the LGB community or in public attitudes toward LGB individuals may affect labour market trajectories. Moreover, if LGB identification affects job tenure, experience, or attachment to the labour force, then these effects on acquisition of job-specific human capital could affect labour market trajectories. Finally, the timing of "coming out" to one's employer may lead to different earnings growth.

The current study makes use of newly collected data from a nationally representative longitudinal survey — the Household, Income and Labour Dynamics in Australia (HILDA) Survey — to provide (i) new estimates of the effect of sexual identity on earnings in Australia, and (ii) the first empirical investigations of labour market trajectories of sexual minorities, as well as the dynamic labour market effects of entering into a same-sex relationship.

Our findings suggest that Australian gay males are substantially more likely to have multiple non-working spells during the previous decade than their heterosexual counterparts, and face an annual earnings penalty of approximately 20 percent. These findings are robust to controls for a wide set of family- and individual-level characteristics, including personality, religiosity, and risky health behaviours. We further find that the average ten-year earnings growth rate for gay males is substantially smaller than for heterosexual males, and that gay males who are more likely to be observably gay by employers—those with same-sex partners—face larger earnings penalties. Finally, we find that males who enter into same-sex partnerships have slower earnings growth relative to males who enter opposite-sex partnerships, consistent with either household specialisation or labour market discrimination. For women, we uncover evidence of an earnings premium for lesbians driven by increased labour supply on the intensive margin and some evidence of stronger earnings growth—particularly for lesbians with same-sex partners—relative to heterosexual women.

II. Background

Earnings Differentials. Interpreting earnings differences between sexual minorities and heterosexuals as evidence of labour market discrimination is challenging for three reasons. First, a discrimination explanation needs to reconcile an earnings penalty for gay males with an earnings premium for lesbians. One explanation for this result is that lesbians earn more than heterosexual women because of increased labour supply and reduced work interruptions caused by lower probabilities of childbearing and childrearing (Black, Sanders, and Taylor 2007), which may, in part, be the result of discrimination against potential lesbian parents. Another is that the labour market rewards social constructs of masculinity—including those demonstrated by lesbians—and penalises less masculine traits among men (Gorsuch 2015).

Second, earnings penalties for gay males and earnings premia for lesbians could reflect household specialisation (Becker 1991). Jepsen and Jepsen (2015), in fact, find some evidence of household specialisation among same-sex households. Their results show that heterosexual married couples exhibit the highest degree of labour market specialisation, and that gay male couples are more similar to heterosexual married couples in terms of specialisation than are lesbian or unmarried heterosexual couples. However, household specialisation may not explain this entire finding, as there is evidence of gay male wage penalties among single individuals (Carpenter 2012; Sabia 2014).² Moreover, there is also evidence that same-sex couples—

 $^{^{2}}$ Of course, it is possible that single gay males intending to specialise in future relationships may invest less in the labor market and more in household production.

particularly those without children—may make household decisions differently than married or cohabiting opposite sex partners (Klawitter 2008; Kurdek 2005) due to differences in legal protections for same-sex couples or differences in cultural/social norms (Klawitter 2015).

Third, while sexual identity may be largely influenced by genetic factors (Dawood, Bailey and Martin 2009; Kallmann 1952) that are unrelated to labour market outcomes, selfidentification of sexual orientation (on a survey or in the workplace) is likely related to family background and individual characteristics that are also associated with earnings (Carpenter 2005; Sabia 2014). However, recent work by Sabia (2014, 2015) and Plug, Webbink, and Martin (2014) suggests that the labour market penalty faced by sexual minorities—particularly by gay males—is robust to controls for a wide set of family and individual background characteristics.

Other evidence in support of the presence of labour market discrimination against LGB individuals includes: (i) findings showing that the largest earnings penalties exist for those who are more likely to be "out" to their employers (Carpenter 2012; Sabia 2014, 2015); and (ii) experimental research that finds that resumes are significantly less likely to be selected for job interviews when those resumes include information on LGB organisation membership (Ahmed, Andersson, and Hammarstedt 2013; Gorsuch 2015; Tilscik 2011; Weichselbaumer 2013; 2015).

Earnings Gaps and Labour Market Trajectories. While a number of studies have compared labour market outcomes of sexual minorities to heterosexuals in cross-sectional data or compared how earnings differentials have changed over time in repeated cross-sections (Klawaitter 2015)—no study of which we are aware has examined labour market histories of sexual minorities, which may be important in understanding the dynamic labour market consequences of discrimination. There are, however, important parallel literatures that have explored the dynamics of the gender wage gap (e.g., O'Neill and Polachek 1993; Blau and Kahn 1997, 2004; Manning and Swaffield 2008; Bertrand, Golden, and Katz 2010;) and the blackwhite earnings gap (e.g., Altonji and Doraszelski 2005; Bratsberg and Terrell 1998; Lubotsky 2007; Oettinger 1996) using longitudinal data. As Manning and Swaffield (2008) write:

"Most papers on ... pay gap[s] focus on the level of pay and not the growth in pay. But as the level of pay at any level experience is simply the initial pay on labour market entry plus cumulated wage growth any theory of the pay level must be... also a theory of wage growth (and vice versa). [T]heories to explain the level of pay should also be able to explain differences in wage growth." (Manning and Swaffield 2008; p. 904)

Manning and Swaffield (2008) use data from the British Cohort Study to explore the factors that explain early career earnings growth gaps between males and females, and find that while human capital, job-shopping, psychological theories, and childbearing can explain a significant portion of the gender pay growth gap, a substantial unexplained portion remains, which could suggest the presence of discrimination. Bertrand, Goldin, and Katz (2010) also examine the dynamic labour market effects of the gender earnings gap, focusing on professionals in the financial and corporate sectors. They find that while male and female MBAs graduating from the same top business school earn similar wages early in their careers, large divergences in earnings develop over time, reaching over 60 log points after ten years. They conclude that pre-MBA training as well as motherhood-driven gender differences in work interruptions are the primary drivers of these differences.

Because of the lack of data on sexual identity in panel datasets, similar analyses have not yet been conducted for sexual minorities, which is an important gap this paper seeks to fill.

Sexual Minorities in Australia. Attitudes toward homosexuality in Australia have become increasingly progressive and are now among the most tolerant in the world. Research in the mid-1980s found that 64 percent of Australians viewed homosexuality to be "always wrong,"

but by 1999 this figure had dropped by approximately one-quarter, with 28 percent viewing homosexuality as "not wrong at all" (Kelley 2001). Changes in public attitudes throughout the 2000s and 2010s were even more dramatic. A 2013 Pew Research Center poll found that 80 percent of Australians believed that "homosexuality should be accepted by society," a figure higher than in the United States and consistent with broad evidence that secular and more affluent nations have more progressive attitudes toward gay rights (Pew Research 2013).

While gay marriage remains banned in Australia under the 1961 Commonwealth Marriage Act, the federal government enacted laws in the 2000s to recognise same-sex de facto partnerships as legally equivalent to opposite-sex domestic partnerships. Most significant are the same-sex reforms introduced in 2008 and 2009 in the wake of a report of the Australian Human Rights and Equal Opportunities Commission (HREOC 2007). More recently, in August 2013, Australia became the first nation to criminalise discrimination against LGB and transgendered individuals via the Sex Discrimination Amendment of 2013. This law prohibits discrimination of sexual minorities in areas such as employment, education, provision of goods, services and facilities, and the administration of Australian law (excepting the Commonwealth Marriage Act).

Relatively few studies have examined the relationship between sexual orientation and labour market outcomes in Australia. Carpenter (2008b) uses confidential data from the Australian Longitudinal Survey of Women's Health and finds that young lesbians between ages 22 and 27 have lower personal incomes, are less likely to find a job, and more likely to lose a job than their heterosexual counterparts. He also finds that lesbians are more likely to be dissatisfied with work and report more stress-related problems about work, career, and money than heterosexual females. Plug et al. (2014) use data from the Australian twins registry and find, consistent with prejudiced-based theories of discrimination against LGB workers, that sexual minorities are more likely to avoid occupations with workers who have more prejudiced attitudes (Plug, et al. 2014). Finally, La Nauze (2015) uses data from earlier waves of the HILDA— where sexual identity was not explicitly measured—and finds some evidence of a wage penalty for same-sex cohabiting males. However, this study is not able to examine labour market outcomes for the substantial numbers of gays and lesbians without live-in partners (Carpenter 2005; Sabia 2014), nor does it exploit the longitudinal nature of the HILDA to examine earnings trajectories.

Our study provides the first set of estimates of the effect of sexual identity on labour market outcomes in Australia using newly collected data from a large nationally representative longitudinal dataset, with novel attention to the dynamic labour market consequences of identification as a sexual minority and individual-specific changes in partnership over time..

III. Data and Measures

Our analysis uses data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. Described in more detail in Watson and Wooden (2012), the HILDA Survey is a household panel survey with a focus on work, income and family. The data used in this analysis are drawn from Release 12, which includes data from wave 12, the first (and only) wave of the survey to collect information on sexual identity.

The survey commenced in 2001 with a national probability sample of Australian households. Personal interviews were completed at 7,682 of the 11,693 households identified as in scope for wave 1, which provided an initial sample of 13,969 individual respondents. The members of these participating households form the basis of the panel pursued in the subsequent waves of interviews, which are conducted approximately one year apart. Interviews are conducted with all adults (defined as persons aged 15 years or older) who are members of the original sample, as well as any other adults who, in later waves, are residing with an original sample member. A large population refreshment sample was introduced in wave 11 (2011) which added a further 2153 responding households (see Watson and Wooden 2013).

Annual re-interview rates are high, rising from 87 percent in wave 2 to over 94 percent by wave 5, and remaining above that level in all subsequent waves. All interview respondents are also given a separate self-completion questionnaire (SCQ), where the question on sexual identity was administered. This instrument is often collected from respondents at a later date, and associated with additional non-response. On average, about 90 percent of all interviewees complete and return the SCQ each survey wave.

Our initial analysis sample consists of 10,298 individuals—4,695 males and 5,603 females—ages 18 to 64, who completed and returned the wave 12 SCQ, provided information on their labour force/employment status, and were not full-time students at the time of the wave 12 interview. For subsequent analyses of hourly wages and work hours, we further restrict the sample to employed individuals for whom we have information on usual weekly hours in their current job and the usual weekly wage from that job, providing a sample size of 7,473 persons. Finally, for analysis of financial year wages and salary, the sample is restricted to the 8,348 persons who earned non-zero wages and salaries at any time during the previous financial year.

Sexual Identity. The HILDA Survey asked about respondents' sexual identity in one wave of the survey: wave 12 in 2012. Following the approach recommended by the UK Office for National Statistics for self-administered surveys (Haseldon and Joloza 2009), respondents were asked, "Which of the following describes how you think of yourself?", and given six

options to choose from: "Heterosexual or Straight"; "Gay or Lesbian"; "Bisexual"; "Other"; "Prefer not to say"; and "Unsure/Don't Know".

When weighted, we find that 92.6 percent (N = 9535) of our sample identified as heterosexual or straight, 1.6 percent as gay or lesbian (N = 164), and 1.5 percent (N = 150) as bisexual. An additional 0.7 percent (N = 69) reported "Other," 0.8 percent (N = 78) reported "Don't know/Unsure," and 2.1 percent (N = 213) reported "Prefer not to say." A further 0.9 percent (N = 89) chose not to respond to this survey item and were coded as missing.³

The proportions of sexual minorities identified in the Australian data are comparable to those found in the UK Household Longitudinal Study in 2011-2012, and the UK Integrated Household Survey in 2009-2010. The proportions are also similar—though slightly lower—than rates observed in the U.S. National Survey of Family Growth and U.S. General Social Survey. An important concern, however, is the small sample of sexual minorities in our data—a common problem faced in this literature (Badgett 2009)—which limit the precision of estimated earnings differentials between sexual minorities and heterosexuals.

