



UNIVERSIDAD DE CHILE  
FACULTAD DE ECONOMÍA Y NEGOCIOS  
DEPARTAMENTO DE ECONOMÍA

# HOMOSEXUALITY AND PARTICIPATION IN THE LABOUR FORCE: EVIDENCE FROM CHILE AND URUGUAY

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CAMILA MURIEL BROWN ORREGO  
LUIS EDUARDO SCHMIDT RIVERA

Profesor guía:  
DANTE CONTRERAS GUAJARDO

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*To all the men and women who were excluded,  
tortured or murdered for expressing their identity  
and pursuing happiness and true love.*

# CONTENTS

Abstract . . . . .	1
Introduction . . . . .	2
Section I: Literature Review . . . . .	5
Section II: Data . . . . .	10
Section III: Methodology . . . . .	18
Section IV: Results . . . . .	20
Section V: Discussion . . . . .	25
Section VI: Conclusions . . . . .	29
References . . . . .	33

## ABSTRACT

In this paper we examine the effect of sexual orientation on labour supply in two countries in Latin America. Using census data, a sample of partnered individuals and a logit model we found that this effect is significant and depends on the individual's gender. While gay men are up to 8.1% less likely to participate in the workforce compared to married straight men, lesbians have a higher probability to participate in the labour force compared to their unmarried and married straight counterparts, varying from 17.3% up to 29.9% respectively. Trends between Chile and Uruguay are similar but the magnitude of the effect on participation differs significantly between countries.

**Key words:** *Homosexuality, labour participation, sexual orientation.*

**JEL classification:** *J15, J16*

## INTRODUCTION

The following paper is an empirical study of labour supply from both homosexual and straight couples in two very different, yet comparable countries in Latin America. These countries are Chile and Uruguay. Using a sample of only partnered individuals from the most recent census for each country and a logit model, this study endeavours to measure the impact of sexual orientation on labour supply. We will also try to determine whether there is any difference in this effect depending on gender. In addition, a description of the family composition and educational levels of the gay and straight population of Chile and Uruguay will be provided. Finally we put forward possible explanations found in the existing literature to interpret our results.

Although literature about this topic has been growing, research has been mostly focused in the US. There are no studies about differences in labour participation or wages between heterosexuals and homosexuals in Latin America; and this is probably due to the lack of databases containing information about sexual orientation. The latter has changed with the last censuses in Uruguay and Chile which allowed same-sex couples to identify themselves as cohabiting partners, opening doors to properly study the topic.

The motivation to study this subject comes mainly from the increasing interest from both academics and citizens for homosexuality and gender roles on the continent. During the 20th century many laws were passed in order to encourage women's participation both in politics and economics, such as the right to vote or to enrol in higher education. On the other hand, homosexuals were discriminated globally during this period and it was not until 1973 when being sexually attracted to same-sex

individuals stopped being considered a psychiatric disorder<sup>1</sup>. After that, the global discussion about legal rights and policies for non-discrimination gradually started.

The debate on the issue of sexual diversity had recently been introduced on a public and legislative level in South America. However, the region and especially Chile have shown a more conservative approach to the topic compared to Continental Europe and some states in the US, which is reflected in the delay for this debate. In the case of Chile, no legal protection for gay and lesbian couples was passed until late 2015 with the civil unions law<sup>2</sup>. Moreover, homosexuality was considered illegal until 1999<sup>3</sup>. On the other hand, Uruguay passed the civil unions law in 2008 and only five years later same-sex marriage was allowed<sup>45</sup>. Argentina legalized the same-sex marriage in 2010<sup>6</sup>, Brazil in 2013<sup>7</sup>; while in Chile, Peru and Bolivia the debate has not even properly started.

The two chosen countries for this study are examples of opposite paths on discrimination and legal support for women and homosexuals. Even though Chile and Uruguay are located on the same continent and share the same language, Uruguayan society seems on paper to be far more liberal than Chilean society. The latter can be seen in laws involving civil rights like abortion, divorce law, marijuana legalization,

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<sup>1</sup>The American Psychiatric Association removed homosexuality from the Diagnostic and Statistical Manual of Mental Disorders (DSM). For more information, see American Psychiatric Association. (1973). Homosexuality and civil rights: Position statement.

<sup>2</sup>Ley 20830, Acuerdo de Unión Civil. Diario Oficial de la República de Chile, Santiago, Chile. 21 Abril de 2015.

<sup>3</sup>Artículo 365, Código Penal Chileno.

<sup>4</sup>Ley 18246, Unión Concubinaria. Registro Nacional de Leyes y Decretos, República Oriental de Uruguay. 27 de Diciembre 2007.

<sup>5</sup>Ley 19119, Matrimonio Igualitario. Registro Nacional de Leyes y Decretos, República Oriental de Uruguay. 2 de Agosto de 2013.

<sup>6</sup>Ley 26618, Matrimonio Civil. 15 de Julio de 2010.

