Sexual Orientation and Marriage

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ABSTRACT

Using the American Community Survey data 2012-2013, I study married and cohabiting same-sex couples. I show that gay couples exhibit more specialization and less similarity than lesbian couples, while marriage makes gay and lesbian couples more alike than cohabiting couples, in terms of larger earnings differences for lesbians, and more positive sorting by education for gays. Education does not increase the odds of marriage among same-sex couples, contrary to heterosexual couples; lesbians are instead similar to heterosexual couples in their education being negatively associated to the number of children.

Keywords: Gay, Lesbian, Heterosexual, Household Formation, Couple, Mate Selection, Same-Sex Marriage.

Orientación sexual y Matrimonio

RESUMEN

Utilizando los datos de la American Community Survey, 2012-2013, el presente trabajo estudia parejas del mismo sexo que están legalmente casadas o cohabitan. El estudio muestra que los miembros de las parejas gay exhiben una mayor especialización y son menos similares que en las parejas lesbianas, mientras que los matrimonios de parejas gais y lesbianas son más similares entre sí que las que cohabitan, en términos de mayores diferenciales de ingresos laborales entre las lesbianas, y más similitudes en niveles de educación entre gais. El nivel educativo no aumenta con la probabilidad de contraer matrimonio para parejas del mismo sexo, mientras que está positivamente relacionado para las parejas heterosexuales. Las parejas lesbianas son similares a las parejas heterosexuales por lo que refiere a la relación negativa entre su nivel educativo y el número de hijos.

Palabras clave: Gais, lesbianas, heterosexuales, matrimonio homosexual.

JEL Classification: D1, J1

1. INTRODUCTION

Recent and widespread phenomena across developed countries are the emergence of a sizable number of same-sex partnerships and the legalization of same-sex marriages:[1] these social and legal changes prompt the compelling question of whether and to what extent gay and lesbian household formation and marriage decisions are similar to those of heterosexual couples.

This paper explores the associations among demographic and socioeconomic attributes in gay and lesbian couples, disentangling for the first time the married from the cohabiting ones. Specifically, it investigates whether and how married or cohabiting gays and lesbians exhibit different correlations patterns in labor and non-labor attributes. It analyzes which individual characteristics are related to being legally married rather than cohabiting, and to the number of children, finally presenting the corresponding evidence for heterosexual married or cohabiting couples.

Using the American Community Survey data for 2012-2013, it is possible for the *very first time* in the US to have information on marriage among same-sex couples in a nationally representative sample with available information on both partners/spouses. The Census now allows to identify same-sex married couples instead of coding them as different-sex ones without flagging the imputation, as was the rule until 2012. The ACS sample also provides the largest and most recent nationally representative sample of individuals for whom detailed demographic and socioeconomic information is available.[2]

In labor and demographic economics, sexual orientation had become popular in studies of wage and employment discrimination since the late 1990s. This research has found that, on average, being gay is associated with lower earnings than their heterosexual counterparts, the opposite being true for lesbians (e.g., Black, Makar, Sanders, Taylor, 2003). More recently, other adult outcomes have also been analyzed by sexual orientation, such as intra-household bargaining power, financial decisions, homeownership and registered partnerships, with interesting differences arising by gender and type of couples (Badgett *et al.,* 2008; Carpenter and Gates, 2008; Jepsen and Jepsen, 2009; Negrusa and Oreffice, 2011; Oreffice, 2011).

However, extremely few papers have considered sexual orientation and the marriage market: on the one hand, the legalization of same-sex marriages is very recent (in the US the first state legalizing it was Massachusetts in 2004),

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[1] The US Supreme Court legalized same-sex marriage nationwide with its landmark ruling of June 26, 2015. The first country in the world to legalize it was the Netherlands (legalization effective in 2001).

[2] These data do not allow to identify single gays or lesbians; this limitation represents a lesser concern here, because this study applies to couples and matching.

while on the other, lack of data availability on actual same-sex marriages has severely limited research on the topic until 2013 at least, as far as the US are concerned. Indeed, the paucity of appropriate data has being recognized also at the international level as the main reason why research on assortative mating by sexual orientation has been rare so far (Verbakel and Kalmijn, 2014).

Existing research on gay and lesbian couple formation mainly focused on household specialization, measuring sorting on labor and non-labor characteristics among gay and lesbian *cohabiting* couples, possibly considering the role of children in the specialization differences across homosexual and heterosexual couples. Jepsen and Jepsen (2002, 2015) find positive assortative mating for non-labor and labor market traits across all types of couples, even though to a smaller extent for same-sex couples. They show that members of same-sex couples were less alike than those of heterosexual married or cohabiting couples in 1990, with Schwartz and Graf (2009) reporting that the least alike are gay cohabiting couples in both 1990 and 2000. Jepsen and Jepsen (2015) use earnings differences within a couple to find that gay couples are more similar than heterosexual married ones, lesbians or cohabiting heterosexual ones in the year 2000. Giddins *et al.* (2014) also focus on specialization and find that it decreases over time and it is not solely determined by the presence of children. Finally, Ciscato, Galichon, and Goussé (2014) document that specialization and positive sorting by age, race and education are much more relevant in different-sex than in same-sex cohabiting couples in California in 2008-2012.

To date and to the best of my knowledge, there is only research by Gates (2015) using Census data on same-sex couples that are actually married in the US: in a brief report, Gates (2015) describes the race, ethnicity, income, homeownership and children prevalence by marital status in the ACS 2013 in the US, whereas Verbakel and Kalmijn (2014) estimate assortative mating on age and education by marital status and sexual orientation in Dutch couples. Dillender (2014) and Trandafir (2015) consider the legalization of same-sex marriage across states to analyze differences in labor supply or heterosexual marriages *without* the microdata on exactly which same-sex couples in their samples are actually married.

However, neither of these strands of literature on gay and lesbian outcomes or couple formation examined the link between sexual orientation and marital outcomes, in spite of the importance of the landmark Supreme Court's ruling of June 26, 2015 and the earlier state laws legalizing same-sex marriages. The aim of this paper is to investigate how individual characteristics in gay and lesbian couples explain the choice of being legally married rather than cohabiting in 2012 and 2013 and how similar the demographic and socioeconomic characteristics of partners and spouses are by sexual orientation and marital

status. The empirical investigation focuses on household heads and their partners or spouses who are black or white, either married or cohabiting, where the head is aged 25-45, restricting the analysis to individuals who are not in school, not in a farm household or in the military, and for whom relationship to head, marital status and sex have not been imputed.

I find that the number of relevant determinants for marital status is larger for gays than for lesbians, and partners/spouses are more similar in lesbian than in gay couples. Married gay and lesbian couples are more similar to one another than those who cohabit except for age correlations, and they exhibit much less assortative mating (and more specialization) in labor attributes than cohabiting couples. Same-sex marriage seems to have the same implications along those dimensions as among heterosexual couples, although it does not seem to be driven by children.

