The Effect of Delayed Motherhood on Earnings of Women in Same-Sex Marriages and What it Means for Shrinking the Gender Pay Gap

by

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Abstract

Prior studies have documented a "lesbian wage premium" and smaller motherhood penalties for women in same-sex couples relative to women in different-sex couples. In this paper, I confirm these two prior findings using more recent data from the 2022 American Community Survey that allows for the identification of married same-sex couples. Then, I explore the role of motherhood timing in contributing to the differential effects of motherhood on wages for women in same-sex couples and women in different-sex couples by answering the question: To what extent can delayed motherhood in same-sex married couples explain the female sexual orientation earnings gap? I apply Oaxaca-Blinder decomposition models to answer this question and find that delayed age at first birth can explain approximately 3% of the female sexual orientation earnings gap. This occurs because accounting for age at first birth reduces the unexplained difference in returns to motherhood by ~7%. This result suggests that delaying motherhood may be one way to decrease the motherhood penalty experienced by women in different-sex couples, reducing the sexual orientation earnings gap, and, by extension, the gender wage gap.

Contents

1 Introduction

As part of her Nobel Prize winning work, Claudia Goldin showed that most of the gender pay gap arises after the birth of the first child (The Nobel Prize, 2023). Such is the importance of the "motherhood penalty" that many economists have explored not only its role in explaining the gender pay gap, but also how it changes for different groups of women under different conditions. Miller (2011) finds that delaying motherhood is associated with greater career outcomes and a decrease in the motherhood penalty. Other papers such as Baumle (2009) have found that the effect of motherhood on wages is actually positive for full-time working females in same-sex couples; however, it should be noted that these studies rely on cross-sectional data and may not estimate the true causal impact of motherhood. Several theories have been posed for this phenomenon, though, which, in part, explains the broader earnings premium observed for women in same-sex couples over women in different-sex couples (sometimes referred to as the "lesbian wage premium" or "sexual orientation earnings gap"). However, these theories, explored in more depth in the literature review, leave room for greater explanation.

In this paper, I aim to understand why women in same-sex marriages experience a relative motherhood premium over women in different-sex marriages. In particular, I will focus on the extent to which the greater prevalence of delayed motherhood among women in same-sex marriages can explain the overall earnings premium that women in same-sex marriages experience over women in different-sex marriages.

First, using OLS regression, I confirm the existence of an earnings premium of ~22% for women in same-sex marriages over women in different-sex marriages in the 2022 ACS data.

Then, I estimate the differential returns to motherhood experienced by women in different-sex marriages and women in same-sex marriages. The data do not reveal a significant motherhood penalty for women in same-sex marriages; whereas, there appears to be a significant penalty of about 11.6% for women in different-sex marriages. I also explore the differences in these returns between the primary and secondary earning women in each marriage category, finding a significant penalty for both primary and secondary earning women in different-sex marriages, and smaller, insignificant penalties for both primary and secondary earning women in same-sex marriages. These regressions also confirm there are positive and approximately equivalent returns to delaying age at first birth for each type of woman.

Next, using a pooled Oaxaca-Blinder decomposition, I measure the extent to which the tendency of women in same-sex marriages to have children at a later age than women in different-sex marriages can explain the "sexual orientation wage gap" in the 2022 ACS data. I find the endowment effect of later age at first birth to explain approximately 3% of the sexual orientation wage gap. While somewhat small in magnitude, this finding is relevant as an actionable result for those looking to decrease the motherhood penalty and, by extension, the gender wage gap.

2 Literature Review

2.1 Motherhood Penalty

The "motherhood penalty" describes the lower earnings that mothers experience relative to non-mothers according to many studies. While some papers that rely on cross-sectional data, such as Kmec (2011) and Glauber (2018), do not observe significant motherhood penalties, these studies are often limited due to their inability to control for selection into motherhood. Although these works are informative in the absence of longitudinal or experimental data, many of the studies which explore the motherhood penalty do have access to such data. Therefore, I will focus this literature review on those longitudinal and experimental studies, which provide better causal estimates. These studies consistently find a significant penalty and posit several reasons for its existence.

One commonly proposed explanation is that household division of labor often results in mothers contributing the most to childcare and, consequently, reducing their workforce intensity or performance following the birth of their first child. Relying on longitudinal data about lawyers, Azmat and Ferrer (2017) found that having children reduced women's job performance and likelihood of promotion. Alternatively, several studies, including lab experiments conducted by Benard and Correll (2010) and Correll et al. (2007) suggest that employers hold negative views towards mothers, which might lead to discrimination in the hiring, promotion, or compensation processes. Lastly, when women temporarily leave the workforce after childbirth, this break reduces work experience and this loss of human capital can hinder future promotion opportunities (Aisenbrey et al., 2009; Staff and Mortimer, 2012; Budig and England, 2001).

In accordance with the loss of human capital explanation, Miller (2011) finds that delayed motherhood can increase post-motherhood wage rates, decreasing the motherhood

penalty. As an extension of this finding, if certain groups of women tended to systematically experience motherhood at later ages, then one might expect them to experience less of a motherhood penalty. One such group is women in same-sex marriages, which is why this paper examines the extent to which the greater tendency for women in same-sex marriages to delay motherhood is associated with a lower motherhood penalty. A systematically lower motherhood penalty for women in same-sex marriages due to this delayed age at first birth could explain a portion of the "lesbian wage premium" or sexual orientation earnings gap, which I discuss next.

2.2 The Lesbian Wage Premium

The "lesbian wage premium" refers to the finding in some studies that homosexual women earn higher incomes than heterosexual women. However, many studies present conflicting findings regarding both the existence and size of the lesbian wage premium. In an attempt to reconcile findings throughout the literature, Klawitter (2015) compares studies conducted from 1995-2012 and finds an average lesbian earnings premium of 9%. In the 29 studies examined, the wage disparity between homosexual and heterosexual women ranges from a 25% lesbian wage penalty to a 43% lesbian wage premium; however, most of the studies do find a premium.

Across the literature, various explanations for this phenomenon have been posed. Many of these explanations focus on "masculine" attributes that are believed to be correlated with higher incomes and may be more prevalent in homosexual women. Buser, Geijtenbeek, and Plug (2015) explore whether greater competitiveness in homosexual women might explain the lesbian wage premium but find that homosexual women compete at comparable levels to heterosexual women. Furthermore, while it has also been proposed that the premium results from lesbian

selection into "more masculine" industries, Antecol, Jong, and Steinberger (2008) found that occupational sorting had a small or insignificant influence on the relative wage advantage.

Alternatively, another explanation might relate to human capital. On average, lesbian women have higher education than heterosexual women; however, controlling for this education does not entirely remove the lesbian earnings premium (Antecol, Jong, and Steinberger (2008); Daneshvary, Waddoups, and Wimmer, 2009). Additionally, it is possible that differing past work experience may partly explain the lesbian wage premium. Daneshvary, Waddoups, and Wimmer (2009) find a 20% reduction in the lesbian wage premium when they controlled for previous marriage. Being married may lower future work expectations resulting in diminished experience and human capital accumulation. If women in same-sex couples generally have higher future work expectations, then past work experience, which unfortunately is typically challenging to capture, may explain part, but not all, of the "lesbian wage premium." Furthermore, occupation, as mentioned, does not appear to explain a significant portion of the "lesbian wage premium."

2.3 Lesbian Motherhood Advantage

An additional explanation for at least a portion of the lesbian wage premium is the "lesbian motherhood advantage." As the name suggests, this explanation refers to motherhood being associated with a smaller decrease in earnings (or even higher earnings, but potentially due to selection) for women in same-sex couples, contrasting the significantly lower earnings or penalty experienced on average by women in different-sex couples when they become mothers.

Baumle (2009) explored the differences in the effect of motherhood on wages for lesbian women versus heterosexual women (all working full-time). In this study, Baumle compares

lesbian women to partnered heterosexual women as well as married heterosexual women because the 2000 U.S. Census data only allows for the study of lesbians who decide to identify as unmarried partners, which, among other issues, makes it unclear whether the better comparison group is cohabiting or married different-sex women. However, in both cases, Baumle (2009) finds, through the Oaxaca-Blinder decomposition method, that differential returns to having children explains a significant portion of the wage differential between lesbian and heterosexual women (about 32% in the comparison with cohabiting different-sex women and 70% in the comparison with married different-sex women). The explanation presented is that lesbian women do not have a higher-earning male partner and consequently are less likely to exit the workforce after childbirth (Baumle, Compton, and Poston, 2009).

However, while Baumle's explanation complements data regarding lesbian workforce participation, it fails to consider that lesbian women may still have a higher earning partner that they rely on (despite not having a male partner). Schneebaum (2013) divides full-time working females in same-sex couples into primary earning and secondary earners and finds that, while there is a motherhood premium for primary earning lesbian mothers, there is a motherhood penalty for heterosexual mothers and secondary earning lesbian mothers. A potential reason for this is that, as in different-sex couples, one of the partners in same-sex couples may take on greater childcare responsibility.

While Baumle (2009) makes a convincing argument that the differential returns to having a child may explain a significant portion of the lesbian earnings premium, Schneebaum highlights a key limitation of Baumle's analysis and contradicts Baumle's reasoning for the motherhood premium. However, Schneebaum (2013) is also limited in the sense that it does not separate heterosexual women into primary and secondary earning partners as well. Furthermore,

it must be noted that the premium that Baumle (2009) finds for lesbian women in general and the premium which Schneebaum finds for primary earning lesbian may be a result of selection bias induced by the sample restriction to only full-time working women combined with a smaller or negligible penalty (which is still a significant finding).