There is some discussion in the sexual orientation literature on "best practices" for asking questions about sexual identity in population-based surveys. Relevant to our study, there is some controversy about the appropriateness of including as wide a range of response options as included in the HILDA Survey item. For example, Badgett (2009) argues against providing an "Other" response because "it is generally impossible to categorise the respondent's sexual orientation based upon the selection of this category," which will result in discarding these individuals from the analysis samples of most studies on the labour market effects of sexual orientation, further reducing statistical power. Moreover, there is evidence that the majority of

³ Our tables below excludes information on this "missing" group, but descriptive statistics and regression coefficients for these individuals are available upon request of the authors.

adults who respond that they are "not sure" do so not because they are undecided, but because they did not understand the sexual orientation question item (Sell, Wells, and Wypij 1995). Finally, Badgett (2009) recommends not including a "prefer not to say" response if such an option is not provided for other demographic questions because this "inappropriately single(s) out" the sexual identity question. Given differences in interpretation of these responses and in the interest of completeness, we present results using full set of responses to the sexual identity variable available in the HILDA Survey.

There are also a number of other limitations to our ability to measure sexual identity with these data. The survey does not ask whether the respondent has revealed their sexual identity to their employer or the timing of "coming out" to themselves, friends, family, co-workers, and employers, as does, for example, the General Social Survey. As noted by Carpenter (2005, p. 261), disclosure of sexual orientation is "a necessary (but not sufficient) condition for the existence of empirically and economically important labour market discrimination against sexual behaviour, which is less likely to be observable in the workplace. Moreover, the question about sexual identity has not (yet) been repeated over time nor asked retrospectively. We can only examine work histories of individuals who later identified themselves as LGB or heterosexual rather than examine differential trajectories of those who came out at different times. Thus, important we will miss potentially important life course differences in orientation. However, as noted below, we do have measures of same-sex partnership over time that we exploit to ameliorate this concern.

Labour Market Outcomes. We first measure labour supply on the extensive margin. We generate a dichotomous variable set equal to one if the respondent was employed part- or full-

time during the seven days prior to interview and set equal to zero if the respondent was unemployed or not in the labour force.⁴ We measure labour supply on the intensive margin (among workers) by generating a variable equal to the natural log of usual weekly hours of work in the respondent's main job.

We calculate hourly earnings as the ratio of usual weekly gross (pre-tax) earnings in the respondent's main job (in 2012 Australian dollars, AUD) to usual weekly hours worked in that job. *Wage* is bottom coded at \$8.00 (AUD) per hour and top coded at \$300 per hour, though our findings are robust to excluding these individuals from our sample.⁵ Finally, we measure the respondent's gross financial year (July 1 to June 30) wages and salary in 2012 AUD.

Tables 1A and 1B show the means of these economic outcomes and selected background characteristics by sexual identity for males and females, respectively.

IV. Empirical Approach

Baseline Cross-Sectional Analysis. We begin by using cross-sectional data from wave 12 to estimate a labour market equation of the following form:

$$Y_{i} = \beta_{0} + \beta_{1} LGB_{i} + \beta_{2} X_{i} + \varepsilon_{i}$$
(1)

where Y_i is a measure of the labour market outcome (employment, log hours, log wages, or log financial year earnings) of individual *i* and **LGB**_i is a vector of indicators corresponding to the respondent's answer to the above sexual orientation survey item. The vector X_i is initially restricted to exogenous demographic controls: age, age-squared, ethnicity, and remoteness.⁶ In

⁴ We also experimented with alternative measures of labor force participation, including part and full-time employment. The findings using these alternate measures were qualitatively similar to those presented below.

⁵ In our sample, 46 (0.6 percent) employed respondents had hourly wages below \$8.00 per hour and just 5 respondents (0.0 percent) had hourly earnings greater than \$300.

⁶ Our measure of remoteness (defined by the AU Bureau of Statistics) identifies whether the respondent lives in: a major city, inner regional Australia, outer regional Australia, or a remote or very remote location in Australia.

subsequent specifications, X_i is augmented with controls for cognitive ability, educational attainment, English proficiency, and whether the respondent is enrolled in school part-time. Our key parameter of interest, β_1 , shows the difference in labour market outcomes between heterosexuals and sexual minorities, conditional on these observables.

Following Sabia (2014), we then examine the sensitivity of estimates in equation (1) to a wide set of family background and individual characteristics that could be correlated with both sexual identity and labour market outcomes. We augment the vector \mathbf{X}_i with family background characteristics—parental educational attainment, number of siblings, birth order, parental marital status, and parental employment at age 14—as well as a wide set of individual characteristics. These individual controls include body weight and height, religious attendance, personality (extroversion, agreeableness, conscientiousness, emotional stability, and openness to experience), physical health (physical functioning and long-term health condition that prevents ability to work), risky health behaviours (current cigarette consumption, alcohol consumption at least five days per week), and mental health (Mental Health Inventory-5), each of which have been found to be negatively related to labour supply and earnings (see Sabia 2014).

Note that a number of these individual controls—particularly risky behaviours and mental health—may be consequences, rather than non-causal correlates, of sexual orientation. And if they represent pathways through which sexual orientation may affect labour market outcomes, estimates of β_1 in models that include these controls may be considered lower-bound estimates.

Finally, we add controls for job tenure and occupation to the vector \mathbf{X}_i in hours, wages, and earnings equations. Again, while the inclusion of occupation and tenure controls may diminish bias in the estimate of β_1 to the extent that adjusted wage differences reflect non-

discrimination-related occupation selection, occupation choice could itself be a reflection of labour market discrimination. Thus, we present estimates with and without these controls.

Labour Market Trajectories. We next make use of the longitudinal nature of the data to examine how sexual identity is related to labour market trajectories. First, we use information from prior waves to examine whether sexual identity is related to non-working spells during the previous ten years. Specifically, we examine whether sexual minorities are more or less likely to be continuously employed during their adult working-age years.

Then we re-estimate equation (1) replacing the respondent's level of earnings (or wages) on the left-hand side of the estimating equation with four measures of real earnings growth: two-year earnings growth (between waves 10 and 12), five-year earnings growth (between waves 7 and 12), seven-year earnings growth (between waves 5 and 12), and ten-year earnings growth (between waves 2 and 12). Specifically, we restrict the sample to those aged 18 to 64 with non-missing information on earnings in periods t and t-n and who were not full-time students in either year t or t-n, and estimate:

$$(Y_{it} - Y_{it-n})/(Y_{it-n}) = \beta_0 + \theta_1 \mathbf{LGB}_i + \theta_2 \mathbf{X}_i + \upsilon_{i(t, t-n)}$$
(2)

where n indexes two, five, seven, or ten years prior to the current labour market outcome. The dependent variable is the real growth rate (in percentage terms).

While the longitudinal nature of our data provides us an important advantage over prior studies because we can explore growth in earnings, there are some limitations of our analysis. First, estimating equation (2) will limit the size of our already small sample of sexual minorities, a common challenge with using population-based data in the sexual orientation literature.⁷ Our estimates will, therefore, become increasingly less precise as we examine longer-run earnings

⁷ In Appendix Table 1, we show sample sizes, by sexual orientation and gender, for the cross-sectional earnings sample (see column 3) as well as each of the growth samples (which also require information from waves 10, 7, 5, or 2).

trajectories. Moreover, our estimates of longer-run trajectories will be conducted on a sample of somewhat older individuals with a longer earnings history. To assure that comparisons of earnings growth estimates over the short- and longer-run are not contaminated by cohort effects, we perform a sensitivity analysis whereby we restrict the sample to those older individuals who provide information on earnings across the decade-long period. A final concern with the trajectory analysis is that the use of a single prior year of earnings data to generate a growth rate may introduce measurement error. One way we attempt to address this concern is by taking the average of earnings over a two-year period to ameliorate measurement error.

Second, because the HILDA Survey only asks about sexual orientation at wave 12, we cannot identify the labour market effects of individual-specific fluidity or stability in sexual orientation identification, which may be important (Sabia 2015). Our data only allow us to examine the labour market histories of those who, at wave 12, reported their sexual identity. Second, and relatedly, the lack of information on individuals' sexual orientation in earlier periods impedes our ability to examine how changes in sexual identity might affect changes in earnings levels or trajectories. "Coming out" (to oneself, family, and employer) could have important labour market effects that we are unable to identify with our data.

While we do not have information on sexual identity over time, the HILDA does include information on same- or opposite-sex partnering over time. Thus, we exploit within-person over-time variation in same- or opposite-sex coupling to estimate the effect of entering into partnerships on labour market outcomes. Specifically, we pool data from Waves 1 through 12 and estimate an individual fixed effects model of the following form:

$$Y_{it} = \alpha_0 + \alpha_1 Same - Sex Partner_{it} + \alpha_2 Opp - Sex Partner_{it} + \mathbf{X}_{it} + \tau_i + \lambda_t + \rho_{it}$$
(3)

where *Same-Sex Partner*_{it} is an indicator for whether respondent *i* had a same-sex partner in year *t*, *Opp-Sex Partner* is an indicator for whether the respondent had an opposite-sex partner, \mathbf{X}_{it} is vector of individual time-varying characteristics⁸, τ_i is a time-invariant individual fixed effect, and λ_t is a year effect. The identifying variation comes from those who transition partnership between waves (see Appendix Table 2). We are interested in whether the labour market effect of partnering is different for those who enter same-sex versus opposite-sex partnerships (α_1 - α_2). Such a difference could be explained either by household specialisation or due to labour market discrimination against more easily identifiable LGB individuals.

V. Results

Our main estimates appear in Tables 2 through 9 below. Robust standard errors are in parentheses and all regressions are weighted using the HILDA Survey population weight. To conserve space, our estimates in the tables focus on β_1 (or θ_1 , α_1 , or α_2). Estimates on the controls appear in Appendix Tables 2.

Our analysis begins with an examination of cross-sectional estimates of the relationship between sexual identity and labour market outcomes—to benchmark our estimates against other large national datasets—and then proceeds to exploit the longitudinal nature of the data to examine labour market trajectories, as well as individual-specific flows into or out of same- or opposite-sex partnerships.

Employment and Hours. Panel I of Table 2 presents estimates of the relationship between sexual identity and employment of males. Column (1) shows estimates of β_1 from the specification using the most parsimonious set of exogenous demographic controls. We find that

⁸ These set of controls include age, remoteness, educational attainment, weight, height, religiosity, health conditions, smoking status, frequent drinking status, mental health (measured by the MHI-5 score), and occupation.

gay males are 15.6 percent (0.129/0.830) less likely to be employed than their heterosexual counterparts. The addition of controls for education (column 2), family background characteristics (column 3) and a wide set of individual background characteristics, including measures of appearance, personality, and religiosity (column 4) as well as of health and health behaviours (column 5) does not change this pattern of findings. For bisexual males, the estimated coefficient is uniformly smaller (in absolute magnitude) and is statistically indistinguishable from zero. Interestingly, we also find that those who report having an "other" sexual identity are significantly less likely to be employed than heterosexual identifiers, though the estimates become smaller in absolute magnitude with the inclusion of controls for personality, religion, risk preferences and health.

For females (Panel II), there is little evidence that lesbians are less likely to be employed than heterosexual women. However, we do find that bisexual females are 9.1 to 12.8 percentage points, or 13.2 to 18.6 percent, less likely to be employed. Females who respond that they "don't know," "prefer not to say," or have some sexual identity "other" than lesbian, bisexual, or heterosexual are also less likely to be employed than heterosexual women, though as for men, the magnitude of estimated employment effect for these groups falls substantially after the inclusion of controls for risky health behaviours.