The present study represents one step forward with respect to the existing literature, as it allows comparisons by sexual orientation and actual marital status, and with respect to marriage patterns in other countries, since it encompasses a variety of individual attributes and couple outcomes (i.e., Verbakel, Kalmijn, 2014). Specifically, the observed differences between married and cohabiting couples by sexual orientation seem to suggest that: 1) household specialization may be driven by marriage rather than the presence of children, especially for lesbians; 2) positive sorting in education increases with marriage, especially for gays; 3) education does not increase the likelihood of marriage in same-sex couples, and is not related to having children in gay couples. A comparison with Becker (1991)'s view that the disparities between homosexual unions and heterosexual marriages are due to the lack of difference in comparative advantage between partners, indicates that once these unions are married, differences by sexual orientation may become less relevant.

The paper is organized as follows. Section 2 describes the empirical specification and the data. Section 3 presents the empirical findings for gay and lesbian couples, married or cohabiting. Section 4 reports the corresponding evidence on different-sex couples, married or cohabiting. Section 5 concludes the paper.

2. EMPIRICAL SPECIFICATION AND DATA DESCRIPTION

Estimation is carried out on US Population Census data, specifically on the recent waves of the American Community Survey, of 2012, 2013. These cross-sectional data represent one-percent samples of the US population and allow to identify the sexual orientation of each couple and its marital status, in addition to providing detailed demographic and socioeconomic information at the household and individual level. Using the variable "relationship to household head", all individuals who are "household heads", "spouses" or "unmarried

partners" are extracted and then matched to their corresponding mate on the household identification code "serial", creating a single observation for each couple. As such, it is possible to *distinguish* individuals who cohabit from those who are married, where an unmarried partner is defined to "share living quarters and have a close personal relationship with the householder" (2000 Census Documentation B14 and B63).

Lesbians and gays can be identified in the US Census *only* if they are in a relationship, using the same procedure described above, with the additional restriction that both the head and the unmarried partner or spouse must be of the same gender. Furthermore, since 2012 the Census allows the identification of married homosexual couples: prior to 2012, married couples were recoded as unmarried partners by the Census Bureau, without including any data flag to identify those observations for which the change had been performed. In 2012, however, while still recoding married couples, the Census included a data flag identifying the same-sex couples that had been recoded. In 2013, for the first time, same-sex married couples were not recoded as unmarried partner but included in the married category: as such, their marital status is married and a new variable "ssmc" reports whether the head and the spouse are a same-sex married couple (the year of marriage between head and spouse coincide in 100% of the sample).

My sample focuses on men and women who are black or white, and the household head is between 25 and 45 years of age, has at least the eighth grade, and the total household income is above the second percentile.[3] All individuals with imputed values for sex, marital status or relationship to household head are excluded (about 1.92% of the observations are dropped): this procedure is crucial to prevent heterosexual couples from being recorded as homosexuals, e.g., Black *et al.,* 2007; Oreffice, 2011). Those that are in the military, in farm households, or still in school are also excluded.

The following set of individual characteristics are considered for each partner or spouse: age, educational attainment, race (black or white), ethnicity (Hispanic or not), a dummy variable for whether US-born, earnings, unearned income, wages, number of children, and field of degree for the college graduates. Differences within the couple in age, education and income are also considered. Two indicators of being married are created: one compares being married as first marriage to the status of never married cohabiting, while a different dummy variable considers being married versus being unmarried cohabiting irrespective of previous marital stata, to better ascertain possible differences in marital status among gay, lesbian, and heterosexual couples.

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[3] 92% of gay and lesbian couples have individuals who are either black or white.

I present correlations to explore the associations between partners' and spouses' characteristics by type of couple, and regressions to examine the role of these attributes in explaining marital status (married vs. cohabitation) by type of couple. The regressions are run with state and year fixed effects, using heteroskedasticity robust standard errors, and weights are employed to make the sample representative of the US population.

Table 1
Descriptive statistics: married and unmarried

	Gay Couples		Lesbian Couples	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Age head	36.96	5.97	35.97	5.97
Age partner	37.80	8.66	36.90	8.38
Years of education head	14.71	1.98	14.37	2.09
Years of education partner	14.28	2.23	14.15	2.33
White head	.93	.25	.91	.29
White partner	.93	.25	.89	.31
Hispanic head	.11	.32	.10	.29
Hispanic partner	.12	.33	.11	.31
US born head	.92	.27	.95	.21
US born partner	.90	.30	.95	.22
Earnings head	71,590.08	75,476.24	48,915.82	56,446.22
Earnings partner	52,152.00	59,529.90	39,144.34	39,383.21
Unearned income head	2,071.40	10,545.19	2,481.48	14,021.27
Unearned income partner	2,157.68	13,114.80	1,836.41	9,312.40
Hours head	2,045.21	790.65	1,875.13	784.55
Hours partner	1,853.44	821.64	1,718.83	841.30
Log wage head	3.23	.75	2.97	.67
Log wage partner	3.04	.71	2.89	.69
Household income	131,015	107,189	95,138	78,525
Number of children head	.24	.73	.64	1.04
Number of children partner	.12	.55	.28	.75
Married	.15	.36	.19	.39
Age difference	-.84	6.84	-.92	6.69
Years of education difference	.43	2.19	.22	2.11
Earnings difference	19,438.08	97,482.80	9,771.48	91,027.72
Unearned income difference	-86.28	16,612.70	645.07	16,636.26
Degree field head (N=733/720)	1.93	.80	1.85	.73
Degree field partner (N=599/647)	1.80	.78	1.78	.75
No. of observations	1,285		1,462	

Source: U.S. Census American Community Survey data 2012-2013.

Table 1 presents the descriptive statistics for gay and lesbian couples, either married or cohabiting. 15% of gay couples are married, while 19% of lesbian couples are. Gays are slightly younger, less educated, more White, and foreign-born than lesbians; their earnings are higher and unearned incomes lower. As to age, education and income differences within couples, on average gay ones are more similar in age and unearned income than lesbians, but much less similar in

earned incomes and years of education. This latter finding is consistent with Jepsen and Jepsen (2015) and Schwartz and Graf (2009) reporting more household specialization in gay than lesbian couples.

Table 2
Descriptive statistics: married

	Gay Couples		Lesbian Couples	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Age head	38.21	5.70	36.66	5.32
Age partner	39.14	8.46	38.61	7.34
Years of education head	14.45	2.06	14.61	2.16
Years of education partner	14.15	2.62	14.40	2.78
White head	.94	.25	.89	.32
White partner	.91	.28	.89	.31
Hispanic head	.19	.39	.09	.29
Hispanic partner	.20	.40	.10	.31
US born head	.87	.34	.94	.24
US born partner	.83	.38	.92	.27
Earnings head	76,813.77	83,829.13	51,669.26	62,770.17
Earnings partner	55,444.93	68,482.30	45,359.73	46,335.40
Unearned income head	3,436.56	14,642.79	4,492.65	24,451.35
Unearned income partner	2,587.87	20,615.06	3,234.70	18,591.48
Hours head	1,998.87	850.43	1,819.78	877.21
Hours partner	1,822.23	884.85	1,733.69	881.17
Log-wage head	3.29	.81	3.06	.72
Log-wage partner	3.09	.72	3.07	.74
Household income	143,921.00	110,129.20	107,179.70	88,409.97
Number of children head	.82	1.22	.95	1.17
Number of children partner	.75	1.21	1.08	1.24
Married	1	0	1	0
Age difference	-.93	8.39	-1.96	5.91
Years of education difference	.31	2.33	.21	2.61
Earnings difference	21,368.84	105,404.60	6,309.53	76,360.80
Unearned income difference	848.68	25,394.81	1,257.95	30,944.43
Degree field head (N=125/168)	1.87	.73	1.88	.77
Degree field partner (N=111/157)	2.01	.83	1.75	.71
No. of observations	231		309	

Source: U.S. Census American Community Survey data 2012-2013.