Therefore, I evaluate whether a lesbian motherhood premium appears in 2022 when including part-time working women in the sample and distinguishing between primary and secondary earning lesbian and heterosexual women. I also build upon Baumle (2009) and Schneebaum (2013)'s work by using data from the 2022 ACS and relying on improved variables for identifying homosexual women.

I do not find that motherhood is associated with an increase in wages for women in same-sex marriages; however, the data does suggest the existence of a *relative* motherhood premium for all types of women in same-sex marriages in the sense that they do not experience a penalty to the same extent as women in different-sex marriages. My finding of a relative but not outright premium are more consistent with the results of Miller (2011), which would not suggest that later motherhood could increase wages (only decrease the penalty) and therefore would not predict a motherhood premium for lesbian women, only a *relative* premium over women in different-sex marriages.

Finally, I attempt to understand why this relative premium might exist. In particular, I examine the extent to which the delayed motherhood theory presented by Miller (2011) can explain the relative lesbian motherhood premium.

3 Theory

3.1 Qualitative Understanding of the Theory

To explain why delaying one's age at first birth may increase post-motherhood earnings, I draw on two human capital related explanations presented by Miller (2011). First, more tenured women may experience less depreciation of their human capital due to a greater ability to protect that human capital. Second, if key opportunities for promotion occur during earlier motherhood periods, then women who delay motherhood may have more chances to secure those promotions and enjoy higher wages as a result. From this reasoning, it follows that if women with female partners tend to have children at later ages, that might explain at least a portion of the lesbian earnings premium.

There are several reasons why women with female partners might have children at later ages. First, since women with female partners already rely on fertility treatment to have biological children, they may be more open to additional treatments that prolong the age at which a woman can give birth. Furthermore, having a child is also generally more expensive, particularly in "upfront costs" for women with female partners, whether due to fertility treatment or adoption fees. As a result, there may be more of a financial need (or awareness of the financial need) to delay motherhood until the couple has accumulated more wealth. This explanation might create selection concerns, in that, perhaps only same-sex couples who are wealthier than different-sex couples have children, thus creating the illusion of a relative lesbian motherhood premium. To account for this, I control for factors associated with higher wages outside of the delayed motherhood effect such as education. If women in same-sex marriages still have higher pre-motherhood earnings after controlling for these differences, then the pre-motherhood wage gap is likely a result of greater work experience and promotions, which is the theorized effect of

delayed motherhood. In other words, women in same-sex couples and women in different-sex couples who delay motherhood should have higher pre and post motherhood wages according to the promotions and tenure-based motivation for delaying motherhood.

Furthermore, another potential criticism is that some women may have children earlier because of differing career trajectories rather than an inability to make wise financial choices (i.e. they receive key promotions earlier). However, if this is the case, then these women should have higher pre and post motherhood earnings, but a lower age at first birth. These cases should lower the coefficient on the variable for age at first birth, and if more women in same-sex couples or more women in different-sex couples fall into this early wealth group, we should observe differing returns to delayed motherhood between the two groups, which does not appear to be the case in the data.

3.2 Theoretical Model

For illustrative purposes, if we broadly assume the same average wage for all mothers who delay motherhood and all mothers who do not, all else equal, we can model how the higher proportion of mothers in same-sex couples who delay motherhood relative to mothers in different-sex couples contributes to a higher average wage for mothers in same-sex couples. Equations (1) and (2) represent the average wages of mothers in same-sex couples and mothers in different sex couples, respectively:

$$\bar{w}_{SSC_{mothers}} = P_{SSC_{delay}}\bar{w}_{delay} + \left(1 - P_{SSC_{delay}}\right)\bar{w}_{early} \quad (1)$$

$$\bar{w}_{DSC_{mothers}} = P_{DSC_{delay}}\bar{w}_{delay} + \left(1 - P_{DSC_{delay}}\right)\bar{w}_{early} \quad (2)$$

$\overline{w}_{SSC_{mothers}}$ is the average wage for mothers in same-sex couples, $\overline{w}_{DSC_{mothers}}$ is the average wage for mothers in different-sex couples, $P_{SSC_{delay}}$ is the proportion of mothers in same-sex couples who delay motherhood, $P_{DSC_{delay}}$ is the proportion of mothers in different-sex couples who delay motherhood, $\overline{w}_{delay}$ is the average wage for mothers who delay marriage, and $\overline{w}_{early}$ is the average wage of mothers who do not delay motherhood. As noted, for simplicity, here I assume that $\overline{w}_{delay}$ and $\overline{w}_{early}$ are the same for lesbian and different-sex mothers, and that there are only two time periods for childbirth. In the actual model, we will allow for variation in lesbian and heterosexual wages for early mothers and delayed mothers and estimate age at first birth as a continuous variable, but the basic idea to capture is that for both groups, we posit that:

$$\overline{w}_{delay} > \overline{w}_{early}.$$

Therefore, if:

$$P_{SSC_{delay}} > P_{DSC_{delay}}, \text{ then}$$

$$\overline{w}_{SSC_{mothers}} > \overline{w}_{DSC_{mothers}}.$$

4 Data

4.1 Overview of Data Source and Key Variables

This paper uses 2022 American Community Survey (ACS) data for women in different-sex marriages and women in same-sex marriages. Since this data is cross-sectional, I will not be able to observe specific drops in individual's incomes as a result of motherhood as authors with panel data have. I will therefore attempt to measure the impact of having a child by comparing wages of women with and without children. Furthermore, I will explore variation in the effect of motherhood by age at first birth. I follow the prior literature in the set of controls I include in my models to account for observable characteristics that might otherwise explain differences in wages.

Because I am not able to account for individual fixed effects using panel data or to exploit quasi-experimental variation in my estimation, the estimates are not likely to reflect the causal impacts of interest. Instead, my estimates should be interpreted as showing the correlations between motherhood status and timing and my outcomes of interest. To the extent that selection into motherhood is similar for the two groups of married women that I study, the differential effects I estimate will capture differences in the causal effects of motherhood. However, if selection into motherhood differs between women in same-sex and different-sex marriages, that can itself drive the differences in my estimates.

The IPUMs extract of this data includes a relatively new variable, an indicator for whether there is a same-sex married couple in the household, which was not available to most authors in the preexisting literature. Relying on this variable, I classify the relevant "lesbian" population of interest as respondents of the female gender, who live in a household with a same-sex married couple present, and are either the head of the household or the spouse of the head of

household.[1] Of course, it is uncertain whether these individuals are homosexual (and that individuals in different-sex marriages are strictly heterosexual), so rather than refer to them as lesbian women, I refer simply to women in same-sex marriages. Given this classification, I exclusively use women in different-sex marriages (women whose spouse's gender is coded as male) as the comparison group.

The data include a variable to indicate whether each respondent has their own children present in the household. I use this variable to identify the relevant mother population and to observe returns to having a child. A limitation of the ACS data is that children indicator variables include stepchildren, adopted children, and biological children without distinction. The inclusion of stepchildren, in particular, makes calculating a woman's age at first birth challenging. To calculate the age at first birth variable, I subtract the age of an individual's eldest child from the individual's age. However, when women marry older partners with children from previous relationships, these children are included in the calculation. As a result, I dropped any observations where age at first birth calculations appeared unrealistically low (less than 16 years old) and the respondent had a spouse who is significantly older.[2]

Ultimately, the data included 5,106 women in same-sex marriages and 335,120 women in different-sex marriages. 1,791 of the women in same-sex marriages are mothers and 208,741 of the women in different-sex marriages are mothers.[3] In the next section, I explore more of the summary statistics for these groups.

[1] There is a possibility that a small number of respondents who are the head of household or spouse of the head of household and have a same-sex married couple in their household are not a member of the same-sex married couple. However, there are likely zero or very few cases of this, since it is not common for there to be multiple married couples in a single household in the US.
[2] Later I also dropped observations where the individual was younger than 20 years old or older than 60 years old (and likely did not have their own children living in their household).
[3] All of these women had wage>0

4.2 Relevant Summary Statistics

Summary statistics for women in different-sex marriages and women in same-sex marriages are presented in Table 1.

Table 1 - Summary Statistics (Means for All Married Women)

Variable	Women in Different-Sex Marriages	Women in Same-Sex Marriages	Sexual Orientation Gap
Wage	45,706.31	60,163.98	-14,457.67***
Log of Wage	10.59	10.79	-0.20***
Usual Hours Worked per Week	29.52	35.60	-6.09***
Hourly Wage	33.45	34.82	-1.37
Log of Hourly Wage	3.21	3.30	-0.09***
Has Child	0.64	0.35	0.29***
Age	43.66	42.22	1.44***
College Degree	0.48	0.54	-0.06***
Metropolitan	0.25	0.37	-0.12***
White	0.79	0.81	-0.02***
Hispanic	0.15	0.14	0.00
Speaks English	0.18	0.13	0.06***
Observations	453,013	6,077	

Results of a two-sample t-test are indicated as follows: $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$
Note: The sample includes married women with wage>0 and between the ages of 20 and 60 in the 2022 ACS data. College degree is an indicator variable for whether the respondent has a college degree or higher. Speaks English is an indicator for whether the respondent speaks English well or very well.