In Table 3, we explore whether sexual identity is related to labour supply on the intensive margin by examining log hours of work among those who are employed. Columns (1) through (4) include the same sets of controls as in Table 3, while column (6) adds additional controls for job tenure and one-digit occupation (ANZSCO major group). The results in Panel I provide little evidence that gay males or bisexual males work significantly different hours than heterosexual males. However, we find that lesbians work 18.7 ($e^{0.171} - 1$) to 25.9 ($e^{0.230} - 1$) percent more

hours than heterosexual women. This result is consistent with evidence summarised by Klawitter (2015) and may be explained, in part, by lower rates of childbearing (and child rearing) among lesbians (Black et al. 2007).

Wages. Table 4 shows the wage effects of sexual identity for workers. In Panel I, column (1), we find that conditional on basic demographic characteristics, gay males earn wages that are, on average, 5.7 percent less than their heterosexual counterparts, though this difference is not statistically distinguishable from zero. The addition of controls for education (column 2) increases the wage penalty by nearly 50 percent and becomes statistically significant at the 10 percent level, consistent with descriptive statistics in Table 1 showing that education is positively related to gay male identification and with wages. We find that the wage penalty faced by gay males persists with the inclusion of controls for family background characteristics (column 3), as well as personality, appearance, risk preferences and health (columns 4 and 5), and occupation and tenure (column 6). The result in column (6) suggests that gay male identification is associated with 11.5 percent lower wages. Interestingly, the pattern of results for those that "prefer not to say" their sexual identity is quite similar to that observed for gay men. However, the bisexual wage penalty is almost uniformly smaller (in absolute magnitude) and shrinks with the inclusion of controls for education and risk preferences.

For females (Panel II), we do not find any evidence of significant differences in average wages for sexual minorities as compared to heterosexual females in models that include controls beyond the basic demographic characteristics (column 1). We do find that those who report a sexual identity of "prefer not to say" earn wages that are approximately 12 percent lower than their heterosexual counterparts.⁹

Financial Year Earnings. In Table 5A, we examine the effect of sexual identity on the probability of having any financial year wages and salary. For men (Panel I), the coefficients on sexual minorities are consistently negative, but uniformly are statistically indistinguishable from zero in the most fully saturated specification (column 5). For women (Panel II), there is some evidence of year-long non-working spells for bisexuals and those who identify with an "other" sexual identity.

In Table 5B, we examine the effect of sexual identity on log of financial year earnings for those with positive financial year earnings. Here we find consistent evidence that gay males face an approximately 20 to 25 percent earnings penalty, consistent with both negative employment spells (Table 3) and with wage penalties (Table 4). We also continue to find some evidence of an earnings penalty for bisexual males, but the magnitude of the effect is quite sensitive to the inclusion of controls for personality, appearance, and risky health behaviours, consistent with Sabia (2014). Interestingly, however, unlike the result for gay males, the absolute magnitude of the earnings penalty is actually *larger* after controlling for occupation and tenure.

For lesbians (Panel II), there is consistent evidence of a large earnings premium across all specifications. In our most fully saturated specification, we find that lesbians earn approximately 27 percent more than their heterosexual counterparts. Given the above findings on wages, this

⁹ In unreported results available upon request, we repeat the analysis in Table 4 for those who report full-time employment. The results are qualitatively and quantitatively similar to those observed for the full sample of workers.

lesbian earnings premium appears to be largely driven by greater work hours among employed lesbians relative to heterosexuals.¹⁰

Taken together, these results are consistent with those found in other representative crosssectional datasets of Western nations: an earnings penalty for gay males and an earnings premium, driven by work intensity, for lesbians. Next, we exploit the longitudinal nature of the HILDA Survey data and examine whether sexual identity is associated with differential labour supply and earnings growth.

Labour Market Trajectories. In Table 6, we examine the relationship between sexual identity and: (i) the probability of any non-working spells over the previous 10 years (column 1), two or more non-working spells (column 2), or three or more non-working spells (column 3); and (ii) percent changes in conditional hours of work between wave 12 and waves 10 (column 4), 7 (column 5), 5 (column 6), and 2 (column 7). We find consistent evidence that gay males are more likely to have multiple non-working spells in their work histories than their heterosexual counterparts (Panel I, columns 2 and 3), a result that holds when we restrict the sample to those not attending school at all in any prior wave. This suggests that our finding cannot be explained by gay males being more likely to return to school. For hours of work, there is little evidence that sexual identify is associated with differential growth in usual hours worked per week for sexual minorities as compared to heterosexual males. In Panel II, we find little consistent evidence that lesbian and bisexual identification affects the probability of multiple prior non-working spells or work hours growth, we do find some evidence that those who report some "other" sexual identity or respond "don't know" to the sexual identity question are more likely to have multiple non-working spells in the past decade.

¹⁰ In unreported results, available upon request, we examine the effects of sexual identity over the age distribution (those ages 18-to-29, 30-to-39, 40-to-49, and 50-to-64). We fail to reject the hypothesis that the earnings penalty for gay males and the earnings premium for lesbians are statistically equivalent across age cohorts.

Next, we turn to financial year earnings trajectories. Figures 1 (males) and 2 (females) provide some descriptive evidence on earnings histories (for those with positive earnings) over a decade-long period for respondents of differing sexual identities. All financial year earnings are measured in Australian dollars at 2012 prices. While earnings trajectories for sexual minorities is more variable than for heterosexuals, due to the far smaller samples of LGB individuals, the pattern of results suggests that earnings growth is generally lower for gay and bisexual males relative to heterosexuals (with the notable exception of 2003-2004 for gay males). For females, while earnings levels are higher for lesbians than heterosexuals, growth rates appear similar. Bisexual females have noticeably lower growth rates. Of course, these are just raw differences in earnings trajectories, so we next turn to regression results to control for observables.

In columns 1 through 4 of Table 7, we examine whether the earnings trajectory of sexual minorities differ from heterosexuals. The results show evidence that gay males' earnings grows slower than heterosexuals and that earnings growth differentials widen over the longer-run. We find that over a 10-year period, wage growth is 0.29 percentage-points lower for gay males relative to heterosexuals. One explanation for this result is the long-run labour market consequences of multiple unemployment spells impeding the acquisition of job-specific human capital; another may be weaker wage growth.¹¹ For bisexual males, we also find some evidence of negative earnings growth, though the magnitude of the earnings growth penalty does not uniformly follow an increasing or decreasing pattern over the short- to longer-run. In contrast, for women, we find some evidence of stronger earnings growth, particularly in the medium-run (five-year growth), which is consistent with greater work intensity growth.

Could these comparisons of longer- and shorter-run differential growth trajectories be picking up sample composition effects driven by different age cohorts appearing in each sample?

¹¹ In unreported results available upon request, we find some evidence of weaker wage growth for gay males.

In columns 5 through 8 of Table 7, we hold sample composition constant, requiring individuals to contribute positive earnings across the decade-long period. Our results continue to show that gay males face an earnings growth penalty relative to heterosexual males, with larger effects in the longer-run (0.16 to 0.20 percentage-point lower growth) than in the shorter- or medium-run (0.04 to 0.13 percentage-point). Interestingly, we also uncover stronger evidence for an earnings growth penalty for bisexuals with a balanced panel of individuals. Finally, we examine the robustness of our estimates to using average earnings over a two-year period (instead of a single year) to estimate changes in earnings growth. These results, shown in Appendix Table 3, produce a qualitatively similar pattern of results.

Same-Sex Partnership. The results presented above—particularly those that control for a wide set of individual and family background characteristics—are consistent with labour market discrimination against gay males and, to a somewhat lesser extent, against bisexual males. To further explore this hypothesis, we follow the approach of Sabia (2014) and further exploit information from our data on whether the respondent reported living with a same-sex partner. While partnership is endogenous (Carpenter and Gates 2008), those who report a bisexual identity, but live with an opposite-sex partner are probably less likely to present a bisexual identity to an employer than a bisexual identifier living with a same-sex partner. Furthermore, a male who identifies as gay and also lives with a same-sex partner may be more likely to be "out" on the job.

Each respondent to the HILDA Survey is asked about the people living in their household, including the sex of their live-in partner. We find that 46.8 percent of gay males and 52.5 percent of lesbians report living with a same-sex partner at wave 12. This relative parity in same-sex partnering rates between gay males and lesbians is quite a different pattern than has been observed in other Western nations, where rates of lesbian partnering are much higher (see, for example, Carpenter and Gates 2008). We also find that 1.5 percent of bisexual males and 4.6 percent of bisexual females report living with a same sex partner. Table 8 presents the results from interacting sexual identity with our "presence and sex of partner" indicators. The omitted category from this regression is comprised of heterosexuals with an opposite-sex partner (married or cohabiting heterosexual couples). We suppress estimates from identity-partner interaction categories where the number of individuals was four or fewer.

The results in column (1), row (1) suggest evidence of an earnings premium for heterosexual married men relative to heterosexuals with no partners, consistent with a longstanding marriage literature (Hersch and Stratton 2001; Hill 1979; Korenman and Neumark 1991). We do find some evidence, however, that earnings growth is faster for single straight men. For gay males, we observe a different pattern. While we find that gay males with no partners and opposite-sex partners earn less than heterosexual men with female partners, gay men with same-sex partners face the largest earnings penalty (-0.391). This finding is consistent with Sabia (2014) and suggests that gay men who are most likely to be observed as gay (because they have a same-sex partner) may be those most likely to face labour market discrimination. An alternate interpretation of this finding is that gay men in same-sex relationships are more likely to specialise in home production (Jepsen and Jepsen 2015). In the longer-run (column 5), we find some evidence that earnings growth may be significantly lower for gay men without partners or same-sex partners. And interestingly, we find that two-year growth rates for single gay males is substantially lower than that of single heterosexual males, a finding that is less consistent with a household specialisation explanation.

The lesbian earnings premium appears to exist both for those without partners and those with same-sex partners. Interestingly, earnings growth over their work histories differs. For lesbians without partners, earnings growth lags that of heterosexual women with male partners while for lesbians with female partners, there is evidence of stronger earnings growth.

Individual Fixed Effects Estimates. One of the important limitations of the HILDA survey is that we cannot measure sexual identity at earlier waves. However, we can measure the presence of a same-sex or opposite-sex partner in all waves. This data availability allows us, for the first time, to estimate the dynamic labour market effects of entrance into a same-sex partnership. In Table 9, we pool data from Waves I through 12 and estimate individual fixed effects models of the labour market effects of entering into a same-sex versus opposite-sex partnership (relative to having no partner). For men (Panel I), we find strong and consistent evidence that entering into an opposite-sex partnership is associated with increases in employment (column 1), conditional hours worked (column 2), and earnings (column 3). However, entering into a same-sex relationship is associated with no net change in labour supply or earnings. Tests of the differences between the effects of entering into same-sex and oppositesex partnerships suggest a labour market penalty for same-sex coupling individuals. These results could suggest labour market discrimination against same-sex relative to opposite -sex partnered couples or Becker-style household specialisation. For females, we find that those who enter into opposite-sex partnerships see a decline in employment relative to both single women and women who enter same-sex partnerships. In addition, women who enter into same-sex partnerships see a net rise in earnings relative to single women as well as women entering into opposite-sex relationships, though this latter difference is not statistically significant at

conventional levels. Again, these findings could be interpreted as evidence of household specialisation.

VI. Conclusions

This study is the first in the literature to (i) estimate the effect of sexual identity on earnings in Australia, (ii) investigate whether sexual minorities face different labour market trajectories relative to heterosexuals, and (ii) estimate the differential labour market effects of entering into same-sex as compared to opposite-sex partnerships. Using data from the HILDA Survey, we find that gay males are less likely to be employed than their heterosexual counterparts and face an earnings penalty of approximately 20 percent. This penalty is robust to a wide set of controls for family and individual confounders, which may be related to both selfidentification as a sexual minority and with labour market outcomes. Descriptive trajectories analysis suggests that this penalty may be explained, in part, by differential earnings growth. We find that earnings growth over a decade-long period is significantly lower for gay as compared to heterosexual males. Bisexual males also appear to have slower earnings growth relative to straight men, but the effect does not appear to get larger over time as is observed for gay males. In contrast, for lesbians, we find consistent evidence of an earnings premium, driven by greater work intensity. We also find some evidence that labour supply differentials on the intensive margin between lesbian and heterosexual women appear to grow over time.