Table 2 presents similar findings for the subsample of married same-sex couples, where we can also see their low number: 231 married gay couples and 309 married lesbian couples.

The bottom of Table 2 provides a similar picture but with a wider age gap and earnings gap for gays than for lesbians, while the education gap for married gays is smaller than for cohabiting ones and closer, although still higher, to the lesbians' gap. This evidence suggests that those gay couples who got married are more specialized and more similar to heterosexual married than the

cohabiting ones, and that the differences between gays and lesbians are not reversed by marital status. 62% of married gay couples have no children, while the figure is 44% for married lesbian couples.

3. FINDINGS ON SAME-SEX COUPLES: GAY AND LESBIAN, MARRIED OR COHABITING

3.1. Correlations of non-labor and labor attributes of gay and lesbian spouses or partners

Tables 3a-3b present correlation matrices of non-labor characteristics in gay and lesbian couples, respectively, followed by the corresponding ones for labor characteristics (Tables 3c-3d). Same-sex couples exhibit significant positive assortative mating in all the non-labor dimensions: by age, education, race, ethnicity, US-birth, with stronger sorting by education and race in lesbians than gay couples. In labor characteristics instead, sorting is somewhat weaker, with significant correlations in earnings, wages, and hours worked only for lesbians, indicating that in lesbian couples, partners/spouses are more similar than in gay couples, and that household specialization may still be stronger for gays than lesbians.

Table 3a

Correlation matrix among non-labor attributes for gay couples: married and unmarried

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.62***								
	(.00)								
Years of education head	.06**	-.01							
	(.04)	(.67)							
Years of education partner	.02	.03	.46***						
	(.56)	(.33)	(.00)						
White head	.04	.04	.11***	.07**					
	(.18)	(.13)	(.00)	(.02)					
White partner	.03	.01	.09***	.03	.64***				
	(.22)	(.70)	(.00)	(.27)	(.00)				
Hispanic head	-.02	-.05*	-.12***	-.17***	.03	.02			
	(.48)	(.09)	(.00)	(.00)	(.22)	(.48)			
Hispanic partner	.01	-.03	-.11***	-.17***	.05*	.05*	.45***		
	(.65)	(.26)	(.00)	(.00)	(.09)	(.10)	(.00)		
US born head	-.05*	.01	.00	.05*	-.02	-.03	-.27***	-.26***	
	(.06)	(.79)	(.98)	(.09)	(.49)	(.25)	(.00)	(.00)	
US born partner	-.00	.01	.02	.08***	(.03	-.02	-.27***	-.39***	.40***
	(.91)	(.81)	(.55)	(.00)	(.37)	(.40)	(.00)	(.00)	(.00)
No. of observations				1,285					

*P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.*

Source: U.S. Census American Community Survey data 2012-2013.

Table 3b
Correlation matrix among non-labor attributes for lesbian couples:
married and unmarried

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.61***								
	(.00)								
Years of education head	.17***	.13***							
	(.00)	(.00)							
Years of education partner	.11***	.12***	.55***						
	(.00)	(.00)	(.00)						
White head	.11***	.11***	.13***	.13***					
	(.00)	(.00)	(.00)	(.00)					
White partner	.12***	.11***	.17***	.14***	.75***				
	(.00)	(.00)	(.00)	(.00)	(.00)				
Hispanic head	.05*	-.01*	-.07***	-.12***	.07**	.07**			
	(.05)	(.71)	(.00)	(.00)	(.01)	(.01)			
Hispanic partner	-.00	-.00	-.10***	-.11***	.05**	.10***	.51***		
	(.93)	(.88)	(.00)	(.00)	(.04)	(.00)	(.00)		
US born head	-.04*	.01	-.02	.03	.05*	.05*	-.19***	-.16***	
	(.09)	(.64)	(.49)	(.26)	(.05)	(.08)	(.00)	(.00)	
US born partner	-.03	-.01	-.05*	.01	.06**	.08**	-.11***	-.14***	.29***
	(.33)	(.72)	(.07)	(.85)	(.02)	(.00)	(.00)	(.00)	(.00)
No. of observations				1,462					

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 3c
Correlation matrix among labor attributes for gay couples: married and unmarried

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.18***						
	(.00)						
Unearned income head	-.00	.01					
	(.88)	(.63)					
Unearned income partner	.07***	.06**	.03				
	(.01)	(.03)	(.35)				
Hours head	.42***	.02	-.14***	-.04			
	(.00)	(.56)	(.00)	(.12)			
Hours partner	-.04	.46***	-.09***	-.17***	.04		
	(.13)	(.00)	(.00)	(.00)	(.13)		
Log_wage head	.78***	.23***	.06*	.08***	.18***	.01	
	(.00)	(.00)	(.05)	(.00)	(.00)	(.85)	
Log_wage partner	.31***	.76***	.04	.12***	.09***	.22**	.38***
	(.00)	(.00)	(.19)	(.00)	(.00)	(.00)	(.00)
No. of observations			1,285				

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 3d

Correlation matrix among labor attributes for lesbian couples: married and unmarried

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.23***						
	(.00)						
Unearned income head	.02	.04					
	(.46)	(.18)					
Unearned income partner	-.03	-.05**	.03				
	(.33)	(.04)	(.34)				
Hours head	.43***	.04	-.13***	-.08***			
	(.00)	(.12)	(.00)	(.00)			
Hours partner	.14***	.52***	-.08***	-.15***	.14***		
	(.00)	(.00)	(.00)	(.00)	(.00)		
Log_wage head	.70***	.27***	.08***	-.01	.16***	.10***	
	(.00)	(.00)	(.00)	(.77)	(.00)	(.00)	
Log_wage partner	.23***	.73***	.09***	-.02	.02	.17***	.35***
	(.00)	(.00)	(.00)	(.45)	(.52)	(.00)	(.00)
No. of observations				1,462			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Tables 4a-4d report the same information for the subsample of couples who do not have children and moved to the current dwelling unit not more than two years before the interview year, in an attempt to capture recently formed couples. Interestingly, these correlations show that recent couples are more sorted along the education dimension and less by race and ethnicity than the overall sample, with still higher correlations for lesbians than for gays. As to earnings, recent lesbian couples exhibit more assortativeness than the overall sample, while recent gay couples exhibit less, the same pattern can be observed for hours worked. This stark difference may indicate that in recent couples assortative mating is definitely increasing along the socioeconomic dimension for lesbian couples, whereas among gay couples household specialization becomes more relevant; it is not possible yet to distinguish a selection explanation (couples who are still together after many years are the less sorted and more specialized ones) from a cohort explanation (nowadays in gay couples specialization matters more and in lesbian couples less).