Table 1 shows that the mean wage and log of wage for women in same-sex marriages is significantly greater than that of women in different-sex marriages. However, the mean work intensity, measured by usual hours worked per week is also significantly greater for women in same-sex marriages than women in different-sex marriages. The hourly wage variable accounts for this by dividing wage by the usual hours worked per week and multiplying by the number of weeks worked in a year. The table shows that, in terms of mean hourly wage, there is no significant difference between women in different-sex marriages and women in same-sex marriages. In terms of log of hourly wage, which decreases the sensitivity to extremes, there is a significant difference; however, it is smaller than the difference shown by the mean log of wage.

This suggests that a portion of the lesbian wage premium likely comes from greater workforce intensity among women in same-sex marriages. Moving forward, I primarily rely upon log of wage as the dependent variable in my analysis because both hours and wages are variables of interest in exploring the motherhood penalty. I do not restrict the sample to full time working women because that could introduce selection bias as women with higher wages before motherhood are more likely to decide to work full time after birth.[4]

Notably, Table 1 also indicates that significantly more women in different-sex marriages have a child than women in same-sex marriages. Other significant differences are also present in the age, education, metropolitan, white, and Speaks English variables. These variables are traditionally controlled for in literature on wage gaps. Age is often used as an imperfect but necessary proxy for work experience when working with ACS or Census data, as in Baumle (2009). The college degree variable represents whether an individual has attained a college degree or higher. Consistent with the literature, women in same-sex marriages appear to be more highly educated. These women are also more concentrated in metropolitan areas, and on average more of them are white. While not significant, it appears that women in same-sex marriages are, on average, less likely to be Hispanic, which may result from differing intensity of cultural attitudes towards homosexuality. Finally, women in same-sex marriages are more likely to speak English well or very well, a factor that tends to be associated with higher wages, and may be inversely associated with the prevalence of Hispanic women in same-sex marriages. Differences in mean prevalence in some census regions and occupations are also significant, as can be seen

[4] The Robustness Checks in the Appendix explore the effects with Log of Hourly Wage as the dependent variable.

in Appendix A.[5] Therefore, I control for these fixed effects in each model either in the main body of the paper or through the robustness checks.[6]

Summary statistics for exclusively mothers in different-sex marriages and mothers in same-sex marriages are presented in Table 2.

Table 2 – Summary Statistics (Means for Mothers)

Variable	Mother in Different-Sex Marriage	Mother in Same-Sex Marriage	Sexual Orientation Gap
Wage	44902.31	62755.98	-17740.18***
Log of Wage	10.57	10.81	-0.24***
Usual Hours Worked per Week	28.34	35.13	-6.83***
Hourly Wage	34.21	36.68	-2.40
Log of Hourly Wage	3.22	3.33	-0.10***
Child Variables			
Age at First Birth	28.44	30.34	-1.90***
Number of Own Children in the Household	1.94	1.69	0.26 ***
Other Demographics			
Age	42.41	41.44	0.97***
College Degree	0.48	0.53	-0.04***
Metropolitan	0.23	0.30	-0.07***
White	0.77	0.80	-0.03**
Hispanic	0.17	0.15	0.02
Speaks English	0.21	0.11	0.10***
Observations	289,385	2,136	

Results of a two-sample t-test are indicated as follows: $^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$
Note: See notes in Table 1 for details.

This table introduces two new variables. The first is the age at first birth variable. This variable was constructed by subtracting the age of an individual's eldest own child from their age. Importantly, the mean age at first birth for mothers in same-sex marriages is about two years older and significantly greater than the mean age at first birth for mothers in different-sex

[5] In constructing the occupation variable, I create a set of indicators for the 26 occupational categories as defined in the 2010 US census (excluding the unemployed category, which does not apply to the relevant sample).
[6] Decompositions in the robustness checks include region and occupation fixed effects.

marriages. Additionally, it appears that, on average, mothers in different-sex marriages have more children. This is a feature that will be explored in the robustness checks in the appendix.

Next, Table 3 shows summary statistics for the primary and secondary earning mothers in different-sex and same-sex marriages. The classification as a primary or secondary earner in the marriage was based on whether the individual was labeled the head of household (primary earner) or spouse of the head of household (secondary earner).

Table 3 – Summary Statistics (Primary and Secondary Earners)

	Primary Earning Mother in Different-Sex Marriage	**Secondary Earning Mother in Different-Sex Marriage**	**Primary Earning Mother in Same-Sex Marriage**	**Secondary Earning Mother in Same-Sex Marriage**
Wage	45666.40	41660.58	68883.74	56529.66
Log of Wage	10.54	10.54	10.90	10.73
Usual hours Worked per Week	31.14	26.23	36.47	33.76
Hourly Wage	32.07	34.054	37.85	35.41
Log of Hourly Wage	3.16	3.217	3.38	3.28
Child Variables				
Age at First Birth	27.741	28.75	30.49	30.19
Number of Own Children in the Household	1.86	1.96	1.69	1.68
Other Demographics				
Age	42.60	42.81	41.62	41.25
College Degree	0.42	0.48	0.56	0.49
Metropolitan	0.26	0.23	0.29	0.30
White	0.75	0.73	0.81	0.80
Hispanic	0.18	0.18	0.14	0.17
Speaks English	0.18	0.25	0.12	0.11
Observations	309,312	156,404	2,591	2,515

Note: See notes in Table 1 for details.

Primary earning mothers in same-sex marriages earn the highest mean wage (across all wage measures) followed by secondary earning mothers in same-sex marriages, primary earning mothers in different-sex marriages, and, lastly, secondary earning mothers in different-sex

marriages. Primary earning mothers in same-sex marriages also, on average, have their first child at the latest age; although, unsurprisingly, this is not much different from the age at which secondary earning mothers in same-sex marriages tend to have their first child. On average, both of these groups have their first child 2 years later than secondary earning mothers in different-sex marriages, and three years earlier than primary earning mothers in different-sex marriages.

Furthermore, while secondary earning mothers in same-sex marriages do work fewer average hours than primary earning mothers in same-sex marriages, they still work more hours, on average, than all mothers in different-sex marriages. This supports Baumle (2009)'s explanation that women in same-sex marriages might experience positive returns to motherhood at least partly because they maintain higher work intensity after childbirth. However, in accordance with Schneebaum (2013), the magnitude of the difference does shrink for secondary earning women in same-sex marriages.

5 Method

5.1 Linear Oaxaca-Blinder Decomposition of Wage Gap Between Women in Different-Sex Marriages and Women in Same-Sex Marriages

The first step in the decomposition is to estimate three linear regression models – (1) the model for women in different-sex marriages (DSM), (2) the model for women in same-sex marriages (SSM), and (3) the model for all women (who are working):

$$\bar{Y}_{DSM} = \hat{\beta}_{DSM}\bar{X}_{DSM} \quad (1)$$

$$\bar{Y}_{SSM} = \hat{\beta}_{SSM}\bar{X}_{SSM} \quad (2)$$

$$\bar{Y} = \hat{\beta}\bar{X} \quad (3)$$

These estimates inform the Oaxaca-Blinder decomposition model:

$$\bar{Y}_{DSM} - \bar{Y}_{SSM} = \left[(\bar{X}_{DSM} - \bar{X}_{SSM}) \times \hat{\beta}\right] + \left[(\hat{\beta}_{DSM} - \hat{\beta}_{SSM}) \times \overline{X}\right] \quad (4)$$

In this model, $\bar{Y}_{DSM}$ represents the average log of annual wages for working women in different-sex marriages, and $\bar{Y}_{SSM}$ represents the log of annual wages for working women in same-sex marriages. Therefore, $\bar{Y}_{DSM} - \bar{Y}_{SSM}$ represents the raw gap in average wages for women in different-sex marriages and women in same-sex marriages. A negative difference suggests that women in same-sex marriages, on average, have higher wages than women in different-sex marriages.

$\hat{\beta}$ represents the coefficient vector for Model 3, which includes all women. $\hat{\beta}_{DSM}$ represents the coefficient vector for Model (1), or the estimated return to characteristics when solely modeling women in different-sex marriages. Likewise, $\hat{\beta}_{SSM}$ represents the coefficient

vector for Model (2), or the estimated return to characteristics when solely modeling women in same-sex marriages.

$\bar{X}$ is a vector representing the average characteristics of working women; whereas, $\bar{X}_{DSM}$ is a vector representing average characteristics of working women in different-sex marriages, and $\bar{X}_{SSM}$ is a vector representing average characteristics of working women in same-sex marriages. In Table 7, I conduct the decomposition first on the following variables: indicators for having a child, having a college degree or higher, age, whether the woman is white or Hispanic, speaking English well or very well, and living in a metropolitan area. Then, I run a second decomposition on those characteristics as well as the woman's age at first birth. Those are the characteristics included in the main decomposition between women in different-sex marriages and women in same-sex marriages; however, in the preliminary regressions and robustness checks in the appendix, I test other variables such as number of children, region, and occupation.

The portion of the model represented by $\left[(\bar{X}_{DSM} - \bar{X}_{SSM}) \times \hat{\beta}\right]$ demonstrates the difference in wage between women in different-sex marriages and women in same-sex marriages that is solely due to differences in their average characteristics. In other words, if women in different-sex marriages received the same return, $\hat{\beta}$, to their characteristics as women in same-sex marriages, then this portion of the equation shows the impact of the different endowments or prevalence of those characteristics in each group. For example, if the return to later age at first birth is a positive coefficient $\hat{\beta}$, then the difference in wage between women in different-sex marriages and women in same-sex marriages can be represented by the difference in age at first birth multiplied by $\hat{\beta}$.