Evidence in support of labour market discrimination as a likely explanation for the estimated wage penalty we observe for sexual minority males is bolstered by the robustness of our estimates to a wide set of controls for family background characteristics as well as individual characteristics, such as appearance, religiosity, personality, risk preferences, and health. Moreover, our estimates are also largest for those individuals with same-sex partners who are most likely to be observably gay to their employers. Finally, individual fixed effects estimates suggest an earnings penalty for males entering into same-sex partnerships relative to oppositesex partnerships and an earnings gain for females entering into same-sex partnerships.

Our findings represent an important contribution to the literature in understanding the effect of sexual identity on labour market outcomes in Australia, and the role of dynamic labour market effects of sexual identity. With other national longitudinal datasets — such as the UK Household Longitudinal Study — recently adding sexual identity to their surveys, cross-national comparisons can be made on the dynamic labour market effects of sexual orientation. A new working paper using these data suggests important differences between Australia and the UK with regard to the gay male wage penalty (Aksoy et al. 2015). Thus, it will be informative for future researchers to examine data on sexual identity in Australia in the post-2013 period—when the Sex Discrimination Amendment of 2013 was enacted—to explore whether the labour market effects of sexual identity converged in Australia and the United Kingdom.

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Figure 1. Financial Year Wages and Salary Trajectories for Men, by Sexual Identity

Figure 2. Financial Year Wages and Salary Trajectories for Women, by Sexual Identity



	Hetero-	Gay	Bisexual	Other	Don't know	Preferred not	Missing
	sexual	-				to say	_
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Labour market outcomes at Wave	e 12						
Employment	0.842 (0.365)	0.732 (0.445)	0.788 (0.413)	0.485 (0.509)	0.673 (0.476)	0.663 (0.476)	0.587 (0.501)
Hours Employment	41.86 (11.60)	42.37 (9.992)	39.34 (12.85)	31.54 (16.68)	43.95 (14.12)	39.31 (8.403)	37.76 (9.633)
Hourly earnings	35.00 (19.92)	33.48 (14.65)	30.96 (17.31)	32.33 (16.66)	27.99 (11.20)	25.98 (11.00)	32.32 (18.29)
Any annual wages & salary	0.884 (0.32)	0.829 (0.379)	0.779 (0.419)	0.591 (0.501)	0.818 (0.392)	0.691 (0.465)	0.735 (0.449)
Annual wages & salary Annual	66,918.38	52,627.39	44,210.08	23,077.03	41,162.62	35,487.79	47,532.93
wages & salary > 0	(58,292.45)	(47,042.09)	(38,927.41)	(32,060.15)	(41,060.02)	(39,083.87)	(48,318.27)
Selected controls							
Age	41.51 (12.80)	38.07 (12.01)	43.20 (13.41)	36.02 (14.86)	41.24 (13.85)	41.14 (13.63)	45.28 (13.44)
Education attainment ^b							
Post-grad	0.072 (0.259)	0.069 (0.255)	0.092 (0.292)	0.000 (0.000)	0.143 (0.355)	0.109 (0.314)	0.083 (0.281)
Grad diploma	0.061 (0.240)	0.086 (0.282)	0.040 (0.198)	0.000 (0.000)	0.020 (0.141)	0.005 (0.069)	0.045 (0.210)
Bachelor degree	0.172 (0.377)	0.199 (0.401)	0.109 (0.316)	0.090 (0.292)	0.042 (0.205)	0.066 (0.249)	0.135 (0.348)
Diploma	0.092 (0.290)	0.155 (0.364)	0.039 (0.197)	0.027 (0.165)	0.028 (0.167)	0.079 (0.272)	0.000 (0.000)
Certificate III/IV	0.279 (0.449)	0.210 (0.410)	0.240 (0.432)	0.328 (0.479)	0.211 (0.414)	0.186 (0.391)	0.311 (0.470)
Year 12	0.151 (0.358)	0.195 (0.399)	0.178 (0.387)	0.189 (0.399)	0.230 (0.427)	0.232 (0.425)	0.155 (0.367)
Year 11 or less	0.173 (0.378)	0.086 (0.283)	0.301 (0.464)	0.365 (0.491)	0.327 (0.476)	0.324 (0.470)	0.272 (0.452)
Attending school/post-school	0.082 (0.275)	0.140 (0.349)	0.074 (0.265)	0.090 (0.291)	0.015 (0.123)	0.056 (0.232)	0.070 (0.260)
English proficiency							
Native speakers	0.831 (0.374)	0.893 (0.311)	0.862 (0.349)	0.773 (0.427)	0.589 (0.499)	0.612 (0.490)	0.688 (0.471)
Very well or Well	0.155 (0.362)	0.095 (0.295)	0.138 (0.349)	0.166 (0.378)	0.389 (0.495)	0.356 (0.481)	0.279 (0.456)
Not well/Not at all	0.014 (0.116)	0.012 (0.110)	0.000 (0.000)	0.061 (0.245)	0.021 (0.146)	0.032 (0.177)	0.033 (0.182)
Cognitive Ability ^c							
BDS Score	5.045 (1.443)	5.373 (1.47)	5.071 (1.409)	4.847 (1.74)	4.176 (1.425)	4.242 (1.446)	4.676 (1.654)
SDM Score	13.38 (5.464)	15.18 (5.637)	13.18 (5.600)	11.06 (7.375)	11.12 (7.262)	8.485 (5.746)	11.51 (6.003)
NART25 Score	50.18 (10.92)	52.25(10.93)	47.63 (10.22)	43.76 (17.34)	44.55 (12.03)	43.35 (12.17)	44.53 (12.95)

Table 1A. Labour Market Outcomes and Background Characteristics for Men, by Sexual Identity

^b Respondents are assigned to education categories based on both their highest year of completed schooling and any post-school qualifications they have completed, using the decision table provided in ABS (2002, p. 39). The categories are as per the Australian Standard Classification of Education. ^c The acronyms for cognitive ability scores refer to Backwards digit span (BDS) score, Symbol digits modalities (SDM) score, and National Adult Reading Test 25-item version (NART-25) score. Details about these tests and their administration within the HILDA Survey can be found in Wooden (2013).

	Hetero-	Gay	Bisexual	Other	Don't know	Preferred not	Missing
	sexual					to say	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Number of siblings	2.615 (2.015)	2.347 (1.686)	2.809 (1.688)	3.022 (3.421)	4.226 (3.517)	3.454 (2.524)	3.585 (2.128)
Oldest child	0.373 (0.484)	0.347 (0.479)	0.235 (0.429)	0.326 (0.478)	0.287 (0.459)	0.228 (0.422)	0.302 (0.467)
Father's schooling							
Secondary school or less	0.573 (0.495)	0.511 (0.503)	0.647 (0.485)	0.621 (0.496)	0.604 (0.493)	0.666 (0.481)	0.575 (0.505)
Year 11 or 12	0.427 (0.495)	0.400 (0.503)	0.353 (0.485)	0.379 (0.496)	0.396 (0.493)	0.334 (0.481)	0.425 (0.505)
Father completed a qualification	0.563 (0.496)	0.549 (0.501)	0.681 (0.472)	0.483 (0.511)	0.595 (0.501)	0.549 (0.501)	0.685 (0.475)
Mother's schooling							
Secondary school or less	0.544 (0.498)	0.678 (0.470)	0.579 (0.500)	0.464 (0.509)	0.590 (0.501)	0.641 (0.483)	0.503 (0.510)
Year 11 or 12	0.456 (0.498)	0.322 (0.470)	0.421 (0.500)	0.536 (0.509)	0.409 (0.501)	0.359 (0.483)	0.497 (0.510)
Mother completed qualification	0.370 (0.483)	0.39 (0.491)	0.437 (0.502)	0.232 (0.431)	0.254 (0.443)	0.344 (0.478)	0.427 (0.504)
Father paid employ at age 14	0.915 (0.279)	0.911 (0.286)	0.857 (0.354)	0.899 (0.307)	0.946 (0.230)	0.901 (0.300)	0.949 (0.223)
Mother paid employ at age 14	0.573 (0.495)	0.615 (0.49)	0.749 (0.439)	0.462 (0.508)	0.369 (0.490)	0.321 (0.470)	0.484 (0.508)
Parents were married at age 14	0.822 (0.383)	0.766 (0.426)	0.675 (0.475)	0.625 (0.494)	0.824 (0.386)	0.830 (0.378)	0.714 (0.460)
Weight (kg)	87.10 (17.31)	82.08 (15.81)	83.39 (22.54)	86.64 (17.25)	84.78 (23.13)	80.03 (17.66)	75.94 (14.08)
Height (cm)	177.9 (7.833)	178.3 (6.997)	175.7 (8.545)	178.1 (7.14)	176.1 (8.621)	171.4(12.217)	172.9 (9.946)
Extroversion	4.254 (1.010)	4.627 (1.022)	4.345 (1.358)	4.369 (0.863)	4.047 (0.837)	4.199 (1.054)	4.280 (0.942)
Agreeableness	5.087 (0.91)	5.275 (0.824)	5.114 (0.966)	4.888 (1.218)	4.695 (0.981)	5.207 (1.128)	4.781 (1.549)
Conscientiousness	4.971 (0.966)	5.018 (1.188)	4.936 (1.141)	4.492 (0.845)	4.597 (1.185)	4.928 (0.900)	4.768 (1.069)
Emotional stability	5.168 (1.005)	4.861 (1.016)	5.17 (1.112)	4.907 (1.319)	4.628 (1.407)	5.040 (1.033)	5.389 (0.810)
Openness to experience	4.220 (1.029)	4.622 (0.807)	4.474 (1.229)	4.960 (1.557)	4.344 (1.174)	4.265 (1.158)	3.897 (1.072)
Religious attendance							
About once a year or less	0.776 (0.417)	0.816 (0.392)	0.920 (0.276)	0.952 (0.221)	0.544 (0.507)	0.744 (0.441)	0.848 (0.371)
Several times a year	0.139 (0.346)	0.134 (0.392)	0.080 (0.276)	0.048 (0.221)	0.278 (0.456)	0.112 (0.318)	0.081 (0.282)
At least once a week	0.086 (0.280)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.177 (0.389)	0.000 (0.000)	0.000 (0.000)
SF36 physical functioning	87.59 (20.98)	89.19 (18.53)	84.84 (24.13)	69.05 (30.49)	77.44 (25.94)	73.04 (31.52)	85.21 (21.68)
Disability: None	0.798 (0.401)	0.852 (0.357)	0.679 (0.472)	0.674 (0.478)	0.710 (0.460)	0.63 (0.485)	0.641 (0.488)
Disability: Mild or Moderate	0.191 (0.393)	0.131 (0.339)	0.301 (0.464)	0.294 (0.464)	0.252 (0.440)	0.301 (0.461)	0.214 (0.144)
Disability: Severe	0.010 (0.102)	0.017 (0.130)	0.02 (0.140)	0.032 (0.18)	0.038 (0.195)	0.069 (0.254)	0.144 (0.357)
Current smoker	0.229 (0.420)	0.302 (0.462)	0.453 (0.504)	0.299 (0.467)	0.121 (0.331)	0.288 (0.455)	0.482 (0.508)
Drink 4+ days/week	0.153 (0.360)	0.114 (0.320)	0.263 (0.445)	0.040 (0.199)	0.068 (0.256)	0.089 (0.287)	0.151 (0.364)
Mental health: MHI-5	75.53 (16.91)	71.72 (17.35)	69.84 (17.55)	65.30 (27.16)	69.62 (20.19)	68.36 (18.34)	73.30 (23.75)
Ν	4,387	83	43	27	35	89	31

Notes: All means are weighted and generated from wave 12 of the HILDA Survey data. Standard deviations appear in parentheses.