Given these differences in sorting according to types of characteristics, it is worth moving one step forward and restricting the analysis to only married same-sex couples: Tables 5a-5d illustrate that married gay and lesbian couples are more similar to one another than those who cohabit except for age, for which now the gay correlation is half than among lesbians. In particular, it is interesting to see that married same-sex couples strongly sort by age, education, race, ethnicity, US birth, but not at all by earnings or other labor market attributes. Comparing these estimates to the evidence on the whole sample of

couples, it seems that married gay and lesbian couples exhibit less assortative mating in labor attributes than cohabiting gay couples, with married gays being much more heterogeneous in age.

Table 4a
Correlation matrix among non-labor attributes for gay couples: no children and moved in ≤ 2 years ago, married and unmarried

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.62***								
	(.00)								
Years of education head	-.05	-.14***							
	(.27)	(.00)							
Years of education partner	-.09*	.02	.43***						
	(.06)	(.71)	(.00)						
White head	.05	.09*	.00	.01					
	(.27)	(.07)	(.95)	(.78)					
White partner	-.03	-.05	-.02	-.05	.44***				
	(.59)	(.36)	(.75)	(.30)	(.00)				
Hispanic head	-.10	-.08	-.11**	-.22***	-.02	.04			
	(.05)	(.13)	(.03)	(.00)	(.75)	(.43)			
Hispanic partner	-.03	-.07	-.10*	-.11**	.01	.04	.32***		
	(.61)	(.16)	(.06)	(.03)	(.92)	(.41)	(.00)		
US born head	-.05	-.01	-.06	.03	-.03	-.04	-.16***	-.19***	
	(.33)	(.80)	(.24)	(.60)	(.51)	(.46)	(.00)	(.00)	
US born partner	-.02	.01	.04	.06	.10**	-.04	-.19***	-.33***	.40***
	(.62)	(.79)	(.40)	(.21)	(.05)	(.47)	(.00)	(.00)	(.00)
No. of observations					402				

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 4b
Correlation matrix among non-labor attributes for lesbian couples: no children and moved in ≤ 2 years ago, married and unmarried

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.58***								
	(.00)								
Years of education head	.08	.10*							
	(.15)	(.07)							
Years of education partner	.01	.09	.61***						
	(.91)	(.13)	(.00)						
White head	.09	.09**	.23***	.21***					
	(.13)	(.13)	(.00)	(.00)					
White partner	.12**	.09	.22***	.16***	.64***				
	(.03)	(.11)	(.00)	(.01)	(.00)				
Hispanic head	.08*	-.05	-.04	-.14***	.06	.11*			
	(.14)	(.38)	(.49)	(.01)	(.30)	(.05)			
Hispanic partner	-.07	-.01	-.02	-.03	-.01	.13**	.32***		
	(.23)	(.80)	(.76)	(.58)	(.90)	(.02)	(.00)		

Table 4b *(continue)*
Correlation matrix among non-labor attributes for lesbian couples: no children and moved in ≤ 2 years ago, married and unmarried

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
US born head	-.11[*]	.06	.05	.13[**]	-.05	-.06	-.33[***]	-.21[***]	
	(.06)	(.28)	(.42)	(.02)	(.35)	(.27)	(.00)	(.00)	
US born partner	-.07	.01	-.09	-.00	-.06	.10[*]	-.09	-.09	.37[***]
	(.21)	(.82)	(.10)	(.97)	(.28)	(.07)	(.13)	(.10)	(.00)
No. of observations					312				

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 4c
Correlation matrix among labor attributes for gay couples: no children and moved in ≤ 2 years ago, married and unmarried

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.12[**]						
	(.02)						
Unearned income head	.08	.22[***]					
	(.13)	(.00)					
Unearned income partner	.01	-.08[*]	.18[***]				
	(.82)	(.09)	(.00)				
Hours head	.41[***]	-.02[**]	-.39[***]	-.10[**]			
	(.00)	(.70)	(.00)	(.04)			
Hours partner	.02	.50[***]	-.12[**]	-.26[***]	.08		
	(.65)	(.00)	(.01)	(.00)	(.11)		
Log_wage head	.81[***]	.28[***]	.19[***]	.13[**]	.18[***]	.07	
	(.00)	(.00)	(.00)	(.01)	(.00)	(.18)	
Log_wage partner	.24[***]	.75[***]	.05	.02	.11[**]	.21[***]	.36[***]
	(.00)	(.00)	(.33)	(.65)	(.04)	(.00)	(.00)
No. of observations				402			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 4d
Correlation matrix among labor attributes for lesbian couples: no children and moved in ≤ 2 years ago, married and unmarried

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.35[***]						
	(.00)						
Unearned income head	-.04	-.04					
	(.46)	(.43)					

Table 4d *(continue)*
Correlation matrix among labor attributes for lesbian couples: no children and moved in
≤ 2 years ago, married and unmarried

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Unearned income partner	-.02	-.08	.02				
	(.73)	(.16)	(.69)				
Hours head	.52***	.12**	-.14**	-.07			
	(.00)	(.04)	(.01)	(.19)			
Hours partner	.17***	.56***	-.08	-.16***	.24***		
	(.00)	(.00)	(.19)	(.01)	(.00)		
Log_wage head	.84***	.30***	.05	-.03	.13**	.01	
	(.00)	(.00)	(.40)	(.56)	(.02)	(.90)	
Log_wage partner	.32***	.76***	-.00	-.05	.03	.09	.38***
	(.00)	(.00)	(.94)	(.42)	(.60)	(.13)	(.00)
No. of observations				312			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

A distinctive feature arising from the above analysis is the fact that marriage is associated to higher earnings differences and more specialization also in same-sex couples, which is exactly what is traditionally found when comparing heterosexual married to cohabiting households. The above new evidence represents an important finding documenting for the first time that same-sex household behavior is indeed similar to different-sex one: marriage seems to have the same implications along these dimensions as it does among heterosexual couples, that is, less similarity in labor attributes and more positive sorting in education. So far this had been documented by sexual orientation, by comparing only *cohabiting* same-sex couples to married different-sex ones, as in Jepsen and Jepsen (2015) and Alden *et al.* (2015), the latter in Sweden. This new evidence represents a step forward in our understanding of same-sex couples and marriage. It also shows that in the US marriage motives and trends by sexual orientation may be significantly different from the Netherlands: Verbakel and Kalmijn (2014) find that partnership status is not significantly associated to different mate selection in same-sex couples by age and education, whereas the above evidence shows it does in the US.