The portion of the model represented by $[(\hat{\beta}_{DSM} - \hat{\beta}_{SSM}) \times \overline{X}]$ shows the difference in wage that can be attributed to the different returns to the same characteristics, $\bar{X}$, that each group faces, as determined by models (1) and (2).

5.2 Linear Oaxaca-Blinder Decomposition of Wage Gap Between Women in Different-Sex Marriages and Women in Same-Sex Marriages

Using the same, process, I also decompose the wage gap between primary earning women in same-sex marriages (5) and each of the following groups: primary earning women in different-sex marriages (6), secondary earning women in different-sex marriages (7), and secondary earning women in same-sex marriages (8). Then, I decompose the wage gap between secondary earning women in same-sex marriages (8), and both types of women in different-sex marriages, (6) and (7). These decompositions will show whether the finding for the earnings gap between all women in same-sex marriages and all women in different-sex marriages holds for all types of women, or if the effect varies based on the type of woman, perhaps due to specialization as shown in Schneebaum (2013). The linear regression estimations are as follows:

$$\bar{Y}_{P\_SSM} = \hat{\beta}_{P\_SSM}\bar{X}_{P\_SSM} \tag{5}$$

$$\bar{Y}_{P\_DSM} = \hat{\beta}_{P\_DSM}\bar{X}_{P\_DSM} \tag{6}$$

$$\bar{Y}_{S\_DSM} = \hat{\beta}_{S\_DSM}\bar{X}_{S\_DSM} \tag{7}$$

$$\bar{Y}_{S\_SSM} = \hat{\beta}_{S\_SSM}\bar{X}_{S\_SSM} \tag{8}$$

$$\bar{Y}_{P\_SSM\_P\_DSM} = \hat{\beta}_{P\_SSM\_P\_DSM}\bar{X}_{P\_SSM\_P\_DSM} \tag{9}$$

$$\bar{Y}_{P\_SSM\_S\_DSM} = \hat{\beta}_{P\_SSM\_S\_DSM}\bar{X}_{P\_SSM\_S\_DSM} \quad (10)$$

$$\bar{Y}_{P\_SSM\_S\_SSM} = \hat{\beta}_{P\_S\_SSM}\bar{X}_{P\_SSM\_S\_SSM} \quad (11)$$

$$\bar{Y}_{S\_SSM\_P\_DSM} = \hat{\beta}_{S\_SSM\_P\_DSM}\bar{X}_{S\_SSM\_P\_DSM} \quad (12)$$

$$\bar{Y}_{S\_SSM\_S\_DSM} = \hat{\beta}_{S\_SSM\_S\_DSM}\bar{X}_{S\_SSM\_S\_DSM} \quad (13)$$

Model (9) represents the pooled regression of primary earning women in same-sex marriages and primary earning women in different-sex marriages. Model (10) represents the pooled regression of primary earning women in same-sex marriages and secondary earning women in different-sex marriages. Model (11) represents the pooled regression of primary earning women in same-sex marriages and secondary earning women in same-sex marriages. Model (12) represents the pooled regression of secondary earning women in same sex marriages and primary earning women in different-sex marriages. Lastly, Model (13) represents the pooled regression of secondary earning women in same sex marriages and secondary earning women in different-sex marriages

These estimates inform the Oaxaca-Blinder decomposition model as shown below.

$$\bar{Y}_{P\_DSM} - \bar{Y}_{P\_SSM} = \left[\left(\bar{X}_{P\_DSM} - \bar{X}_{P\_SSM}\right) \times \hat{\beta}_{P\_SSM\_P\_DSM}\right] + \left[\left(\hat{\beta}_{P\_DSM} - \hat{\beta}_{P\_SSM}\right) \times \bar{X}_{P\_SSM\_P\_DSM}\right. \quad (14)$$

$$\bar{Y}_{S\_DSM} - \bar{Y}_{P\_SSM} = \left[\left(\bar{X}_{S\_DSM} - \bar{X}_{P\_SSM}\right) \times \hat{\beta}_{P\_SSM\_S\_DSM}\right] + \left[\left(\hat{\beta}_{S\_DSM} - \hat{\beta}_{P\_SSM}\right) \times \bar{X}_{P\_SSM\_S\_DSM}\right. \quad (15)$$

$$\bar{Y}_{S\_SSM} - \bar{Y}_{P\_SSM} = \left[\left(\bar{X}_{S\_SSM} - \bar{X}_{P\_SSM}\right) \times \hat{\beta}_{P\_SSM\_S\_SSM}\right] + \left[\left(\hat{\beta}_{S\_SSM} - \hat{\beta}_{P\_SSM}\right) \times \bar{X}_{S\_SSM\_P\_SSM}\right. \quad (16)$$

$$\bar{Y}_{S\_SSM} - \bar{Y}_{P\_DSM} = \left[\left(\bar{X}_{S\_SSM} - \bar{X}_{P\_DSM}\right) \times \hat{\beta}_{S\_SSM\_P\_DSM}\right] + \left[\left(\hat{\beta}_{S\_SSM} - \hat{\beta}_{P\_DSM}\right) \times \bar{X}_{S\_SSM\_P\_DSM}\right] \quad (17)$$

$$\bar{Y}_{S\_SSM} - \bar{Y}_{S\_DSM} = \left[\left(\bar{X}_{S\_SSM} - \bar{X}_{S\_DSM}\right) \times \hat{\beta}_{S\_SSM\_S\_DSM}\right] + \left[\left(\hat{\beta}_{S\_SSM} - \hat{\beta}_{S\_DSM}\right) \times \bar{X}_{S\_SSM\_S\_DSM}\right] \quad (18)$$

Model (14) represents the decomposition of the wage gap between primary earning women in same-sex marriages and primary earning women in different-sex marriages**.** Model (15) represents the decomposition of the wage gap between primary earning women in same-sex marriages and secondary earning women in different-sex marriages. Model (16) represents the decomposition of the wage gap between primary earning women in same-sex marriages and secondary earning women in same-sex marriages. Model (17) represents the decomposition of the wage gap between secondary earning women in same-sex marriages and primary earning women in different-sex marriages. Lastly, Model (18) represents the decomposition of the wage gap between secondary earning women in same-sex marriages and secondary earning women in different-sex marriages.

6 Results

6.1 Same-Sex Marriage Earnings Premium Regression Results

Before conducting the decompositions and the regressions that set up for the decompositions, I first run an OLS regression to check whether a "lesbian" wage premium (a premium for women in same-sex marriages in my specification), exists in my data as well as understand what the general return is to key variables like having a child. Table 4 displays results from models including various controls. In all cases, the included population is working females (females with wage>0). Regression (1) regresses the log of wage on an indicator for whether or not the woman is in a same-sex marriage and no other controls to show the "raw" "lesbian" wage premium. Regression (2) adds the Age, College Degree, White, Hispanic, English, Metropolitan, and Region controls.[7] Regression (3) adds the child variable. Regression (4) adds an age at first birth variable that has been centered on the average age at first birth among the female working population. Regression (5) adds a control for the number of children an individual has. Regression (6) controls for occupation. Lastly, Regression (7) adds a control for work intensity by adding a variable for the usual hours worked per week.

[7]For presentation purposes, region and occupation effects are not shown for each level of the variable.

Table 4 – OLS Regressions Exploring Wage Premium for Women in Same-Sex Marriages

	(1) Log Wage b/se	(2) Log Wage b/se	(3) Log Wage b/se	(4) Log Wage b/se	(5) Log Wage b/se	(6) Log Wage b/se	(7) Log Wage b/se
Same-Sex	0.20***	0.17***	0.14***	0.13***	0.12***	0.11***	0.04*
Marriage	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Age	-	0.08***	0.10***	0.10***	0.11***	0.09***	0.07***
	-	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Age^2	-	-0.00***	-0.00***	-0.00***	-0.00***	-0.00***	-0.00***
	-	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
College	-	0.69***	0.68***	0.65***	0.65***	0.43***	0.37***
Degree	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
White	-	0.06***	0.06***	0.05***	0.05***	0.02***	0.05***
	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Hispanic	-	-0.16***	-0.15***	-0.13***	-0.13***	-0.05***	-0.07***
	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Speaks	-	-0.02*	-0.01	-0.01	-0.01	-0.04***	-0.02***
English	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Metropolitan	-	0.07***	0.06***	0.05***	0.05***	0.06***	0.05***
	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Region FE	-	X	X	X	X	X	X
	-	X	X	X	X	X	X
Has Child	-	-	-0.13***	-0.16***	-0.01	0.01	0.01
	-	-	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Centered	-	-	-	0.01***	0.01***	0.01***	0.01***
A1B	-	-	-	(0.00)	(0.00)	(0.00)	(0.00)
Number of	-	-	-	-	-0.08***	-0.07***	-0.02***
Children	-	-	-	-	(0.00)	(0.00)	(0.00)
Occupation	-	-	-	-	-	X	X
FE	-	-	-	-	-	X	X
Usual Hrs of	-	-	-	-	-	-	0.05***
Work/Week	-	-	-	-	-	-	(0.00)
Constant	10.71***	8.55***	8.24***	8.33***	8.14***	8.77***	7.31***
	(0.00)	(0.05)	(0.05)	(0.05)	(0.05)	(0.09)	(0.08)
Observations	139,133	139,133	139,133	139,133	139,133	139,133	139,133
R Squared	0.00	0.13	0.13	0.14	0.14	0.25	0.45
DF_R	340224	139116	139115	139114	139113	139089	139088

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: In the centered A1B variable, age at first birth is centered on the mean for females in the sample such that if Centered A1B=0, A1B=27.85. The observations in Model (1) were restricted to match the others, which have fewer observations due to missing metropolitan data. Region and Occupation Fixed Effects were controlled for with dummy variables for each of the 5 census-defined regions and 25 occupational categories. The effect of each was not of specific interest, so for summary purposes individual coefficients are not reported. See note in Table 1 for variable definitions.