(7)
476 (0.504)
2.98 (11.49)
8.49 (7.914)
558 (0.501)
19,986.16
24,327.60)
1.61 (13.10)
176 (0.384)
077 (0.269)
144 (0.354)
035 (0.185)
252 (0.438)
114 (0.321)
202 (0.405)
129 (0.338)
485 (0.504)
472 (0.504)
043 (0.204)
610 (1.308)
557 (4.578)
5.32 (9.064)

Table 1B. Labour Market Outcomes and Background Characteristics for Women, by Sexual Identity

^b Respondents are assigned to education categories based on both their highest year of completed schooling and any post-school qualifications they have completed, using the decision table provided in ABS (2002, p. 39). The categories are as per the Australian Standard Classification of Education.

^c The acronyms for cognitive ability scores refer to Backwards digit span (BDS) score, Symbol digits modalities (SDM) score, and National Adult Reading Test

25-item version (NART-25) score. Details about these tests and their administration within the HILDA Survey can be found in Wooden (2013).

	Hetero-	Lesbian	Bisexual	Other	Don't know	Preferred not	Missing
	sexual					to say	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Number of siblings	2.695 (2.006)	2.398 (1.949)	2.293 (1.900)	3.358 (2.211)	4.42 (3.022)	3.934 (2.909)	3.031 (1.845)
Oldest child	0.362 (0.481)	0.321 (0.470)	0.449 (0.500)	0.213 (0.414)	0.235 (0.429)	0.246 (0.433)	0.463 (0.503)
Father's schooling							
Secondary school or less	0.589 (0.492)	0.480 (0.503)	0.514 (0.502)	0.554 (0.504)	0.638 (0.488)	0.530 (0.502)	0.466 (0.504)
Year 11 or 12	0.411 (0.492)	0.520 (0.503)	0.486 (0.502)	0.446 (0.504)	0.362 (0.488)	0.470 (0.502)	0.534 (0.504)
Father completed qualification	0.564 (0.496)	0.621 (0.488)	0.667 (0.474)	0.416 (0.500)	0.498 (0.507)	0.433 (0.498)	0.623 (0.490)
Mother's schooling							
Secondary school or less	0.571 (0.495)	0.551 (0.500)	0.411 (0.494)	0.631 (0.489)	0.618 (0.492)	0.791 (0.409)	0.487 (0.505)
Year 11 or 12	0.629 (0.495)	0.449 (0.500)	0.589 (0.494)	0.369 (0.489)	0.382 (0.492)	0.209 (0.409)	0.513 (0.505)
Mother completed qualification	0.390 (0.488)	0.395 (0.492)	0.607 (0.491)	0.292 (0.461)	0.238 (0.431)	0.196 (0.399)	0.309 (0.466)
Father paid employ at age 14	0.910 (0.286)	0.939 (0.241)	0.833 (0.375)	0.946 (0.229)	0.862 (0.35)	0.878 (0.329)	0.885 (0.322)
Mother paid employ at age 14	0.581 (0.493)	0.574 (0.498)	0.597 (0.493)	0.389 (0.494)	0.462 (0.505)	0.325 (0.47)	0.507 (0.504)
Parents were married at age 14	0.827 (0.379)	0.763 (0.428)	0.673 (0.471)	0.867 (0.344)	0.814 (0.394)	0.869 (0.338)	0.901 (0.301)
Weight (kg)	71.73 (17.85)	73.04 (14.57)	77.66 (25.41)	71.50 (16.98)	68.01 (15.34)	67.12 (18.14)	69.78 (20.12)
Height (cm)	164.1 (7.873)	164.1 (7.457)	165.5 (7.677)	165.4 (7.632)	159.9 (7.759)	162.2 (8.382)	161.4 (7.779)
Extroversion	4.529 (1.119)	4.092 (1.142)	4.580 (1.241)	4.235 (1.007)	4.262 (0.999)	4.278 (0.979)	4.734 (0.821)
Agreeableness	5.600 (0.816)	5.382 (0.818)	5.549 (1.146)	5.756 (0.805)	5.184 (1.208)	5.267 (1.094)	5.524 (1.113)
Conscientiousness	5.176 (1.02)	4.983 (1.212)	4.816 (1.224)	5.463 (1.018)	4.525 (1.226)	4.817 (0.912)	4.857 (1.071)
Emotional stability	5.184 (1.042)	5.049 (0.962)	4.964 (0.989)	5.060 (1.002)	5.050 (1.106)	4.857 (1.153)	4.967 (1.121)
Openness to experience	4.142 (1.046)	4.321 (1.130)	4.512 (1.121)	4.105 (1.302)	3.697 (1.224)	4.017 (1.089)	4.094 (1.036)
Religious attendance							
About once a year or less	0.718 (0.450)	0.920 (0.274)	0.859 (0.351)	0.661 (0.482)	0.561 (0.505)	0.556 (0.500)	0.419 (0.503)
Several times a year	0.176 (0.381)	0.070 (0.257)	0.108 (0.313)	0.140 (0.353)	0.294 (0.464)	0.279 (0.451)	0.416 (0.502)
At least once a week	0.106 (0.307)	0.010 (0.100)	0.033 (0.180)	0.199 (0.406)	0.145 (0.358)	0.166 (0.374)	0.166 (0.379)
SF36 physical functioning	85.10 (21.35)	83.85 (25.15)	89.08 (15.71)	71.14 (23.59)	74.05 (24.79)	78.24 (23.69)	73.52 (30.56)
Disability: None	0.782 (0.413)	0.715 (0.454)	0.681 (0.468)	0.512 (0.506)	0.581 (0.499)	0.660 (0.476)	0.647 (0.482)
Disability: Mild or Moderate	0.207 (0.405)	0.256 (0.489)	0.319 (0.468)	0.458 (0.029)	0.382 (0.037)	0.291 (0.456)	0.331 (0.474)
Disability: Severe disability	0.011 (0.103)	0.029 (0.169)	0.000 (0.000)	0.029 (0.170)	0.037 (0.192)	0.048 (0.216)	0.022 (0.147)
Current smoker	0.171 (0.377)	0.204 (0.405)	0.397 (0.492)	0.231 (0.427)	0.281 (0.455)	0.186 (0.390)	0.148 (0.359)
Drink 4+ days/week	0.088 (0.284)	0.117 (0.323)	0.017 (0.132)	0.073 (0.263)	0.051 (0.222)	0.009 (0.092)	0.071 (0.260)
Mental health: MHI-5	73.56 (17.23)	68.29 (16.66)	64.99 (19.03)	64.65 (22.66)	58.68 (21.87)	66.88 (17.15)	69.26 (21.43)
Ν	5,148	81	107	42	43	124	58

Notes: All means are weighted and generated from wave 12 of the HILDA Survey data. Standard deviations appear in parentheses.

	(1)	(2)	(3)	(4)	(5)				
		Ра	anel I: Males	5					
Gay	-0.129*	-0.133**	-0.136**	-0.141**	-0.122**				
	(0.068)	(0.066)	(0.065)	(0.063)	(0.057)				
Bisexual	-0.035	-0.019	-0.010	-0.000	0.046				
	(0.061)	(0.063)	(0.064)	(0.066)	(0.059)				
Other	-0.348***	-0.290**	-0.286**	-0.249*	-0.221*				
	(0.120)	(0.123)	(0.128)	(0.131)	(0.124)				
Don't know	-0.146*	-0.103	-0.099	-0.070	-0.077				
	(0.087)	(0.090)	(0.088)	(0.089)	(0.090)				
Preferred not to say	-0.168***	-0.125**	-0.111*	-0.090	-0.024				
	(0.062)	(0.060)	(0.058)	(0.057)	(0.059)				
N	4,695	4,695	4,695	4,695	4,695				
	Panel II: Females								
Lesbian	0.026	0.007	0.011	0.019	0.041				
	(0.051)	(0.044)	(0.045)	(0.044)	(0.043)				
Bisexual	-0.128**	-0.115**	-0.105**	-0.098**	-0.092*				
	(0.054)	(0.049)	(0.049)	(0.049)	(0.049)				
Other	-0.216**	-0.185**	-0.176**	-0.174**	-0.101				
	(0.090)	(0.077)	(0.076)	(0.078)	(0.076)				
Don't know	-0.320***	-0.168*	-0.148	-0.118	-0.080				
	(0.087)	(0.094)	(0.098)	(0.093)	(0.079)				
Preferred not to say	-0.220***	-0.105*	-0.094*	-0.087	-0.024				
	(0.067)	(0.057)	(0.057)	(0.057)	(0.048)				
Ν	5,603	5,603	5,603	5,603	5,603				
Basic demographics?	Yes	Yes	Yes	Yes	Yes				
Education & cognition?	No	Yes	Yes	Yes	Yes				
Family background?	No	No	Yes	Yes	Yes				
Appearance, personality & religion?	No	No	No	Yes	Yes				
Risky health behaviours & health?	No	No	No	No	Yes				

Table 2. Estimates of the Relationship between Sexual Identity and Employment

***Significant at 1% level **Significant at 5% level *Significant at 10% level

	(1)	(2)	(3)	(4)	(5)	(6)		
			Panel I	: Males				
Gay	0.011	0.020	0.028	0.022	0.022	0.008		
	(0.031)	(0.031)	(0.031)	(0.032)	(0.033)	(0.032)		
Bisexual	-0.100	-0.096	-0.084	-0.082	-0.066	-0.060		
	(0.071)	(0.073)	(0.073)	(0.074)	(0.068)	(0.061)		
Other	-0.346*	-0.341*	-0.335**	-0.319**	-0.321**	-0.243*		
	(0.185)	(0.191)	(0.168)	(0.159)	(0.154)	(0.131)		
Don't know	0.074	0.092	0.086	0.116*	0.126*	0.106		
	(0.062)	(0.064)	(0.065)	(0.069)	(0.072)	(0.069)		
Preferred not to say	-0.020	-0.008	-0.003	-0.001	0.020	0.014		
	(0.046)	(0.043)	(0.040)	(0.038)	(0.042)	(0.040)		
N	3,726	3,726	3,726	3,726	3,726	3,726		
	Panel II: Females							
Lesbian	0.230***	0.213***	0.225***	0.222***	0.215***	0.171***		
	(0.041)	(0.042)	(0.041)	(0.042)	(0.043)	(0.043)		
Bisexual	0.078	0.091	0.092	0.080	0.070	0.082		
	(0.065)	(0.068)	(0.069)	(0.070)	(0.066)	(0.062)		
Other	0.065	0.071	0.070	0.093	0.113	0.210*		
	(0.096)	(0.096)	(0.104)	(0.094)	(0.104)	(0.110)		
Don't know	-0.141	-0.070	-0.095	-0.074	-0.070	-0.094		
	(0.124)	(0.108)	(0.106)	(0.109)	(0.108)	(0.109)		
Preferred not to say	0.078	0.119**	0.094*	0.114**	0.130**	0.170***		
	(0.055)	(0.053)	(0.050)	(0.052)	(0.052)	(0.051)		
Ν	3,747	3,747	3,747	3,747	3,747	3,747		
Basic demographics?	Yes	Yes	Yes	Yes	Yes	Yes		
Education & cognition?	No	Yes	Yes	Yes	Yes	Yes		
Family background?	No	No	Yes	Yes	Yes	Yes		
Appearance, personality, religion?	No	No	No	Yes	Yes	Yes		
Risky health behaviours & health?	No	No	No	No	Yes	Yes		
Occupation & tenure?	No	No	No	No	No	Yes		

Table 3. Estimates of the Relationship between Sexual Identity and Log(Hours)