Table 5a
Correlation matrix among non-labor attributes for gay couples: married

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.34***								
	(.00)								
Years of education head	.01	.00							
	(.90)	(.99)							

Table 5a *(continue)*

Correlation matrix among non-labor attributes for gay couples: married

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Years of education partner	.07	.00	.52***						
	(.28)	(.95)	(.00)						
White head	-.07	-.12*	.13*	.08					
	(.32)	(.07)	(.05)	(.25)					
White partner	.08	-.04	.10	.05	.75***				
	(.24)	(.57)	(.11)	(.46)	(.00)				
Hispanic head	-.01	-.05	-.27***	-.36***	-.04	-.09			
	(.89)	(.42)	(.00)	(.00)	(.59)	(.18)			
Hispanic partner	-.03	-.12*	-.21***	-.34***	-.02	.02	.65***		
	(.68)	(.07)	(.00)	(.00)	(.72)	(.77)	(.00)		
US born head	-.07	.05	.03	.19***	.03	-.01	-.33***	-.27***	
	(.32)	(.42)	(.60)	(.00)	(.67)	(.92)	(.00)	(.00)	
US born partner	.06	-.01	.03	.24***	.08	.06	-.39***	-.41	.43***
	(.40)	(.86)	(.61)	(.00)	(.24)	(.37)	(.00)	(.00)	(.00)
No. of observations					231				

*P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.*

Source: U.S. Census American Community Survey data 2012-2013.

Table 5b

Correlation matrix among non-labor attributes for lesbian couples: married

	Age head	Age partner	Years of education head	Years of education partner	White head	White partner	Hispanic head	Hispanic partner	US born head
Age partner	.61***								
	(.00)								
Years of education head	.06	.06							
	(.26)	(.26)							
Years of education partner	-.01	.07	.46***						
	(.88)	(.23)	(.00)						
White head	.03	.12**	.13**	.11*					
	(.62)	(.03)	(.02)	(.06)					
White partner	.07	.09*	.16***	.12**	.75***				
	(.20)	(.10)	(.00)	(.03)	(.00)				
Hispanic head	.17***	.07	-.16***	-.21***	.03	.07			
	(.00)	(.23)	(.01)	(.00)	(.62)	(.23)			
Hispanic partner	.15***	.04	-.12**	-.23***	-.00	.08	.66***		
	(.01)	(.47)	(.03)	(.00)	(.98)	(.18)	(.00)		
US born head	-.02	.07	.22***	.17***	.10*	.11*	-.29***	-.23***	
	(.80)	(.19)	(.00)	(.00)	(.09)	(.06)	(.00)	(.00)	
US born partner	.01	.04	.11**	.16***	.02	-.02	-.26***	-.19***	.48***
	(.88)	(.46)	(.05)	(.01)	(.76)	(.67)	(.00)	(.00)	(.00)
No. of observations					309				

*P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.*

Source: U.S. Census American Community Survey data 2012-2013.

Table 5c

Correlation matrix among labor attributes for gay couples: married

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.05						
	(.42)						
Unearned income head	-.09	.00					
	(.16)	(.94)					
Unearned income partner	-.07	-.02	-.01				
	(.30)	(.80)	(.89)				
Hours head	.40***	-.01	-.14**	-.12*			
	(.00)	(.86)	(.03)	(.07)			
Hours partner	-.13**	.48***	-.02	-.12*	.03		
	(.04)	(.00)	(.72)	(.06)	(.70)		
Log_wage head	.80***	.12*	-.01	-.03	.14**	-.06	
	(.00)	(.09)	(.88)	(.63)	(.04)	(.42)	
Log_wage partner	.24***	.73***	.04	.06	-.05	.18**	.29***
	(.00)	(.00)	(.58)	(.42)	(.46)	(.01)	(.00)
No. of observations				231			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Table 5d

Correlation matrix among labor attributes for lesbian couples: married

	Earnings head	Earnings partner	Unearned income head	Unearned income partner	Hours head	Hours partner	Log_wage head
Earnings partner	.04						
	(.44)						
Unearned income head	.16***	.10*					
	(.01)	(.07)					
Unearned income partner	-.01	-.06	-.02				
	(.80)	(.26)	(.79)				
Hours head	.48***	-.01	.01	-.09			
	(.00)	(.92)	(.81)	(.12)			
Hours partner	-.08	.48***	-.05	-.01	.01		
	(.14)	(.00)	(.37)	(.80)	(.87)		
Log_wage head	.65***	.06	.17***	.01	.19***	-.15**	
	(.00)	(.35)	(.01)	(.85)	(.00)	(.02)	
Log_wage partner	.11*	.65***	.13**	-.12*	.05	-.02	.21***
	(.09)	(.00)	(.04)	(.06)	(.45)	(.73)	(.00)
No. of observations				309			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

3.2. Marriage determinants in gay and lesbian couples

Table 6 presents least squares regressions of marital status (1 if being married, 0 if unmarried) on heads' and partners' individual (non-labor) characteristics and their interaction, along with state and year fixed effects,

estimated separately by gays and lesbian couples (linear probability model). Two specifications are presented for each regression and type of couple: a standard one, and an augmented one that also controls for the heads' and partners' earnings and their interaction. Each of these specifications is presented for two different dependent variables: in columns (1)-(4), the dependent variable includes only married in their first marriage or never married individuals, whereas in columns (5)-(8) the dependent variable simply considers who is currently married rather than cohabiting, irrespective of previous marriages (78% of married gay couples are in their first marriage, while 69% of lesbians are). Using the more stringent definition of marriage, we can see that being more educated and white make it *less* likely for a gay couple to be married rather than cohabiting, whereas being older and Hispanic increase the marriage odds. Among those who may have been previously married, only being older or having a black partner increases the odds of marriage in a gay couple.

Table 6
LS regression of being married on partners' characteristics and interactions

	Married first marriage vs cohabiting never married				Married vs cohabiting, irrespective of previous marriages			
	Gay couples		Lesbian couples		Gay couples		Lesbian couples	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age head	.018**	.018**	.022**	.021**	.026***	.026***	.012	.013*
	(.007)	(.008)	(.009)	(.010)	(.007)	(.007)	(.008)	(.007)
Age partner	.017**	.017**	.030***	.029***	.026***	.026***	.019**	.019**
	(.008)	(.007)	(.010)	(.010)	(.008)	(.008)	(.008)	(.008)
Age head interaction	-.000**	-.000**	-.001**	-.001**	-.001***	-.001***	-.000*	-.000*
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
Years of education head	-.098**	-.099**	-.013	-.017	-.039	-.041	-.009	-.013
	(.040)	(.040)	(.043)	(.043)	(.031)	(.031)	(.033)	(.033)
Years of education partner	-.096**	-.094**	-.013	-.018	-.032	-.033	-.010	-.014
	(.042)	(.042)	(.042)	(.041)	(.032)	(.032)	(.032)	(.032)
Years of education interaction	.007**	.007**	.001	.001	.002	.003	.001	.001
	(.003)	(.003)	(.003)	(.003)	(.002)	(.002)	(.002)	(.002)
White head	-.088	-.085	-.198**	-.194**	.002	.000	-.122*	-.121*
	(.101)	(.101)	(.080)	(.080)	(.098)	(.098)	(.067)	(.067)
White partner	-.091	-.089	.318**	.307**	-.167**	-.166**	.141	.133
	(.075)	(.075)	(.130)	(.131)	(.075)	(.075)	(.102)	(.102)
White interaction	.055	.054	-.080	-.075	.136	.134	-.039	-.030
	(.114)	(.114)	(.144)	(.145)	(.109)	(.109)	(.113)	(.113)
Hispanic head	.070	.071	.026	.024	.047	.049	-.028	-.032
	(.064)	(.064)	(.078)	(.077)	(.054)	(.054)	(.049)	(.049)
Hispanic partner	.038	.038	-.145***	-.138***	.005	.003	-.093**	-.088*
	(.044)	(.044)	(.050)	(.052)	(.040)	(.041)	(.044)	(.046)
Hispanic interaction	.012	.012	.194	.190	.116	.117	.181**	.178**
	(.098)	(.098)	(.121)	(.121)	(.088)	(.088)	(.080)	(.081)
Earnings head		.000		.000		.000		.000
		(.000)		(.000)		(.000)		(.000)
Earnings partner		-.000		.000		.000		.001*
		(.000)		(.000)		(.000)		(.000)