The results in Table 4 suggest there is, in fact, a "lesbian" wage premium present in the data. Under every specification the coefficient for Same-Sex Marriage is positive. The premium without any controls is approximately 22%.[8] Adding the child coefficient in Regression (3) decreases the premium relative to Regression (2), which has most non-child controls, by about 3 percentage points to ~19%. Adding the centered age at first birth variable in Regression (4) decreases the premium by another 5 percentage points to about 14%. Further controlling for number of children and occupation similarly reduce the wage premium. Lastly, the usual hours of work per week variable in particular significantly reduces the premium to ~4%, showing again that work intensity explains much of the premium experienced by women in same-sex marriages.

The data also show a general motherhood penalty under all specifications. The coefficient on Has Child in both Regression (3) and Regression (4) is negative, which indicates the penalty. When number of children is added as a control in Regression (5), this changes the coefficient on Has Child, making it almost neutral and insignificant, which indicates that the returns to having children are fairly linear based on the number of children had. Specifically, there appears to be a negative return to each additional child, indicating the penalty. In the robustness checks in the appendix, I explore the impact of the number of children a woman has on the model. Adding in the occupational controls in Regression (6) slightly decreases the magnitude of the coefficient on the number of children variable and will be included in forthcoming regressions and in the robustness checks of the decomposition. Lastly, adding in usual hours of work per week significantly reduces (but does not eliminate) the magnitude of the coefficient on the number of children variable, suggesting that decreased work intensity is a notable outcome of motherhood

[8] When interpreting results, coefficients are transformed using $(e^b - 1) \times 100$

and that it explains part of the motherhood penalty. A dependent variable involving hourly wage is therefore also explored in the robustness checks in the appendix.

Furthermore, when the age at first birth variable is included, higher age at first birth appears to be associated with significantly higher wages. Its inclusion in Regression (4) increases the apparent motherhood penalty from Regression (3), suggesting that age at first birth may counteract some of the negative impact of motherhood on wages.

Next, I run the preliminary regressions needed to conduct the Oaxaca-Blinder decomposition, which will show just how much later age at first birth might be decreasing the motherhood penalty for women in same-sex marriages relative to women in different-sex marriages.

6.2 Results from Preliminary Regressions for the Decomposition

Before conducting the Oaxaca-Blinder decompositions, I conduct preliminary regressions for Models (1)-(2) and (5)-(8) from the Methods section.

First, to explore the different returns to children among women in different-sex marriages and women in same-sex marriages, I perform separate OLS regressions for women in different-sex marriages and women in same-sex marriages, as in Models (1) and (2). In each case, I report results with and without the inclusion of the centered age at first birth variable.

Table 5 – OLS Regressions Exploring Differential Returns to Motherhood by Sexuality

	(1) Women in Different-Sex Marriage		(2) Women in Same-Sex Marriage	
	Without A1B	**With A1B**	**Without A1B**	**With A1B**
	Log Wag b/se	Log Wage b/se	Log Wage b/se	Log Wage b/se
Has Child	-0.10***	-0.11***	-0.00	-0.03
	(0.01)	(0.01)	(0.04)	(0.04)
College	0.45***	0.43***	0.41***	0.40***
Degree	(0.01)	(0.01)	(0.04)	(0.04)
Age	0.09***	0.09***	0.08***	0.08***
	(0.00)	(0.00)	(0.02)	(0.02)
Age^2	-0.00***	-0.00***	-0.00***	-0.00***
	(0.00)	(0.00)	(0.00)	(0.00)
White	0.03***	0.02**	0.12*	0.11*
	(0.01)	(0.01)	(0.05)	(0.05)
Hispanic	-0.06***	-0.05***	-0.03	-0.03
	(0.01)	(0.01)	(0.06)	(0.06)
Speaks	-0.04***	-0.04***	-0.00	0.00
English	(0.01)	(0.01)	(0.06)	(0.06)
Metropolitan	0.07***	0.06***	0.01	0.00
	(0.01)	(0.01)	(0.04)	(0.04)
Region FE	X	X	X	X
	X	X	X	X
Occupation	X	X	X	X
FE	X	X	X	X
Centered A1B	-	0.01***	-	0.01*
	-	(0.00)	-	(0.00)
Constant	8.86***	8.92***	9.03***	9.06***
	(0.10)	(0.10)	(0.43)	(0.43)
Observations	136,820	136,820	2,313	2,313
R Squared	0.24	0.24	0.25	0.25
DF R	136779.00	136778.00	2273.00	2272.00

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: In the centered A1B variable, age at first birth is now centered on the mean for married females in the sample who participate in the labor force such that if Centered A1B=0, A1B= 28.27937. Region and Occupation Fixed Effects were controlled for with dummy variables for each region or occupation. The effect of each was not of specific interest, so for summary purposes individual coefficients are not reported.

The results in Table 5 show that women in same-sex marriages experience less of a motherhood penalty than women in different-sex marriages. In the models without the Centered A1B variable, motherhood is associated with a 10.52% decrease in wage for women in different-sex marriages and no change in wage for women in same-sex marriages. When the Centered A1B

variable is added to the model, the motherhood penalty for both groups increases (by one percentage point for women in different-sex marriages, and three percentage points for women in same-sex marriages); however, the motherhood penalty is still lower and insignificant for women in same-sex marriages.[9] The positive sign on the coefficient for Centered A1B indicates that a later age at first birth is associated with higher wages. Furthermore, the fact that the magnitude of the coefficient is the same for both groups suggests that women in different-sex marriages and women in same-sex marriages have similar returns to delaying motherhood. However, the greater magnitude of the impact of the inclusion of this variable on the motherhood penalty for women in same-sex marriages, suggests that higher wages amongst mothers in same-sex marriages relative to mothers in different-sex marriages may be partially a result of a greater tendency for women in same-sex marriages to delay motherhood. The precise impact is explored later in the Oaxaca-Blinder decomposition.

Lastly, Table 6 shows separate regressions for each type of earner (primary or secondary) in each type of marriage (different-sex or same-sex). These are based on Models (5) – (8) from the Methods section and meant to test whether the "lesbian" wage premium and relevant explanatory variables differ based on the earner type.

[9] Part of the insignificance may result from the smaller sample size of women in same-sex marriages.

Table 6 – OLS Regressions Exploring Differential Returns to Motherhood by Earning Type

	Women in Different-Sex Marriages		**Women in Same-Sex Marriages**	
	(6) Primary Earning	**(7) Secondary Earning**	**(5) Primary Earning**	**(8) Secondary Earning**
	Log Wage b/se	Log Wage b/se	Log Wage b/se	Log Wage b/se
Centered A1B	0.01***	0.01***	0.01*	0.01
	(0.00)	(0.00)	(0.01)	(0.01)
Has Child	-0.11***	-0.11***	-0.01	-0.06
	(0.01)	(0.01)	(0.06)	(0.06)
College	0.44***	0.44***	0.29***	0.50***
Degree	(0.01)	(0.01)	(0.06)	(0.06)
Age	0.12***	0.08***	0.09***	0.06**
	(0.00)	(0.00)	(0.02)	(0.02)
Age^2	-0.00***	-0.00***	-0.00***	-0.00*
	(0.00)	(0.00)	(0.00)	(0.00)
White	0.05***	0.02	0.14*	0.08
	(0.01)	(0.01)	(0.07)	(0.07)
Hispanic	-0.06***	-0.04***	-0.10	0.04
	(0.01)	(0.01)	(0.09)	(0.08)
Speaks	-0.01	-0.06***	0.19*	-0.21*
English	(0.01)	(0.01)	(0.09)	(0.09)
Metropolitan	0.02***	0.08***	0.03	-0.04
	(0.01)	(0.01)	(0.06)	(0.05)
Region FE	X	X	X	X
	X	X	X	X
Occupation	X	X	X	X
FE	X	X	X	X
Constant	8.31***	8.93***	8.76***	9.49***
	(0.09)	(0.15)	(0.61)	(0.62)
Observations	106,508	65,068	1,180	1,133
R Squared	0.24	0.25	0.25	0.28
DF_R	106466.00	65026.00	1139.00	1092.00

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

This breakdown still reveals a significant motherhood penalty for women in different-sex marriages, and insignificant, smaller penalties for women in same-sex marriages. For both primary and secondary earning women in different-sex marriages, having a child is associated with an 11.63% reduction in wage. For women in same-sex marriages, the returns to having a

child are different between primary and secondary earners. For primary earners, having a child is associated with a 1.01% reduction in wage. The reduction increases to 6.18% for secondary earners. These findings on differences between primary and secondary earners in same-sex marriages are broadly consistent with Schneebaum (2011); although, Schneebaum finds a motherhood *premium* for primary earners rather than just a reduced penalty.