***Significant at 1% level **Significant at 5% level *Significant at 10% level

	(1)	(2)	(3)	(4)	(5)	(6)
			Panel I	: Males		
Gay	-0.059	-0.104*	-0.100*	-0.110**	-0.098*	-0.121**
-	(0.058)	(0.056)	(0.055)	(0.053)	(0.053)	(0.053)
Bisexual	-0.096	-0.053	-0.055	-0.053	-0.029	-0.014
	(0.077)	(0.071)	(0.073)	(0.070)	(0.067)	(0.066)
Other	-0.025	0.088	0.075	0.077	0.108	0.124
	(0.178)	(0.168)	(0.168)	(0.151)	(0.159)	(0.167)
Don't know	-0.155	-0.081	-0.092	-0.109	-0.107	-0.116
	(0.106)	(0.096)	(0.098)	(0.096)	(0.097)	(0.095)
Preferred not to say	-0.257***	-0.132**	-0.123**	-0.117*	-0.100	-0.103*
	(0.059)	(0.061)	(0.062)	(0.063)	(0.063)	(0.063)
N	3,726	3,726	3,726	3,726	3,726	3,726
			Panel II:	Females		
Lesbian	0.102*	0.044	0.033	0.038	0.037	0.018
	(0.056)	(0.054)	(0.054)	(0.055)	(0.055)	(0.047)
Bisexual	-0.051	-0.053	-0.051	-0.043	-0.032	-0.017
	(0.059)	(0.051)	(0.051)	(0.050)	(0.049)	(0.047)
Other	-0.150**	-0.123*	-0.129*	-0.134*	-0.116	-0.003
	(0.069)	(0.067)	(0.067)	(0.072)	(0.075)	(0.082)
Don't know	-0.252*	-0.093	-0.137	-0.113	-0.109	-0.094
	(0.136)	(0.094)	(0.106)	(0.104)	(0.105)	(0.099)
Preferred not to say	-0.254***	-0.166***	-0.167***	-0.165***	-0.164***	-0.132***
	(0.050)	(0.047)	(0.047)	(0.047)	(0.047)	(0.042)
Ν	3,747	3,747	3,747	3,747	3,747	3,747
Basic demographics?	Yes	Yes	Yes	Yes	Yes	Yes
Education & cognition?	No	Yes	Yes	Yes	Yes	Yes
Family background?	No	No	Yes	Yes	Yes	Yes
Appearance, personality, religion?	No	No	No	Yes	Yes	Yes
Risky health behaviours & health?	No	No	No	No	Yes	Yes
Occupation & tenure?	No	No	No	No	No	Yes

Table 4. Estimates of the Relationship between Sexual Identity and Log(Hourly Wages)

	(1)	(2)	(3)	(4)	(5)			
		1	Panel I: Male	S				
Gay	-0.076	-0.085	-0.090	-0.093	-0.070			
	(0.067)	(0.063)	(0.062)	(0.060)	(0.048)			
Bisexual	-0.085	-0.070	-0.061	-0.053	-0.017			
	(0.065)	(0.068)	(0.070)	(0.071)	(0.067)			
Other	-0.298**	-0.243*	-0.238*	-0.204	-0.179			
	(0.125)	(0.132)	(0.135)	(0.134)	(0.126)			
Don't know	-0.053	-0.009	-0.004	0.019	0.027			
	(0.060)	(0.062)	(0.059)	(0.062)	(0.062)			
Preferred not to say	-0.186***	-0.138**	-0.127**	-0.110*	-0.042			
	(0.060)	(0.059)	(0.058)	(0.056)	(0.055)			
N	4,695	4,695	4,695	4,695	4,695			
	Panel II: Females							
Lesbian	0.009	-0.013	-0.008	0.007	0.022			
	(0.045)	(0.039)	(0.039)	(0.040)	(0.036)			
Bisexual	-0.119**	-0.102**	-0.093*	-0.086*	-0.081*			
	(0.053)	(0.047)	(0.049)	(0.050)	(0.049)			
Other	-0.247***	-0.226***	-0.221***	-0.219***	-0.155**			
	(0.088)	(0.075)	(0.075)	(0.077)	(0.074)			
Don't know	-0.348***	-0.198**	-0.163	-0.128	-0.095			
	(0.088)	(0.099)	(0.101)	(0.097)	(0.084)			
Preferred not to say	-0.206***	-0.089	-0.075	-0.066	0.004			
	(0.076)	(0.063)	(0.064)	(0.064)	(0.044)			
Ν	5,603	5,603	5,603	5,603	5,603			
Basic demographics?	Yes	Yes	Yes	Yes	Yes			
Education & cognition?	No	Yes	Yes	Yes	Yes			
Family background?	No	No	Yes	Yes	Yes			
Appearance, personality & religion?	No	No	No	Yes	Yes			
Risky health behaviours & health?	No	No	No	No	Yes			
Occupation & tenure?	No	No	No	No	No			

Table 5A. Estimates of the Relationship between Sexual Identity and Any Financial Year Earnings

	(1)	(2)	(3)	(4)	(5)	(6)
			Panel I:	Males		
Gay	-0.231*	-0.268**	-0.252*	-0.266**	-0.238*	-0.210**
	(0.136)	(0.134)	(0.130)	(0.128)	(0.125)	(0.100)
Bisexual	-0.276**	-0.197	-0.176	-0.147	-0.068	-0.120
	(0.128)	(0.127)	(0.131)	(0.128)	(0.121)	(0.121)
Other	-0.774***	-0.618**	-0.626**	-0.581**	-0.553**	-0.329
	(0.280)	(0.279)	(0.279)	(0.278)	(0.265)	(0.232)
Don't know	-0.495**	-0.355	-0.394*	-0.346	-0.307	-0.218
	(0.214)	(0.221)	(0.222)	(0.220)	(0.238)	(0.225)
Preferred not to say	-0.321***	-0.147	-0.123	-0.106	-0.028	-0.033
	(0.100)	(0.103)	(0.100)	(0.099)	(0.110)	(0.111)
	4,105	4,105	4,105	4,105	4,105	4,105
			Panel II:	Females		
Lesbian	0.463***	0.368***	0.384***	0.393***	0.381***	0.283***
	(0.082)	(0.074)	(0.077)	(0.077)	(0.080)	(0.067)
Bisexual	-0.109	-0.115	-0.079	-0.059	-0.064	-0.024
	(0.138)	(0.131)	(0.128)	(0.128)	(0.123)	(0.121)
Other	-0.333	-0.309	-0.335	-0.315	-0.258	-0.055
	(0.259)	(0.259)	(0.261)	(0.261)	(0.279)	(0.277)
Don't know	-0.790	-0.443	-0.426	-0.352	-0.362	-0.368
	(0.492)	(0.413)	(0.382)	(0.361)	(0.378)	(0.338)
Preferred not to say	-0.215**	-0.044	-0.062	-0.040	-0.026	0.100
·	(0.108)	(0.105)	(0.107)	(0.107)	(0.107)	(0.104)
	4,243	4,243	4,243	4,243	4,243	4,243
Basic demographics?	Yes	Yes	Yes	Yes	Yes	Yes
Education & cognition?	No	Yes	Yes	Yes	Yes	Yes
Family background?	No	No	Yes	Yes	Yes	Yes
Appearance, personality, religion?	No	No	No	Yes	Yes	Yes
Risky health behaviours & health?	No	No	No	No	Yes	Yes
Occupation & tenure?	No	No	No	No	No	Yes

Table 5B. Estimates of the Relationship between Sexual Identity and Log (Financial Year Earnings)

		Employment			Но	urs	
	Any Non-	2+ Non-	3+ Non-	2-Year	5-Year	7-Year	10-Year
	Working Spells	Working Spells	Working Spells	Growth	Growth	Growth	Growth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Panel 1	I: Males			
Gay	0.126**	0.161***	0.080*	0.048	-0.148	-0.041	0.312
	(0.060)	(0.058)	(0.048)	(0.049)	(0.171)	(0.060)	(0.370)
Bisexual	-0.006	0.078	0.024	-0.085	-0.062	-0.139	0.077
	(0.069)	(0.067)	(0.064)	(0.067)	(0.157)	(0.096)	(0.145)
Other	0.148	0.145	0.213*	0.185	-0.093	0.112	0.312*
	(0.113)	(0.118)	(0.110)	(0.181)	(0.147)	(0.139)	(0.169)
Don't know	0.242**	0.133	0.102	0.028	-0.059	0.300***	1.323
	(0.113)	(0.086)	(0.069)	(0.047)	(0.219)	(0.107)	(0.979)
Preferred not to say	0.026	0.012	0.028	0.008	-0.105	-0.006	0.194
	(0.052)	(0.051)	(0.047)	(0.042)	(0.115)	(0.069)	(0.132)
Ν	4,695	4,695	4,695	2,299	1,929	1,722	1,433
Mean Dep Var	0.291	0.174	0.107	0.032	0.089	0.038	0.068
			Panel II.	: Females			
Lesbian	-0.054	-0.044	-0.051	0.048	0.286	0.011	0.004
	(0.059)	(0.050)	(0.044)	(0.125)	(0.463)	(0.182)	(0.329)
Bisexual	0.057	0.071	0.015	-0.023	-0.427***	-0.060	-0.224
	(0.053)	(0.049)	(0.041)	(0.109)	(0.125)	(0.198)	(0.324)
Other	0.159**	0.141*	0.055	-0.038	-0.010	-0.212	-0.175
	(0.072)	(0.083)	(0.082)	(0.145)	(0.232)	(0.159)	(0.319)
Don't know	0.127**	0.203***	0.147**	-0.049	0.099	0.063	-0.390*
	(0.058)	(0.064)	(0.073)	(0.099)	(0.457)	(0.205)	(0.222)
Preferred not to say	0.043	0.019	0.036	0.101	0.016	0.148	0.200
	(0.049)	(0.046)	(0.041)	(0.062)	(0.137)	(0.200)	(0.247)
Ν	5,603	5,603	5,603	2,201	1,781	1,601	1,289
Mean Dep Var	0.521	0.361	0.237	0.101	0.205	0.212	0.306

Table 6. Estimates of the Relationship between Sexual Identity and Labour Supply Histories

	All ind	ividuals ir	Wave 12 s	ample	Individuals with positive earnings			
						in all v	waves	
	2-Year	5-Year	7-Year	10-Year	2-Year	5-Year	7-Year	10-Year
	Growth	Growth	Growth	Growth	Growth	Growth	Growth	Growth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Panel I	• Males			
Gay	0.032	-0.032	-0.060	-0 290**	-0.125*	-0.042	-0 199**	-0 161
Cuj	(0.129)	(0.116)	(0.158)	(0.114)	(0.072)	(0.092)	(0.097)	(0.118)
Bisexual	-0.273***	-0.185	0.024	-0.210	-0.311***	-0.159	-0.183	-0.285*
2100110001	(0.093)	(0.114)	(0.231)	(0.236)	(0.085)	(0.105)	(0.137)	(0.164)
Other	-0.094	-0.185	-0.216	-0.517	-0.033	0.140	0.088	-0.075
	(0.086)	(0.271)	(0.273)	(0.426)	(0.076)	(0.110)	(0.119)	(0.135)
Don't know	-0.104	-0.088	-0.005	0.340*	-0.116	0.120	0.175	0.407*
	(0.075)	(0.097)	(0.127)	(0.189)	(0.092)	(0.102)	(0.107)	(0.237)
Preferred not to say	-0.208**	0.064	0.342	0.007	-0.006	-0.039	-0.060	0.019
2	(0.085)	(0.183)	(0.271)	(0.210)	(0.077)	(0.099)	(0.124)	(0.175)
Ν	2,600	2,182	1,952	1,641	995	995	995	995
Mean Dep Var	0.196	0.290	0.390	0.520	0.079	0.118	0.208	0.413
T 1'	0.122	0.247**	0.054	Panel II:	<u>Females</u>	0.070	0.715	0.001
Lesbian	0.133	0.34/**	-0.054	0.046	-0.104	0.078	0.715	-0.021
D'	(0.144)	(0.151)	(0.246)	(0.194)	(0.104)	(0.134)	(0.458)	(0.263)
Bisexual	0.194	-0.095	-0.273	(0.026)	-0.119	-0.120	-0.299*	-0.03/
Other	(0.212)	(0.190)	(0.224)	(0.440)	(0.122)	(0.1/0)	(0.157)	(0.255)
Other	-0.125	(0.547)	-0.408	-0.300	(0.166)	1.972^{++++}	(0.187)	-0.344
Don't Imorry	(0.113)	(0.304)	(0.200)	(0.239)	(0.100)	(0.712)	(0.187)	(0.303)
Don't know	(0.041)	-0.091	-0.000^{***}	-0.275	-0.157	-0.309^{*}	-0.402^{*}	-0.305
Duefermed wette eer	(0.232)	(0.211)	(0.181)	(0.170)	(0.123)	(0.101)	(0.243)	(0.240)
Preferred not to say	-0.019	-0.0/8	-0.109	0.337	-0.229^{**}	0.207	(0.150)	0.043^{*}
N	(0.132)	(0.190)	(0.142)	(0.307)	(0.095)	(0.309)	(0.150)	(0.382)
IN Maar Da V	2,043	2,10/	1,943	1,580	909	909	909	909
Mean Dep Var	0.215	0.384	0.554	0.643	0.103	0.176	0.310	0.509