Table 6 *(continue)*

LS regression of being married on partners' characteristics and interactions

	Married first marriage vs cohabiting never married				Married vs cohabiting, irrespective of previous marriages			
	Gay couples		Lesbian couples		Gay couples		Lesbian couples	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Earnings Interaction		.000		.000[**]		-.000		.000[***]
		(000)		(000)		(000)		(000)
R2	.242	.242	.321	.326	.215	.217	.288	.295
N	1,061		936		1,285		1,462	

Regressions include state and year fixed effects.

Observations have been weighted by using person weights.

Heteroskedasticity robust standard errors are reported in parentheses.

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Turning to the empirical analysis on lesbian couples and the determinants of their marital status, we see that the role of education is marginal in explaining the marital status of couple in their first marriage, in spite of white, Hispanic and older playing a significant role, together with the earnings interaction between partners/spouses. Having a white partner is positively associated to being married for lesbians, whereas gay couples exhibited a negative association between this characteristic and marriage. With respect to the looser definition of marriage, we can see that the roles of age of head and the partner being white are no longer significant in explaining which couples get married rather than cohabit.

Table 7 presents the same type of regressions when the dependent variable is (the head's) number of children for couples that are either in their first marriage or never married: this restriction helps ensuring that these children are the couples' and not the result of previous heterosexual marriages of one of the spouses. For gay couples, it is only being older, black and less Hispanic that increases the number of children, with education not playing any role in this decision. For lesbians, though, education plays a significant role (negatively), and being older as well, but no other variable is significant. Comparing these patterns to the above findings on the odds of marriage, we note that the evidence does not seem to indicate that marriage in a same-sex couple has the same determinants as having children or that they only get married in order to have children; that is, the characteristics of couple members explain the two household decisions differently. In particular, for lesbians different characteristics seem to matter for marriage than for having children (education for the latter, earnings interaction for the former).

Table 7

LS regression of number of children on partners' characteristics and interactions: married first marriage or never married

| | Married first marriage vs cohabiting never married | | | |
| | Gay couples | | Lesbian couples | |
	(1)	(2)	(3)	(4)
Age head	.036***	.037***	.057**	.061**
	(.013)	(.013)	(.027)	(.026)
Age partner	.019	.020	.044	.045
	(.015)	(.015)	(.030)	(.029)
Age head interaction	-.001*	-.001*	-.001	-.001
	(.000)	(.000)	(.001)	(.001)
Years of education head	-.048	-.058	-.245**	-.246**
	(.083)	(.084)	(.102)	(.102)
Years of education partner	-.065	-.075	-.211**	-.215**
	(.085)	(.087)	(.097)	(.097)
Years of education interaction	.002	.003	.013**	.014**
	(.006)	(.006)	(.007)	(.007)
White head	-.400*	-.406*	-.326	-.330
	(.219)	(.218)	(.340)	(.340)
White partner	-.733***	-.734***	-.160	-.163
	(.196)	(.196)	(.325)	(.327)
White interaction	.694***	.697***	.054	.069
	(.234)	(.233)	(.433)	(.434)
Hispanic head	.101	.108	-.014	-.021
	(.111)	(.111)	(.182)	(.182)
Hispanic partner	-.134**	-.136**	-.090	-.077
	(.058)	(.059)	(.150)	(.152)
Hispanic interaction	.239	.234	.560**	.590
	(.196)	(.197)	(.282)	(.283)
Earnings head		.000		.000
		(.000)		(.001)
Earnings partner		.000		.001
		(.000)		(.001)
Earnings interaction		-.000**		.000
		(000)		(000)
R2	.125	.128	.104	.107
N		1,285		1,462

Regressions include state and year fixed effects.

Observations have been weighted by using person weights.

Heteroskedasticity robust standard errors are reported in parentheses.

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

As to the role of education, while a negative relationship between children and education is common among heterosexual couples, the negative association between education and first marriage among gays is striking: in the population overall, the correlation is positive (Lundberg and Pollak, 2014). This may suggest that the new availability of marriage for same-sex couples makes them behave differently from couples who have being having access to marriage for thousands of years, or that gays and lesbians see marriage differently from heterosexuals.

4. FINDINGS ON DIFFERENT-SEX COUPLES: MARRIED OR COHABITING

This study has documented the matching of same-sex couples by gender and marital status, and the main determinants of marriage among them. To better understand this empirical evidence, I now run the same analysis on heterosexual couples, married or cohabiting. The summary statistics show that heterosexual couples have similar age and white prevalence as same-sex couples, slightly less education, are less likely to be Hispanic or US-born. They have less unearned income and more children than same-sex couples.

Table 8
Descriptive statistics of heterosexual couples

	Married and unmarried		Married	
	Mean	Std. Dev.	Mean	Std. Dev.
Age male	36.61	5.65	37.08	5.47
Age female	35.45	6.72	35.97	6.43
Years of education male	13.74	2.09	13.87	2.10
Years of education female	13.97	2.35	14.09	2.35
White male	.91	.29	.92	.27
White female	.92	.27	.93	.26
Hispanic male	.13	.34	.13	.34
Hispanic female	.14	.34	.13	.34
US born male	.87	.33	.87	.34
US born female	.88	.33	.87	.33
Earnings male	61,654.52	64,634.64	65,570.05	67,254.42
Earnings female	30,875.35	38,290.60	31,509.32	39,627.82
Unearned income male	1,727.59	11,644.15	1,821.80	12,227.00
Unearned income female	1,241.59	8,337.42	1,178.83	8,566.35
Hours male	2,104.55	744.58	2,139.15	722.84
Hours female	1,381.34	945.51	1,356.09	954.45
Log-wage male	3.11	.69	3.17	.69
Log-wage female	2.85	.70	2.89	.70
Household income	97,538.93	81,404.59	102,075.80	84,035.58
Number of children male	1.53	1.27	1.72	1.22
Number of children female	1.56	1.26	1.72	1.22
Married	.85	.35	1	0
Age difference	1.16	4.31	1.11	4.05
Years of education difference	-.23	2.11	-.22	2.11
Earnings difference	30,779.16	7,1242.21	34060.74	74,697.64
Unearned income difference	486.01	13,816.30	642.97	14,372.75
Degree field male (N=103,556/95,502)	2.09	.76	2.10	.76
Degree field female (N=121,029/110,411)	1.84	.78	1.84	.78
No. of observations	283,053		246,499	

Source: U.S. Census American Community Survey data 2012-2013.