This difference might exist because of specialization between primary and secondary earners or because secondary earners could be the more likely group to have actually given birth to the child and therefore may have taken more time off from work. While I am not able to control for whether a mother gave birth to her child and do not control for actual specialization that may have occurred (to avoid selection bias), the fact that the decrease in wage associated with having a child is lower for secondary earning women in same-sex marriages than for women in different-sex marriages validates that the act of giving birth or a tendency for secondary heterosexual earners to specialize in childcare cannot fully explain the difference in returns to motherhood between women in different-sex marriages and women in same-sex marriages.

In Table 6, the centered A1B variable is also positive with the same magnitude for all groups, showing that each year that having a child is delayed past the average age at first birth for married women who participate in the labor force is associated with a 1.01% increase in wages and is significant for all but secondary earning women in same-sex marriages. This finding again indicates that age at first birth may be significant in explaining the sexual orientation earnings gap.

Next, I conduct the Oaxaca-Blinder decomposition, to better understand the extent to which different mean ages at first birth can explain differential returns to having a child and, ultimately, the earnings premium experienced by women in same-sex marriages.

6.2 Decomposition Results

Table 7 shows the results of the pooled Oaxaca-Blinder decomposition of the difference in the log of wages between women in different-sex marriages and women in same-sex marriages with and without including age at first birth as a variable (Model 4 from the Methods section).

Table 7 – Decomposition of Wage Gap Between Women in Same-Sex Marriages and Women in Different-Sex Marriages

	With A1B Log Wage b/se		Without A1B Log Wage b/se	
Overall				
Women in Different-sex Marriages	10.7079*** (0.00)		10.7079*** (0.00)	
Women in Same Sex Marriages	10.9072*** (0.02)		10.9072*** (0.02)	
Difference	-0.1992*** (0.02)		-0.1992*** (0.02)	
Total Explained	-0.0695*** (0.01)		-0.0571*** (0.01)	
Total Unexplained	-0.1298*** (0.02)		-0.1421*** (0.02)	
Components	**Explained**	**Unexplained**	**Explained**	**Unexplained**
Has Child	-0.0452*** (0.00)	-0.0336* (0.02)	-0.0392*** (0.00)	-0.0421** (0.01)
Centered A1B	-0.0061*** (0.00)	0.0016 (0.00)	- -	- -
College Degree	-0.0199** (0.01)	0.0476 (0.03)	-0.0211** (0.01)	0.0578* (0.02)
Age	0.1462*** (0.02)	0.1068 (0.78)	0.1482*** (0.02)	0.1065 (0.78)
Age^2	-0.1357 (0.02)	-0.1947 (0.40)	-0.1346 (0.02)	-0.1798 (0.40)
White	-0.0019*** (0.00)	-0.1056* (0.05)	-0.0022*** (0.00)	-0.1044* (0.05)
Hispanic	-0.0010 (0.00)	-0.0109 (0.01)	-0.0011 (0.00)	-0.0132 (0.01)
Speaks English	0.0002 (0.00)	0.0050 (0.01)	0.0003 (0.00)	0.0055 (0.01)
Metropolitan	-0.0061*** (0.00)	0.0149 (0.02)	-0.0074*** (0.00)	0.0163 (0.02)
Constant	0.0391 (0.39)		0.0112 (0.39)	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The decomposition in Table 7 shows that women in different-sex marriages earn about 22% less than women in same-sex marriages. In the model that does not include age at first birth as a

variable (right hand side), about 5.88 percentage points of that difference can be explained by differences in endowments between the groups and 15.27 percentage points of that difference cannot be explained by differences in endowments, but rather differences in returns to certain characteristics. Notably, it seems that the difference in proportions of women in same-sex marriages and women in different-sex marriages that have a child explains about 4 percentage points or 18% of the gap, and different returns to having a child explain about 20% of the gap.

In contrast, once the age at first birth variable is entered into the model, the total explained difference increases to 7.20 percentage points and the total unexplained difference decreases to 13.86 percentage points. Notably, a portion of the decrease in this total unexplained difference comes from a decrease in the differential returns to having a child (the unexplained portion) of about 7%. In other words, age at first birth appears to account for about 7% of the differential returns to having a child between women in same-sex marriages and women in different-sex marriages. As demonstrated in the summary statistics, women in same-sex marriages, on average, have their first child at a later age. Furthermore, our preliminary regressions show that later age at first birth is associated with an increase in log of income. Therefore, it makes sense that the later mean age at first birth for women in same-sex marriages explains part of the smaller motherhood penalty that these women experience. As will be discussed in more depth later, an implication of this finding is that women in different-sex marriages (and all women in general) might be able to decrease the motherhood penalty by delaying motherhood. This finding is consistent with Miller (2011).

Additionally, this decomposition shows the degree to which differences in age at first birth explain the overall sexual orientation earnings gap. Specifically, differences in A1B "endowments" explain 0.6119 percentage points or ~3%, of the gap. The difference in returns to

age at first birth is not significant in explaining part of the gap because, as the preliminary regressions showed, women in same-sex marriages and women in different-sex marriages experience similar increases in wage as a result of delaying their age at first birth. While 3% of the gap is not a very large portion to be explained, it is not insignificant. Additionally, as a portion of the gap that can potentially be controlled, it is of greater practical significance than variables over which individuals have no control. Furthermore, if the sexual orientation earnings gap is decreased by women in different-sex marriages increasing their earnings to more closely match those of women in same-sex marriages, then this has implications for decreasing the overall gender wage gap as well.

Next, I examine decompositions of the wage gap between primary earning women in same-sex marriages, the group with the highest mean wage, and each other category of women (as Group 1 in the decomposition): Primary Earning in different-sex marriages, Secondary Earning Women in different-sex marriages, and Secondary Earning Women in same-sex marriages. Table 8 below shows the results from the estimation of Models (14) – (16)

Table 8 – Decompositions of Wage Gap Between Primary Earning Women in Same-Sex Marriages (SSMs) and All other Types

	(14) Primary Earning Women in DSM v Primary Earning Women in SSM Log Wage b/se		**(15)** Secondary Earning Women in DSM v Primary Earning Women in SSM Log Wage b/se		**(16)** Secondary Earning Women in SSM v Primary Earning Women in SSM Log Wage b/se	
Overall						
Group 1	10.7426***		10.6528***		10.8539***	
	(0.00)		(0.00)		(0.03)	
Primary Earning Women in SSM	10.9583***		10.9583***		10.9583***	
	(0.03)		(0.03)		(0.03)	
Difference	-0.2157***		-0.3055***		-0.1044*	
Total	(0.03)		(0.03)		(0.04)	
Explained	-0.0863***		-0.0919***		-0.0445**	
Total	(0.01)		(0.01)		(0.02)	
Unexplained	-0.1294***		-0.2136***		-0.0599	
	(0.03)		(0.03)		(0.04)	
Components	**Explained**	**Unexplained**	**Explained**	**Unexplained**	**Explained**	**Unexplained**
Child	-0.0087***	-0.0240	-0.0494***	-0.0339	0.0005	-0.0009
	(0.00)	(0.02)	(0.00)	(0.02)	(0.00)	(0.03)
Centered A1B	-0.0103***	-0.0061	-0.0052*	0.0014	-0.0032	-0.0063
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.01)
Education	-0.0301**	0.1168**	-0.0408***	0.1316**	-0.0328**	0.1226*
	(0.01)	(0.04)	(0.01)	(0.04)	(0.01)	(0.05)
Age	-0.0236	0.1028	0.1958***	-1.6032**	-0.0306	-2.6327
	(0.04)	(1.16)	(0.03)	(1.17)	(0.04)	(1.54)
Age^2	-0.0091	-0.1511	-0.1787	0.6690	0.0247	1.3364
	(0.04)	(0.60)	(0.03)	(0.61)	(0.04)	0.7943
White	-0.0038***	-0.1148	-0.0025	-0.1521*	-0.0032	-0.0617
	(0.00)	(0.07)	(0.00)	(0.07)	(0.00)	(0.09)
Hispanic	-0.0012	-0.0010	-0.0014	-0.0013	-0.0007	0.0203
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.02)
English	0.0011*	-0.0124	-0.0009	-0.0176	0.0007	-0.0424*
	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)	(0.02)
Metropolitan	-0.0006	-0.0146	-0.0086***	0.0039	0.0001	-0.0382
	(0.00)	(0.02)	(0.00)	(0.02)	(0.00)	(0.03)
Constant	-0.0250		0.7887		1.2431	
	(0.58)		(0.5815)		(0.77)	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Notably, the age at first birth variable explains a significant amount of the gaps between primary earning women in same-sex marriages and both groups of women in the different-sex marriages (~1.0353 percentage points or ~4% of the gap and 0.6119 percentage points or ~1.7%, respectively), but not the secondary earning women in same-sex marriages. This makes sense because the theory that women in same-sex marriages have kids later should apply to both the primary and secondary earners.

The relative wage premium for primary earning women in same-sex marriages over all other types is expected and consistent with (Schneebaum 2013). However, the more uncertain question is whether secondary earning women in same-sex marriages still experience a relative wage premium over women in different-sex marriages. Such a finding would indicate that the overall premium experienced by women in same-sex marriages cannot entirely be explained by the gains of primary earning women in same-sex marriages due to post-birth specialization that mirrors what is observed for men in different-sex marriages. The decomposition between secondary earning women in same-sex marriages and both types of women in different-sex marriages in Table 9 attempts to answer this question.