Table 7. Estimates of the Relationship between Sexual Identity and Financial Year Wage and Salary Growth

***Significant at 1% level **Significant at 5% level *Significant at 10% level

	Earnings	2-Year	5-Year	7-Year	10-Year
	Level	Earnings	Earnings	Earnings	Earnings
		Growth	Growth	Growth	Growth
	(1)	(2)	(3)	(4)	(5)
		P	anel I· Males		
Hotorogovugl*No Bortnor	0 199***	0.092**	0.060*	0.054	0.007*
Heterosexual No Farther	(0.038)	(0.035)	(0.009)	(0.034)	(0.054)
Gay*No Partner	(0.038)	(0.030)	(0.039)	(0.049)	-0 323**
Gay No Farmer	(0.105)	(0.185)	(0.207)	(0.266)	(0.135)
Gay*Sama Say Partner	0.305**	(0.183)	0.015	(0.200)	0.155)
Gay Same-Sex Farmer	(0.161)	(0.181)	(0.008)	(0.162)	(0.160)
Bisavual*Opposita Say Partner	(0.101)	0.101)	0.168	(0.102)	(0.109)
Disexual opposite-sex l'artifer	(0.114)	(0.090)	(0.141)	(0.193)	(0.341)
Bisevual*No Partner	-0.306	(0.000)	-0 154	0.196	-0 747***
Disexual 1001 artifer	(0.222)	(0.156)	(0.176)	(0.385)	(0.181)
Ν	4 105	2 600	2 182	1 952	1 641
Mean Dep Var	10.934	0.196	0.290	0.390	0.520
L					
		Par	nel II: Femalo	es	
Heterosexual*No Partner	0.040	0.077**	0.056	0.099*	0.051
	(0.033)	(0.032)	(0.044)	(0.055)	(0.062)
Lesbian*No Partner	0.426***	-0.205**	0.412*	-0.417**	0.083
	(0.111)	(0.082)	(0.245)	(0.188)	(0.321)
Lesbian*Same-Sex Partner	0.219***	0.364*	0.329*	0.173	0.053
	(0.076)	(0.205)	(0.185)	(0.335)	(0.239)
Bisexual*Opposite-Sex Partner	-0.160	-0.071	-0.108	-0.052	-0.203
	(0.187)	(0.156)	(0.422)	(0.346)	(0.481)
Bisexual*No Partner	0.050	0.539	-0.038	-0.319	0.150
	(0.169)	(0.357)	(0.261)	(0.317)	(0.571)
Bisexual*Same-Sex Partner	0.412	-0.119	-0.188	-0.271	-0.369
	(0.359)	(0.166)	(0.150)	(0.216)	(0.238)
Ν	4,243	2,643	2,167	1,943	1,586
Mean Dep Var	10 406	0.215	0 384	0 554	0.643

Table 8. Estimated Effect of Interaction of Same-Sex Partner Living in Household and Sexual Identity on Earnings Levels and Earnings Growth

***Significant at 1% level **Significant at 5% level *Significant at 10% level

	Employment	Ln(Hours)	Ln(Wage)	Ln(Earning)
	(1)	(2)	(3)	(4)
		Panel I	: Males	
Same-Sex Partner	-0.030	-0.037	-0.021	-0.116
	(0.051)	(0.037)	(0.045)	(0.087)
Opposite-Sex Partner	0.010	0.028***	0.036***	0.104***
	(0.008)	(0.008)	(0.010)	(0.017)
Ν	33,058	25,188	25,188	28,056
χ^2 of $\alpha_1 = \alpha_2$	0.594	2.988*	1.572	6.263**
		Panel II:	Females	
Same-Sex Partner	0.046	0.009	0.084*	0.173**
	(0.032)	(0.047)	(0.047)	(0.084)
Opposite-Sex Partner	-0.040***	-0.022	0.043***	0.035
	(0.009)	(0.014)	(0.009)	(0.020)
Ν	40,705	23,893	23,893	27,986
χ^2 of $\alpha_1 = \alpha_2$	7.001***	0.405	0.736	2.599

Table 9. Individual Fixed Effects Estimates of Effect of Partner

***Significant at 1% level **Significant at 5% level *Significant at 10% level

Notes: Estimates are generated from unweighted individual fixed effect regressions using data from waves 1 to 12 of the HILDA Survey. All models include controls for age, remoteness, educational attainment, weight, height, religiosity, health conditions, smoking status, frequent drinking status, and mental health (measured by the MHI-5 score). Robust standard errors are reported.

	Employ	Hours	Annual	2-Year	5-Year	7-Year	10-Year
	-ment		Earnings	Earnings	Earnings	Earnings	Earnings
				Growth	Growth	Growth	Growth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Panel	I: Males			
Heterosexual	4,387	3,521	3,871	2,463	2,071	1,861	1,563
Gay	83	65	73	43	37	26	23
Bisexual	43	33	34	21	18	15	12
Other	27	15	17	7	4	4	3
Don't know	35	21	26	19	12	13	11
Preferred not to say	89	53	61	36	29	24	22
			Panel I	I: Females			
Heterosexual	5,148	3,507	3,965	2,482	2,037	1,837	1,508
Lesbian	81	62	66	49	41	25	26
Bisexual	107	58	70	32	23	24	11
Other	42	17	19	12	11	9	5
Don't know	43	17	21	12	11	7	5
Preferred not to say	124	61	72	42	35	31	23

Appendix Table 1A. Number of Respondents, by Sexual Identity, for Various Samples

Notes: Counts generated from various waves of the HILDA Survey.

			Males			Females	
Wave 12	Previously	No	Same sex	Opp. sex	No	Same sex	Opp. sex
Sexual		Partner	Partner	Partner	Partner	Partner	Partner
Identity	Currently						
Heterosexual	No Partner	981	1	324	1253	1^{a}	507
	Same sex Partner	0	6	0	0	0	0
	Opp. sex Partner	736	0	2339	812	1^{a}	2574
Gay/Lesbian	No Partner	36	4^{a}	2	21	8	3 ^b
	Same sex Partner	15	$24^{\rm a}$	0	18	29	2 ^b
	Opp. sex Partner	1	0	1	0	0	0
Bisexual	No Partner	17	0	2	36	0	12
	Same sex Partner	1	0	0	2	3	0
	Opp. sex Partner	2	0	21	19	0	35

Appendix Table 1B. Number of Respondents, by Sexual Identity and Partner/Spouse Transition

Notes: ^a Including one respondent in the category that previously had both same sex and opposite sex partners. ^b Including two respondent in the category that previously had both same sex and opposite sex partners.

		Males			Females			
	Employ	Wages	Annual	Employ	Wages	Annual		
	-ment		Earnings	-ment		Earnings		
	(1)	(2)	(3)	(4)	(5)	(6)		
Ages 25-29	0.107***	0.143***	0.447***	-0.088**	0.091***	0.434***		
A and 20, 24	(0.025)	(0.033)	(0.075)	(0.036)	(0.027)	(0.074)		
Ages 30-34	(0.097^{****})	(0.034)	(0.012^{****})	-0.049	(0.030)	(0.092)		
Ages 35-39	0 119***	0 259***	0 674***	-0.080**	0 196***	0 295***		
11500 00 00	(0.024)	(0.037)	(0.065)	(0.032)	(0.030)	(0.077)		
Ages 40-44	0.101***	0.287***	0.601***	0.018	0.192***	0.360***		
	(0.024)	(0.038)	(0.072)	(0.031)	(0.028)	(0.077)		
Ages 45-49	0.116***	0 311***	0.691***	0.086***	0.185***	0 443***		
11905 +5 +7	(0.026)	(0.040)	(0.069)	(0.031)	(0.031)	(0.077)		
Ages 50-54	0.078***	0 273***	0 706***	0.054*	0 194***	0 454***		
160000	(0.070)	(0.041)	(0.070)	(0.031)	(0.033)	(0.078)		
Ages 55-59	0.044	0 243***	0 548***	-0.012	0 181***	0 384***		
	(0.029)	(0.046)	(0.081)	(0.035)	(0.037)	(0.086)		
Ages 60-64	-0.119***	0.345***	0.527***	-0.177***	0.239***	0.452***		
6	(0.036)	(0.055)	(0.096)	(0.038)	(0.046)	(0.094)		
Indigenous Australian	-0.071*	0.019	0.062	-0.053	0.123***	0.004		
5	(0.037)	(0.049)	(0.083)	(0.042)	(0.045)	(0.099)		
OS born: English language	0.020	0.047*	0.041	-0.053**	0.050**	-0.018		
	(0.018)	(0.028)	(0.057)	(0.026)	(0.023)	(0.065)		
OS born: Other language	0.001	-0.048	-0.078	-0.024	0.032	0.130*		
	(0.026)	(0.036)	(0.054)	(0.034)	(0.034)	(0.067)		
Inner Regional	-0.000	-0.058***	-0.029	-0.055***	-0.047***	-0.106***		
	(0.014)	(0.021)	(0.032)	(0.016)	(0.016)	(0.035)		
Outer Regional	0.012	-0.028	-0.019	-0.055*	-0.007	-0.069		
	(0.019)	(0.034)	(0.051)	(0.029)	(0.025)	(0.052)		
Remote	0.055	0.106	0.290**	-0.030	-0.013	-0.168		
	(0.050)	(0.079)	(0.144)	(0.070)	(0.083)	(0.204)		
Cognition: BDS Score	-0.004	0.016**	0.007	0.007	-0.006	0.005		
	(0.004)	(0.006)	(0.012)	(0.006)	(0.005)	(0.012)		
Cognition: SDM Score	-0.001	0.006***	0.001	0.004*	0.003*	0.011***		
	(0.001)	(0.002)	(0.004)	(0.002)	(0.002)	(0.004)		
Cognition: NART25 Score	0.002***	0.002*	0.004**	0.004***	0.002**	0.006***		
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)		
Attending school/post-school	-0.017	-0.081***	-0.060	0.023	-0.014	0.040		
	(0.020)	(0.026)	(0.054)	(0.023)	(0.021)	(0.047)		
Highest degree: Post-grad	0.073***	0.317***	0.327***	0.123***	0.238***	0.347***		
	(0.025)	(0.043)	(0.066)	(0.047)	(0.039)	(0.076)		
Highest degree: Grad diploma	0.037	0.265***	0.306***	0.114***	0.242***	0.273***		