The following tables report the correlations among labor and non-labor traits for all heterosexual couples, for the recently formed ones and finally only for the married ones. These tables show the well-known strong sorting by education (Qian, 1998), and other non-labor attributes, while reporting significant evidence of household specialization: there is a low correlation in earnings, while for

hours worked it is negative. Recently formed couples with no children are shown to be more similar and less specialized. Comparing those patterns to same-sex couples', we can notice that heterosexual couples are more similar to gay than lesbian couples, as it had been previously reported in the literature on specialization and sorting (e.g., Jepsen and Jepsen, 2015).

Table 9a
Correlation matrix among non-labor attributes: married and unmarried

	Age male	Age female	Years of education male	Years of education female	White male	White female	Hispanic male	Hispanic female	US born male
Age female	.78***								
	(.00)								
Years of education male	.05***	.04***							
	(.00)	(.00)							
Years of education female	.02***	.02***	.56***						
	(.00)	(.00)	(.00)						
White male	-.01***	-.01***	.08***	.05**					
	(.00)	(.00)	(.00)	(.00)					
White female	-.02***	-.02***	.07***	.04***	.86***				
	(.00)	(.00)	(.00)	(.00)	(.00)				
Hispanic male	-.04***	-.04***	-.21***	-.26***	.10***	.09***			
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)			
Hispanic female	-.03***	-.03***	-.19***	-.26***	.08***	.09***	.76***		
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)		
US born male	-.02***	.00	.11***	.18***	.02***	.03***	-.48***	-.44***	
	(.00)	(.25)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	
US born female	-.03***	-.01***	.09***	.19***	.01***	.02***	-.43***	-.47***	.64***
	(.00)	(.01)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations					283,053				

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 9b
Correlation matrix among labor attributes for heterosexual couples:
married and unmarried

	Earnings male	Earnings female	Unearned income male	Unearned income female	Hours male	Hours female	Log_wage male
Earnings female	.11***						
	(.00)						
Unearned income male	.08***	.02***					
	(.00)	(.00)					
Unearned income female	.02***	-.01***	.07***				
	(.00)	(.00)	(.00)				
Hours male	.36***	-.00*	-.09***	-.02			
	(.00)	(.08)	(.00)	(.48)			
Hours female	-.11***	.58***	-.03***	-.07***	-.04***		
	(.00)	(.00)	(.00)	(.00)	(.00)		

Table 9b *(continue)*
Correlation matrix among labor attributes for heterosexual couples:
married and unmarried

	Earnings male	Earnings female	Unearned income male	Unearned income female	Hours male	Hours female	Log_wage male
Log_wage male	.76***	.16***	.08***	.02***	.08***	-.07***	
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	
Log_wage female	.26***	.70***	.03***	.03***	.05***	.16***	.32***
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations				283,053			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Table 9c
Correlation matrix among non-labor attributes for heterosexual couples: no children and
moved in ≤ 2 years ago, married and unmarried

	Age male	Age female	Years of education male	Years of education female	White male	White female	Hispanic male	Hispanic female	US born male
Age female	.74***								
	(.00)								
Years of education male	-.14***	-.12***							
	(.00)	(.00)							
Years of education female	-.15***	-.13***	.56***						
	(.00)	(.00)	(.00)						
White male	-.08***	-.07***	.14***	.12**					
	(.00)	(.00)	(.00)	(.00)					
White female	-.09***	-.09***	.13***	.11***	.81***				
	(.00)	(.00)	(.00)	(.00)	(.00)				
Hispanic male	.03***	.03***	-.11***	-.12***	.07***	.04***			
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)			
Hispanic female	.02***	.03***	-.10***	-.13***	.04***	.04***	.57***		
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)		
US born male	-.06***	-.04***	-.02***	.02***	.03***	.05***	-.31***	-.26***	
	(.00)	(.00)	(.00)	(.01)	(.00)	(.00)	(.00)	(.00)	
US born female	-.06***	-.04***	-.03***	.02**	.02***	.04***	-.28***	-.30***	.54***
	(.00)	(.00)	(.00)	(.02)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations					23,322				

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Table 9d
Correlation matrix among labor attributes for heterosexual couples: no children and
moved in ≤ 2 years ago, married and unmarried

	Earnings male	Earnings female	Unearned income male	Unearned income female	Hours male	Hours female	Log_wage male
Earnings female	.29***						
	(.00)						
Unearned income male	.06***	.01*					
	(.00)	(.08)					

Table 9d *(continue)*
Correlation matrix among labor attributes for heterosexual couples: no children and
moved in ≤ 2 years ago, married and unmarried

	Earnings male	Earnings female	Unearned income male	Unearned income female	Hours male	Hours female	Log_wage male
Unearned income female	.01	-.02**	.07***				
	(.39)	(.02)	(.00)				
Hours male	.38***	.08***	-.09***	-.05***			
	(.00)	(.00)	(.00)	(.00)			
Hours female	.06***	.49***	-.03***	-.10***	.12***		
	(.00)	(.00)	(.00)	(.00)	(.00)		
Log_wage male	.74***	.28***	.05***	.03***	.07***	.04***	
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	
Log_wage female	.29***	.73***	.03***	.03***	.08***	.17***	.35***
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations				23,322			

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 9e
Correlation matrix among non-labor attributes for heterosexual couples: married

	Age male	Age female	Years of education male	Years of education female	White male	White female	Hispanic male	Hispanic female	US born male
Age female	.78***								
	(.00)								
Years of education male	.03***	.02***							
	(.00)	(.00)							
Years of education female	.00	.01***	.55***						
	(.32)	(.00)	(.00)						
White male	-.03***	-.02***	.06***	.04***					
	(.00)	(.00)	(.00)	(.00)					
White female	-.03***	-.03***	.06***	.03***	.88***				
	(.00)	(.00)	(.00)	(.00)	(.00)				
Hispanic male	-.04***	-.04***	-.21***	-.26***	.09***	.08***			
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)			
Hispanic female	-.03***	-.04***	-.20***	-.26***	.07***	.08***	.77***		
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)		
US born male	-.02***	.01***	.11***	.18***	.04***	.04***	-.47***	-.43***	
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	
US born female	-.02***	-.01***	-.10***	.19***	.02***	.03***	-.43***	-.47***	.65***
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations				246,499					

P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.
Source: U.S. Census American Community Survey data 2012-2013.

Table 9f

Correlation matrix among labor attributes for heterosexual couples: married

	Earnings male	Earnings female	Unearned income male	Unearned income female	Hours male	Hours female	Log_wage male
Earnings female	.10***						
	(.00)						
Unearned income male	.08***	.02***					
	(.00)	(.00)					
Unearned income female	.03***	-.00*	.08***				
	(.00)	(.05)	(.00)				
Hours male	.34***	-.02***	-.08***	-.02***			
	(.00)	(.00)	(.00)	(.00)			
Hours female	-.13***	.58***	-.03***	-.07***	-.05***		
	(.00)	(.00)	(.00)	(.00)	(.00)		
Log_wage male	.76***	.14***	.07***	.03***	.06***	-.09***	
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	
Log_wage female	.24***	.69***	.03***	.03***	.03***	.15***	.30***
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
No. of observations				246,499			

*P-values are reported in parentheses.*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.*

Source: U.S. Census American Community Survey data 2012-2013.