Table 9 – Decompositions of Wage Gap Between Primary Earning Women in Same-Sex Marriages (SSMs) and All other Types

	(17) Secondary Earning Women in SSM v Primary Earning Women in DSM Log Wage b/se		**(18)** Secondary Earning Women in SSM v Secondary Earning Women in DSM Log Wage b/se	
Overall				
Secondary Earning Woman in SSM	10.8539*** (0.03)		10.8539*** (0.03)	
Group 2 (Primary / Secondary Earning Women in DSM	10.7085*** (0.00)		10.6528*** (0.00)	
Difference	0.1454*** (0.03)		0.2011*** (0.03)	
Total Explained	0.0394** (0.01)		0.0448*** (0.01)	
Total Unexplained	0.1059*** (0.03)		0.1563*** (0.03)	
Components	**Explained**	**Unexplained**	**Explained**	**Unexplained**
Has Child	0.0272*** (0.00)	0.0327 (0.02)	0.0507*** (0.00)	0.0323 (0.01)
Centered A1B	0.0058** (0.00)	-0.0027 (0.01)	0.0010 (0.00)	-0.0066 (0.01)
College Degree	-0.0301 (0.01)	0.0053 (0.03)	0.0021 (0.01)	-0.0030 (0.03)
Age	-0.1214** (0.04)	-2.2696* (1.02)	-0.2216*** (0.03)	-1.0342** (1.04)
Age^2	0.1267*** (0.04)	1.2623* (0.53)	0.2010*** (0.03)	0.6690 (0.53)
White	0.0029*** (0.00)	0.0616 (0.06)	0.0019* (0.00)	0.0878 (0.06)
Hispanic	-0.0005 (0.00)	0.0217 (0.02)	-0.0003 (0.00)	0.0226 (0.02)
Speaks English	-0.0002 (0.00)	-0.0262 (0.01)	0.0016 (0.00)	-0.0246 (0.01)
Metropolitan	0.0029 (0.00)	-0.0313 (0.02)	0.0086*** (0.00)	-0.0422 (0.02)
Constant	1.05 (0.52)		0.4544 (0.52)	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 9 shows that secondary earning women in same-sex marriages appear to earn a relative wage premium over both secondary earning women in different-sex marriages and primary earning women in different-sex marriages (~22% and ~16%, respectively). The later age at first birth for secondary earning women in same-sex marriages is significant in explaining ~3.7% of the premium over primary earning women in different-sex marriages. The age at first birth is not, however, significant in explaining the wage difference between both sets of secondary earners. One potential explanation for this is that the secondary earners may be less impacted by the promotional benefits that delayed age at first birth might bring. This explanation is supported by the fact that age at first birth explains a larger percentage of the gap between both primary earners than any other comparison. However, the explanation is limited due to the endogenous nature of being a secondary or primary earner.

7 Discussion and Conclusions

This paper shows that delayed motherhood is a significant factor that contributes to the relative motherhood premium that women in same-sex marriages experience. Specifically, accounting for age at first birth reduces the unexplained difference in returns to motherhood by ~7%. Furthermore, the impact of delaying motherhood appears strongest for women who are the primary earners in their partnerships.

More broadly, the differential returns to motherhood attributable to later age at first birth among women in same-sex marriages also explain a significant, although small, portion of the overall wage premium experienced by women in same-sex marriages (~3%). Understanding that the greater prevalence of delayed age at first birth among women in same-sex marriages partially contributes to the motherhood premium that they experience has important implications for attempting to shrink the motherhood penalty experienced by women in different-sex marriages, and therefore both the sexual orientation earnings gap and gender wage gap as a whole. Given that all women experienced positive and similar returns to delaying age at first birth, increasing women's ability to have children later in life (i.e. through increasing accessibility of certain fertility treatments) and potentially providing financial incentives to do so may effectively shrink the gender wage gap. Continually shifting social norms towards later motherhood may also increase the prevalence of delayed motherhood.

Additionally, understanding why women in same-sex marriages might have a later average age at first birth has potentially important implications. As discussed in the Theory section, while having a child is an expensive endeavor for all individuals, women in same-sex marriages

generally experience greater upfront costs during conception.[10] These upfront costs are certainly not negligible; however, they are small relative to the costs incurred during a child's early years of life, and certainly compared to the K-12 years in total. Therefore, if women in same-sex marriages are delaying childbirth due to these costs, it is likely more a result of greater awareness or sense of the cost of bearing children (perhaps due to the immediacy of costs incurred and time discounting) than of the actual cost of conception.

Of course, there are limitations to this theory. First, it could be the case that women in same-sex marriages tend to be more financially responsible (or risk averse) than women in different-sex marriages. However, no evidence has been presented to support that notion. Alternatively, it might be the case that women in different-sex marriages are financially ready to have a child earlier in life because of their higher earning male partner. However, the average age at first birth is earlier for both primary and secondary earning women in different-sex marriages. To completely disprove this theory, total joint income for both sets of couples before having a child would need to be considered.

In general, though, if it is the case that a greater feeling for or awareness of the cost of having a child is responsible for delaying age at first birth for women in same-sex marriages, which is resulting in better career outcomes, then perhaps greater education and emphasis on the true cost of having children might help result in these favorable outcomes.

Another reason for the later average age at first birth for women in same-sex marriages might be that many of these women may decide early in adulthood that they will need some type of fertility treatment to conceive, and are therefore more open to a range of fertility treatments,

[10] Adoption also provides a greater upfront cost. Like partaking in conception-related fertility treatment, both women in different-sex marriages and women in same-sex marriages might adopt; however, rates are higher for women in same-sex marriages.

including the treatments that allow for later age at first birth. If this is the case, then increasing understanding and acceptance of such fertility treatments may be an important step in shrinking the motherhood penalty and, by extension, the gender wage gap.

Furthermore, although not explored in the main models for the aforementioned reasons, the number of hours worked is likely a major driver of the sexual orientation earnings gap. While conducting the Robustness Checks found in the Appendices, I perform a decomposition of the sexual orientation earnings gap where the outcome is the log of wage per hour. This decreases the sexual orientation wage gap to about 9%. While secondary earning women in same-sex marriages do appear to experience a motherhood penalty, the magnitude of this penalty is lower than that of secondary earning women in different-sex marriages and the penalty overall is insignificant. Additionally, in general, the number of hours worked for both types of mothers in same-sex marriages is greater than both types of mothers in different-sex marriages. This may suggest that at least part of the sexual orientation earnings gap can be explained by greater sharing of childcare responsibilities in same-sex marriages. The normative implication of this result is simple. To decrease the motherhood penalty for women in different-sex marriages, there ought to be greater sharing of childcare responsibilities between male and female partners. However, there could also be other reasons for the different work intensities such as changing preferences for work following the birth of a child.

Overall, there is still much work to be done to explain the earnings premium for women in same-sex marriages. Including factors that are potentially present in different data such as true measures of work experience might improve the explanatory power of similar models. Additionally, conducting a similar analysis of the sexual orientation earnings gap with panel

data, as others have done previously for studying the general motherhood penalty and benefits of delayed motherhood, would allow for a better measure of the causal effects of motherhood.

Appendices

A Summary Statistics for Occupational Categories

Table 10 – Summary Statistics by Occupational Category

	Women in Different-Sex Marriages	Women in Same-Sex Marriages	Sexuality Gap
Management, Business, Science, and Arts	.1079604	.1567339	-.0489063***
Business Operations Specialists	.0349678	.0417644	-.0067029
Financial Specialists	.0240508	.017832	.0062504
Computer and Mathematical	.0187184	.0300328	-.0112505***
Architecture and Engineering	.0059824	.0051619	.0008318
Technicians	.0111211	.0168935	-.0057373*
Life, Physical, and Social Science	.0223978	.0370718	-.0145858***
Community and Social Services	.0130507	.0211168	-.0080121**
Legal	.1142022	.105115	.0088153
Education, Training, and Library	.0189882	.0286251	-.0095315**
Arts, Design, Entertainment, Sports, and Media	.107587	.1018301	.005475
Healthcare Practitioners and Technicians	.0294972	.0309714	-.0013949
Healthcare Support	.0056505	.0197091	-.0140165***
Protective Service	.0290442	.0281558	.0009545
Food Preparation and Serving	.0212912	.0154857	.005882
Building and Grounds Cleaning and Maintenance	.0398956	.0333177	.0063357
Personal Care and Service	.0673491	.0666354	.0008876
Sales and Related	.1349713	.1046457	.0300897
Office and Administrative Support	.0027215	.008916	-.0061652***
Farming, Fishing, and Forestry	.0000553	0	.0000553
Construction	.001563	.0065697	-.0049889***
Extraction	.0086555	.0173627	-.0086658***
Installation, Maintenance, and Repair	.0145895	.0225246	-.0078754**
Production	.0163186	.026748	-.0103611***
Transportation and Material Moving	.0006916	.0028156	-.0021179***

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

B Robustness Checks

The first robustness check I perform is adding region and occupation controls to the decomposition of the wage gap between women in different-sex marriages and women in same-sex marriages. Doing so decreases the percent of the wage gap that can be explained by age at first birth to about 0.4 percentage points or ~2% of the total gap; however, it is still significant, as can be seen in Table 11.