Appendix Table 2. Estimated Coefficients on Control Variables for Males

	Males			Females			
	Employ	Wages	Annual	Employ	Wages	Annual	
	-ment		Earnings	-ment		Earnings	
	(1)	(2)	(3)	(4)	(5)	(6)	
	(0.030)	(0.048)	(0.068)	(0.029)	(0.034)	(0.066)	
Highest degree: Bachelor Degree	0.038*	0.249***	0.236***	0.137***	0.192***	0.309***	
	(0.023)	(0.033)	(0.055)	(0.025)	(0.027)	(0.065)	
Highest degree: Diploma	0.038	0.176***	0.194***	0.083***	0.081***	0.199***	
	(0.024)	(0.033)	(0.054)	(0.027)	(0.026)	(0.055)	
Highest degree: Certificate III/IV	0.054***	0.096***	0.152***	0.099***	0.078***	0.180***	
	(0.018)	(0.025)	(0.043)	(0.020)	(0.025)	(0.051)	
Highest degree: Year 12	0.005	0.079***	-0.067	0.043*	0.054**	0.112**	
	(0.022)	(0.029)	(0.065)	(0.026)	(0.024)	(0.055)	
English: Very well	-0.018	0.006	-0.007	-0.058	0.016	-0.084	
	(0.029)	(0.044)	(0.057)	(0.036)	(0.033)	(0.086)	
English: Well	-0.014	-0.073	-0.136	-0.099	-0.086*	-0.333**	
	(0.036)	(0.055)	(0.090)	(0.063)	(0.049)	(0.149)	
English: Not well/Not at all	-0.043	-0.085	-0.169	-0.216**	-0.128	-0.308	
	(0.060)	(0.116)	(0.148)	(0.093)	(0.091)	(0.198)	
Father's education: Primary School	-0.108	0.099	-0.100	0.012	-0.075	-0.068	
	(0.078)	(0.132)	(0.181)	(0.098)	(0.071)	(0.168)	
Father's education: Secondary	-0.119	0.097	-0.045	0.033	-0.073	-0.017	
School	(0.076)	(0.131)	(0.179)	(0.098)	(0.073)	(0.169)	
Father's education: Year 11	-0.113	0.039	-0.059	0.035	-0.055	-0.027	
or equivalent	(0.078)	(0.133)	(0.183)	(0.101)	(0.077)	(0.176)	
Father's education: Year 12	-0.108	0.061	-0.099	0.018	-0.073	-0.040	
or equivalent	(0.076)	(0.132)	(0.183)	(0.100)	(0.075)	(0.171)	
Mother's education: Primary	0.021	-0.004	0.143	0.074	0.002	-0.155	
School	(0.063)	(0.119)	(0.156)	(0.087)	(0.103)	(0.214)	
Mother's education:	0.028	0.031	0.162	0.060	0.002	-0.197	
Secondary school	(0.061)	(0.117)	(0.152)	(0.089)	(0.103)	(0.215)	
Mother's education: Year 11	0.065	0.005	0.179	0.074	-0.008	-0.137	
or equivalent	(0.063)	(0.121)	(0.155)	(0.091)	(0.106)	(0.218)	
Mother's education: Year 12	0.051	0.038	0.191	0.073	0.011	-0.148	
or equivalent	(0.062)	(0.118)	(0.153)	(0.090)	(0.105)	(0.216)	
Father completed educational	-0.010	0.044	0.031	-0.022	0.030*	-0.063*	
Qualification	(0.013)	(0.018)**	(0.037)	(0.017)	(0.016)	(0.037)	
Mother completed	-0.018	0.005	-0.035	0.013	-0.044***	-0.016	
educational qualification	(0.014)	(0.019)	(0.034)	(0.018)	(0.016)	(0.036)	
Number of siblings	-0.003	0.001	0.011	-0.005	-0.004	-0.003	
	(0.003)	(0.005)	(0.008)	(0.005)	(0.004)	(0.009)	
Oldest child	-0.014	-0.001	0.013	-0.017	-0.019	0.006	
	(0.012)	(0.017)	(0.033)	(0.016)	(0.014)	(0.034)	
Married parents	0.009	-0.023	0.001	-0.025	0.000	0.068	
	(0.015)	(0.021)	(0.038)	(0.017)	(0.019)	(0.045)	

	Males			Females		
	Employ	Wages	Annual	Employ	Wages	Annual
	-ment		Earnings	-ment		Earnings
	(1)	(2)	(3)	(4)	(5)	(6)
Father employed	0.013	0.054	0.057	0.037	-0.003	-0.062
	(0.025)	(0.028)*	(0.049)	(0.025)	(0.026)	(0.054)
Mother employed	0.008	0.004	-0.019	0.021	-0.003	-0.022
	(0.012)	(0.017)	(0.028)	(0.016)	(0.015)	(0.033)
Weight	0.001	0.000	0.002	0.001	0.000	0.001
	(0.000)**	(0.000)	(0.001)**	(0.000)	(0.000)	(0.001)
Height	0.001	0.002	0.002	0.001	0.003***	-0.001
	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)	(0.002)
Religion: < once a year	0.014	0.073	0.083	0.028	0.040	0.066
	(0.019)	(0.026)***	(0.041)**	(0.023)	(0.027)	(0.047)
Religion: Once a year	-0.003	-0.015	0.010	0.032	0.017	0.028
	(0.026)	(0.034)	(0.055)	(0.024)	(0.027)	(0.056)
Religion: Several times a year	-0.006	0.022	0.131	0.017	0.015	0.007
	(0.026)	(0.034)	(0.047)***	(0.025)	(0.027)	(0.049)
Religion: Once a month	0.029	0.050	-0.194	-0.015	-0.062	-0.113
	(0.043)	(0.055)	(0.197)	(0.052)	(0.041)	(0.114)
Religion: 2-3 times a month	0.026	0.063	-0.285	0.004	-0.001	-0.208*
	(0.047)	(0.083)	(0.124)**	(0.043)	(0.048)	(0.110)
Religion: About once a week	-0.042	-0.097	-0.025	-0.020	-0.007	-0.089
	(0.033)	(0.037)***	(0.059)	(0.031)	(0.034)	(0.069)
Religion: Several times a week	-0.014	-0.005	-0.163	-0.016	0.051	-0.095
	(0.047)	(0.103)	(0.163)	(0.053)	(0.068)	(0.130)
Religion: Every day	-0.004	0.246	0.246	-0.361**	-0.062	0.137
	(0.053)	(0.108)**	(0.132)*	(0.140)	(0.115)	(0.301)
Extroversion	0.012	0.010	0.028	0.012*	0.009	0.030*
	(0.007)*	(0.011)	(0.016)*	(0.007)	(0.008)	(0.016)
Agreeableness	0.025	-0.033	-0.021	0.014	-0.009	-0.022
	(0.009)***	(0.013)**	(0.021)	(0.010)	(0.012)	(0.024)
Conscientiousness	-0.003	0.048	0.071	0.019**	0.022**	0.068***
	(0.008)	(0.012)***	(0.018)***	(0.008)	(0.009)	(0.018)
Emotional stability	-0.025	-0.025	-0.050	-0.015*	-0.007	-0.017
	(0.008)***	(0.010)**	(0.019)***	(0.008)	(0.009)	(0.019)
Openness to experience	-0.025	0.017	-0.028	-0.025***	-0.008	-0.045***
	(0.008)***	(0.011)	(0.018)	(0.008)	(0.009)	(0.017)
Mild disability	-0.362	-0.085	-0.400	-0.265***	-0.013	-0.263***
	(0.029)***	(0.043)**	(0.073)***	(0.024)	(0.026)	(0.064)
Moderate disability	-0.015	-0.036	-0.047	0.036	-0.004	0.108**
	(0.024)	(0.030)	(0.042)	(0.026)	(0.027)	(0.047)
Severe disability	-0.670***		-0.209	-0.532***	0.262*	0.465**
-	(0.032)		(0.457)	(0.034)	(0.137)	(0.184)

		Males			Females	
	Employ	Wages	Annual	Employ	Wages	Annual
	-ment		Earnings	-ment		Earnings
	(1)	(2)	(3)	(4)	(5)	(6)
SF36 physical functioning score	0.001*	0.001	0.001	0.001**	0.000	0.001
	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.001)
Current smoker	-0.062***	-0.048**	-0.083**	-0.010	-0.022	0.078**
	(0.015)	(0.019)	(0.040)	(0.017)	(0.016)	(0.039)
Drink frequently	0.002	0.015	0.066*	-0.015	-0.008	0.042
	(0.016)	(0.022)	(0.034)	(0.021)	(0.026)	(0.048)
MHI-5 score	0.002***	0.001**	0.002*	0.001*	0.001**	0.000
	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)
Managers		0.290***	0.965***		0.094	1.075***
		(0.045)	(0.101)		(0.230)	(0.089)
Professionals		0.318***	0.931***		0.135	0.971***
		(0.042)	(0.102)		(0.230)	(0.086)
Technicians and Trades		0.193***	0.775***		-0.184	0.556***
		(0.039)	(0.103)		(0.231)	(0.111)
Community and Personal Service		0.128***	0.657***		-0.145	0.456***
		(0.043)	(0.110)		(0.230)	(0.099)
Clerical and Administrative		0.210***	0.792***		-0.009	0.803***
		(0.042)	(0.101)		(0.230)	(0.082)
Sales			0.627***		-0.196	0.306***
			(0.119)		(0.230)	(0.102)
Machinery Operators and Drivers		0.187***	0.714***		-0.112	0.476**
		(0.042)	(0.116)		(0.234)	(0.211)
Labourers		0.078*	0.417***		-0.128	0.327***
		(0.045)	(0.104)		(0.232)	(0.111)
Tenure		0.007***	0.023***		0.010***	0.039***
		(0.003)	(0.004)		(0.002)	(0.005)
Tenure squared		-0.000	-0.000***		-0.000**	-0.001***
		(0.000)	(0.000)		(0.000)	(0.000)
Constant	0.478***	1.891***	8.156***	-0.074	2.299***	8.756***
	(0.170)	(0.257)	(0.400)	(0.189)	(0.298)	(0.437)
N	4,695	3,726	4,105	5,603	3,747	4,243

	2-Year	5-Year	7-Year	10-Year
	Growth	Growth	Growth	Growth
	(4)	(5)	(6)	(7)
		Danal I	Malaa	
Gen	0.042		0 1 1 0	0.00(**
Gay	-0.043	-0.016	-0.118	-0.296**
D . 1	(0.051)	(0.093)	(0.129)	(0.131)
Bisexual	-0.108	-0.068	-0.140	-0.021
	(0.088)	(0.123)	(0.154)	(0.216)
Other	-0.073	0.125	-0.062	-0.294
	(0.067)	(0.089)	(0.251)	(0.396)
Don't know	0.061	-0.021	0.006	0.222
	(0.093)	(0.082)	(0.114)	(0.136)
Preferred not to say	-0.116**	0.037	0.216	0.111
	(0.049)	(0.097)	(0.217)	(0.241)
N	2,491	2,040	1,836	1,523
		Panel II:	Fomales	
Lesbian	0 141	0.157	-0.036	-0.220
Lesolan	(0.132)	(0.121)	(0.152)	(0.159)
Bisexual	-0.052	-0.088	0.043	0.170
	(0.056)	(0.172)	(0.216)	(0.384)
Other	-0.048	0.195	-0.393**	-0.304
	(0.073)	(0.280)	(0.174)	(0.306)
Don't know	-0.080	0.052	-0.381*	-0.259
	(0.123)	(0.252)	(0.199)	(0.158)
Preferred not to say	-0.066	0.077	0.001	0.217
	(0.092)	(0.172)	(0.147)	(0.260)
Ν	2,513	2,005	1,784	1,424

Appendix Table 3. Estimates of the Relationship Between Sexual Identity and Financial Year Wage and Salary Growth Using Two-Year Average Earnings

***Significant at 1% level **Significant at 5% level *Significant at 10% level