Table 10 shows how male and female characteristics increase the odds of being a married couple rather than cohabiting. Basically all the characteristics are significantly associated to being married (age, education, earnings), with bigger coefficients in the sample of those who are never married or in their first marriage. Being white or Hispanic discourages marriage apparently, with smaller coefficients in those who are never married or in their first marriage.

Table 10

LS regression of being married on partners' characteristics and interactions

	Married first Marriage vs cohabiting never married		Married vs cohabiting, irrespective of previous marriages	
	(1)	(2)	(3)	(4)
Age male	.042***	.042***	.031***	.031***
	(.001)	(.001)	(.001)	(.001)
Age female	.050***	.049***	.031***	.031***
	(.001)	(.001)	(.001)	(.001)
Age interaction	-.001***	-.001***	-.001***	-.001***
	(.000)	(.000)	(.000)	(.000)
Years of education male	.029***	.028***	.016***	.015***
	(.003)	(.003)	(.003)	(.003)
Years of education female	.023***	.024***	.009***	.012***
	(.003)	(.003)	(.003)	(.003)
Years of education interaction	-.001***	-.001***	.000	.000
	(.000)	(.000)	(.000)	(.000)
White male	-.003	-.005	-.012	-.015
	(.018)	(.018)	(.015)	(.015)
White female	-.077***	-.078***	-.108***	-.109***
	(.013)	(.013)	(.011)	(.011)

Table 10 *(continue)*
LS regression of being married on partners' characteristics and interactions

	Married first Marriage vs cohabiting never married		Married vs cohabiting, irrespective of previous marriages	
	(1)	(2)	(3)	(4)
White interaction	.186***	.184***	.199***	.196***
	(.022)	(.022)	(.018)	(.018)
Hispanic male	-.028***	-.027***	-.036***	-.033***
	(.007)	(.007)	(.006)	(.006)
Hispanic female	-.015*	-.015***	-.019***	-.019***
	(.006)	(.006)	(.005)	(.005)
Hispanic interaction	.040***	.041***	.079***	.081***
	(.009)	(.009)	(.009)	(.009)
Earnings male		.000***		.000***
		(.000)		(.000)
Earnings female		-.000***		-.000**
		(.000)		(.000)
Earnings interaction		-.000***		-.000***
		(000)		(000)
R2	.129	.131	.085	.088
N		208,745		283,053

Regressions include state and year fixed effects.

Observations have been weighted by using person weights.

Heteroskedasticity robust standard errors are reported in parentheses.

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

Table 11 reports the same type of regression but for the number of children rather than the odds of marriage. As before, all the characteristics seem to matter, although education now enters negatively. Interestingly, for gays and lesbians the determinants of marriage and children were different. These differences by sexual orientation may indicate that same-sex couples' decision to get married is either driven by different forces, or due to a selection of couples who got married quickly after the legalization, for instance the least educated ones.

Table 11
LS regression of number of children on partners' characteristics and interactions:
married first marriage or cohabiting never married

	(1)	(2)
Age male	.232***	.231***
	(.003)	(.003)
Age female	.197***	.201***
	(.003)	(.003)
Age interaction	-.005***	-.005***
	(.000)	(.000)
Years of education male	-.055***	-.075***
	(.010)	(.010)
Years of education female	-.118***	-.101***
	(.009)	(.009)

Table 11 *(continue)*
LS regression of number of children on partners' characteristics and interactions:
married first marriage or cohabiting never married

	(1)	(2)
Years of education interaction	.005***	.006***
	(.001)	(.001)
White male	-.255***	-.287***
	(.047)	(.047)
White female	-.208***	-.204***
	(.031)	(.031)
White interaction	.478***	.458***
	(.055)	(.054)
Hispanic male	-.020	-.003
	(.019)	(.019)
Hispanic female	-.039**	-.043**
	(.018)	(.018)
Hispanic interaction	.424***	.412***
	(.028)	(.028)
Earnings male		.002***
		(.000)
Earnings female		-.004***
		(.000)
Earnings interaction		.000***
		(000)
R2	.096	.120
N		283,053

Regressions include state and year fixed effects.

Observations have been weighted by using person weights.

Heteroskedasticity robust standard errors are reported in parentheses.

*** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1.

Source: U.S. Census American Community Survey data 2012-2013.

5. CONCLUSIONS

A renewed interest in whether and to what extent couples differ by sexual orientation has recently emerged, although it still faces the challenge of data availability insofar as married same-sex couples are concerned. This is the first study to document how sexual orientation is related to marriage in the US, estimating the correlations of labor and non-labor attributes among gay and lesbian couples by marital status, and the determinants of being married and the number of children.

Four key patterns emerge from the empirical analysis of sexual orientation and marriage. First, gay couples exhibit more specialization and less similarity than lesbian couples, even more so among the recently formed and childless couples; second, marriage makes gay and lesbian couples more alike than cohabiting couples, in terms of more specialization (earnings differences) for lesbians and more positive sorting by education for gays; third, children seem to increase specialization among lesbians, for whom the expectation of childbearing may be a relevant marriage motive; finally, positive assortative mating in

education increases with marriage (but also for recent couples with no children) especially for gays.

This evidence is consistent with specialization being higher in married couples and education being more productive in marriage than cohabitation, and that overall positive sorting in education and specialization are stronger among heterosexual couples (Becker, 1991). However, the estimated *gender* difference among the same-sex couples shows that those who are "transformed" the most by marriage in terms of higher specialization are the lesbian couples (cohabiting gays appear to be much more specialized), whereas education similarity becomes more prevalent in marriage than in cohabitation for gays than for lesbians; lesbian married and cohabiting couples exhibit the same high positive sorting in education as heterosexual couples do.

Education does not increase at all the odds of marriage among same-sex couples, contrary to heterosexual couples; lesbians are instead similar to heterosexual couples in their education being negatively associated to children, whereas gays do not exhibit any association. Gays do not seem to appreciate education as conducive to marriage or having children. This could be due to a crucial biological difference between gays and lesbians: gay cannot be biological mothers, while there are extremely few gay couples that have children relatively to lesbians. The zero relationship between education and children among gay couples could be interpreted as education not representing an input in the household production of children in gay couples, whereas lesbian couples are similar to heterosexual couples as one of them is the biological mother and their children motive is much higher than gays'. In other words, matching in gay couples does not take into account child production, whereas it does so among lesbians, consistently with lesbians exhibiting higher correlations in education and a significant association of education and children.

Additional data waves in the years ahead will allow future research to document and develop a more complete understanding of the relevance and dynamics of marriage among gay and lesbian couples in the US, to validate these interpretations, and to study selection into marriage and marriage stability, even their divorce patterns, if enough time is allowed for the first married same-couples to separate and divorce.

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