Table 11 – Decomposition of Wage Gap Between Women in Different-Sex Marriages and Women in Same-Sex Marriages with Region and Occupation Controls

	With A1B Log Wage b/se		**Without A1B** Log Wage b/se	
Overall				
Women in Different-sex Marriages	10.7079*** (0.00)		10.7079*** (0.00)	
Women in Same-sex Marriages	10.9072*** (0.01)		10.9072*** (0.01)	
Difference	-0.1992*** (0.01)		-0.1992*** (0.01)	
Total Explained	-0.0844*** (0.01)		-0.0765*** (0.01)	
Total Unexplained	-0.1148*** (0.00)		-0.1227*** (0.00)	
Components	**Explained**	**Unexplained**	**Explained**	**Unexplained**
Has Child	-0.0335*** (0.00)	-0.0262*** (0.00)	-0.0295*** (0.00)	-0.0331*** (0.00)
Centered A1B	-0.0040*** (0.00)	-0.0003*** (0.00)	- -	- -
College Degree	-0.0131** (0.00)	0.0224*** (0.00)	-0.0138** (0.00)	0.0289*** (0.00)
Age	0.1276*** (0.02)	0.2479*** (0.00)	0.1287*** (0.02)	0.2538*** (0.00)
Age^2	-0.1155*** (0.02)	-0.2228*** (0.00)	-0.1147 (0.02)	-0.2185 (0.00)
White	-0.0007*** (0.00)	-0.0793*** (0.00)	-0.0009*** (0.00)	-0.0788*** (0.00)
Hispanic	-0.0004 (0.00)	-0.0018*** (0.00)	-0.0004 (0.00)	-0.0032*** (0.00)
Speaks English	-0.0028*** (0.00)	-0.0045*** (0.00)	-0.0028*** (0.00)	-0.0042*** (0.00)
Metropolitan	-0.0072*** (0.00)	0.0169*** (0.00)	-0.0080*** (0.00)	0.01173*** (0.00)
Region Fixed Effects	X X	X X	X X	X X
Occupation Fixed Effects	X X	X X	X X	X X
Constant		-0.0505 (.)		-0.0651 (.)

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Next, I check how using the log of hourly wage as the outcome changes the decomposition results of the wage gap between women in different-sex marriages and women in same-sex marriages.

Table 12 – Sexual Orientation Earnings Gap Decomposition with Log of Hourly Wage as Outcome

	Log of Hourly Wage b/se	
Overall		
Women in Different-sex Marriages	3.3150*** (0.00)	
Women in Same-sex Marriages	3.4031*** (0.02)	
Difference	-0.0881*** (0.02)	
Total Explained	-0.0299*** (0.01)	
Total Unexplained	-0.0582*** (0.01)	
Components	**Explained**	**Unexplained**
Child	-0.0081*** (0.00)	-0.0111 (0.01)
Centered A1B	-0.0056*** (0.00)	0.0034 (0.00)
College Degree	-0.0161** (0.01)	0.0418* (0.02)
Age	0.0928*** (0.01)	0.2261 (0.58)
Age^2	-0.0852*** (0.01)	-0.2261 0.2971
White	-0.0021*** (0.00)	-0.0435 (0.03)
Hispanic	-0.0010 (0.00)	-0.0143* (0.01)
Speaks English	0.0020*** (0.00)	0.0099 (0.01)
Metropolitan	-0.0066*** (0.00)	0.0062 (0.01)
Constant	-0.0255 (0.28)	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Changing the outcome variable to account for the number of hours worked (excluding the effect of greater working hours on increase wage/hour through mechanisms like promotions), appears to significantly reduce the sexual orientation earnings gap such that it is only about 9.21%. This suggests that a sizeable part of the difference in returns to motherhood comes from differing work intensities. As mentioned in the Discussion and Conclusions section of the paper, this may be a result of greater sharing of childcare responsibility. However, it is hard to say whether work intensity was greater for women in same-sex couples before having a child. The explanation may be different preferences for leisure between the groups. Additionally, it is unclear whether women with higher wages work more hours as a result of those higher wages, creating a selection bias.

Next, I check the OLS regression results when a set of indicator variables for the number of children is included. For both women in different-sex marriages and women in same-sex marriages, I report results with and without the inclusion of the centered age at first birth variable.

Table 13 – OLS Regression Results Including Indicator Variables for Number of Children

	Women in Same-Sex Marriages		**Women in Different-Sex Marriages**	
	Without A1B Log Wage b/se	With A1B Log Wage b/se	With A1B Log Wage b/se	Without A1B Log Wage b/se
1 Child	-0.06	-0.10	-0.07***	-0.05***
	(0.05)	(0.05)	(0.01)	(0.01)
2 Children	0.08	0.04	-0.11***	-0.10***
	(0.06)	(0.06)	(0.01)	(0.01)
3 Children	-0.01	-0.02	-0.20***	-0.21***
	(0.10)	(0.10)	(0.01)	(0.01)
4 Children	-0.08	-0.11	-0.31***	-0.33***
	(0.20)	(0.20)	(0.02)	(0.02)
5 Children	-0.10	-0.03	-0.33***	-0.35***
	(0.61)	(0.61)	(0.04)	(0.04)
College Degree	0.40***	0.39***	0.43***	0.45***
	(0.04)	(0.04)	(0.01)	(0.01)
6 Children	N/A	N/A	-0.67***	-0.70***
	N/A	N/A	(0.07)	(0.07)
7 Children	N/A	N/A	-0.23	-0.27*
	N/A	N/A	(0.13)	(0.13)
8 Children	N/A	N/A	-0.63***	-0.65***
	N/A	N/A	(0.18)	(0.18)
9 Children	N/A	N/A	-1.29***	-1.31***
	N/A	N/A	(0.24)	(0.24)
Age	0.08***	0.08***	0.09***	0.10***
	(0.02)	(0.02)	(0.00)	(0.00)
Age^2	-0.00***	-0.00***	-0.00***	-0.00***
	(0.00)	(0.00)	(0.00)	(0.00)
White	0.12*	0.11*	0.01*	0.02**
	(0.05)	(0.05)	(0.01)	(0.01)
Hispanic	-0.03	-0.03	-0.05***	-0.05***
	(0.06)	(0.06)	(0.01)	(0.01)
Speaks English	-0.00	-0.00	-0.03***	-0.03***
	(0.06)	(0.06)	(0.01)	(0.01)
Metropolitan	0.02	0.01	0.06***	0.06***
	(0.04)	(0.04)	(0.01)	(0.01)
Region FE	X	X	X	X
	X	X	X	X
Occupation FE	X	X	X	X
	X	X	X	X
Centered A1B	-	0.01*	0.01***	-
	-	(0.00)	(0.00)	-
Constant	9.01***	9.07***	8.70***	8.64***
	(0.43)	(0.43)	(0.10)	(0.10)
Observations	2,313	2,313	136,820	136,820
R Squared	0.25	0.25	0.24	0.24
DF_R	2274.00	2273.00	136775.00	136776.00
BIC	6145.93	6147.30	371958.43	372039.27

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Adding indicators for the number of children largely corroborates prior results. The indicators do not change the magnitude of the coefficient for age at first birth. Furthermore, the women in different-sex marriages are still the only ones to have a significant motherhood penalty (although differences in sample size may partly cause this). Lastly, it is worth noting that women in same-sex marriages do not have greater than 5 children, but women in different-sex marriages do have greater than 5 children in some instances, and there are relatively high magnitude negative coefficients on each of these indicators, which partially contributes to the greater overall motherhood penalty observed for women in different-sex marriages, although delayed age at first birth is still a significant contributor as the next decomposition shows.

Table 14 – Oaxaca Blinder Decomposition with Indicators for Number of Children

	Log of Wage	
Women in Different-sex Marriages	10.7079***	
	(0.00)	
Women in Same-sex Marriages	10.9072***	
	(0.01)	
Difference	-0.1992***	
	(0.01)	
Total Explained	-0.0874***	
	(0.01)	
Total Unexplained	-0.1118***	
	(0.00)	
Component	**Explained**	**Unexplained**
1 Child	-0.0054***	0.0049***
	(0.00)	(0.00)
2 Children	-0.0155***	-0.0187***
	(0.00)	(0.00)
3 Children	-0.0109***	-0.0065***
	(0.00)	(0.00)
4 Children	-0.0041***	-0.0017***
	(0.00)	(0.00)
5 Children	-0.0012***	-0.0003
	(0.00)	(0.00)
6 Children	-0009***	-0.0000***
	(0.00)	(0.00)
7 Children	-0.0001***	-0.0000***
	(0.00)	(0.00)
8 Children	-0.0001	-0.0000***
	(0.00)	(0.00)
9+ Children	-0.0002***	-0.0000***
	(0.00)	(0.00)
Centered Age at First Birth	-0.0025***	-0.0052***
	(0.00)	(0.00)
College Degree	-0.0132**	0.0259***
	(0.00)	(0.00)
Age	0.1369***	0.6225***
	(0.02)	(0.00)
Age^2	-0.1247***	-0.4133***
	(0.02)	(0.00)
White	-0.0008***	-0.0778***
	(0.00)	(0.00)
Hispanic	-0.0004	-0.0021***
	(0.00)	(0.00)
English	0.0028***	-0.004***
	(0.00)	(0.00)
Metropolitan	-0.0071***	0.0164***
	(0.00)	(0.00)
Region FE	X	X
Occupation FE	X	X
Constant	-0.2472	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The Oaxaca-Blinder decomposition with the set of indicator variables for the number of children still shows that different tendencies between groups for age at first birth can explain a significant (although smaller) 1.14% of the wage gap between women in different-sex marriages and women in same-sex marriages.

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