<sup>7</sup>Same sex marriage was legalized for the entire territory in 2013 (Resolução No 175) , but the Supreme Court gave a ruling that allowed same-sex couples to get married in 2011.

same-sex marriage and women's role in the society.

Besides their different state of advancement regarding civil rights, Uruguay and Chile are the most developed economies in Latin America, reflected on higher GDPs per capita, life expectancy, educational attainment and lower mortality and fertility rates<sup>8</sup>.

Given the specific cultural, demographic and economic characteristics of the region, studying whether gender and sexual orientation as variables affect local labour markets is necessary and academically fascinating. Our results shed light on the economic behaviour of lesbian and gay population, offering relevant information for future debates on discrimination, gender roles and LGBT issues.

This study is a description of the current situation of the labour market for those who are partnered, using a simple but consistent econometric methodology, comparing two countries and describing both straight and gay couples by age, family composition and educational levels. The study's main variables are gender and sexual orientation, juxtaposing straight and same-sex couples but also straight couples who are married and those who are living together out of wedlock. Due to non-existent law in Uruguay and Chile at the time of the census, it is not possible to include married gay couples in the study.

The paper is structured as follow: Section I consists in a literature review, Section II describes the Data used, Section III explains the methodology and Section IV presents the results. Section V discusses our findings and Section VI concludes.

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<sup>8</sup>World Development Indicators, The World Bank. Country and Lending Groups, The World Bank. For more information see <http://data.worldbank.org/data-catalog/world-development-indicators> and [http://data.worldbank.org/about/country-and-lending-groups#High\\_income](http://data.worldbank.org/about/country-and-lending-groups#High_income).

## I. LITERATURE REVIEW

Labour markets play a very important role in economics and practical issues of people's lives. In fact, the literature aiming at seeing the correlation between poverty, child poverty and employment status from households is wide (Lichter and Eggebeen, 1994). On average, it has been proven that employment has a huge impact on poverty and child poverty; therefore there is a strong correlation between employment and quality of life.

After the First World War, women's role in the labour market has been discussed by politicians and academics, and even more so in Chile as it has the lowest women's labour participation rates in OECD member states (OECD, 2015). The literature claims that marriage, childcare (Psacharopoulos and Tzannatos 1989; Gunderson, 1977), cultural background (i.e. 'machismo')(Contreras and Plaza, 2010). and partner's state of employment (Lichter Eggebeen, 1994) being the most important variables explaining women's absence in the labour market. Educational attainment is the key variable positively correlated to women's participation in the labour force (Contreras et al, 2012)

Even though the literature on participation in the labour force and its relationship with gender and partnership is vast, the existing literature on the economic behaviour of same sex couples has not covered neither all the topics nor all the continents yet. Previous economic research about homosexuality and labour market has been focused on career decisions, discrimination in the hiring process and compensation.

Ueno et al (2015) found that homosexual men tend to choose more atypical



gender-occupation compared to their heterosexual counterparts. However, this finding is based on explanations focusing on human and cultural capital rather than on teenage feminine behaviour, contrary to what the stereotypes would suggest. Moreover, the authors state that homosexual's behaviour is not strongly correlated to opposite gender behaviour.

On the demand side, stereotypes seem to play a major role in the hiring process. Tilcsik (2011) found that openly gay men were less likely to be called for an interview for a job that required certain personality traits often associated with masculinity, like aggressiveness, assertiveness and decisiveness. Although stereotypes do not explain the entire discrimination effect on gay male hiring process, this group has 70% less chance to be called back from a job asking for assertiveness or aggressiveness (Tilcsik, 2011).

Tilcsik (2011) conducted an audit study using participation in an LGBT organization as an indicator of homosexuality. 3538 resumés were sent to 1769 postings in 7 states in the United States that have a differing approval of homosexuality and different anti-discrimination laws. Randomly assigning the homosexual signal to only men candidates, his findings reveal that discrimination to homosexuals differs between states and the type of job offered. For states without an anti-discrimination regulation, the difference between openly gay men and straight men were 6% on average, while the difference in states with an existent law for non-discrimination was 2.9%. These results were statistically significant and considerably important, taking into account that the average call back ratio was only 9.35% (i.e. differences account for 60% and 30% for states with and without anti-discrimination law). Using another audit study, Drydakis (2009) found the same pattern in Greece but added the fact that the salary offered did not differ to those who are homosexuals.

Weichselbaumer (2003) conducted an audit study to account for differences in the hiring process between lesbians and straight women in Austria. According to the study, lesbians are 12.13% less likely to be called for an interview when revealing their sexual orientation. The author argues that discrimination from co-workers and employers could explain these results, while masculine behaviour does not make any significant difference in the hiring process.

Concerning income penalties, previous research in the United States show that homosexual men earn less than their heterosexual counterparts whereas lesbians earn more than straight females. In fact Baumle and Poston (2015), following a series of previous papers, found that gay men have an income penalty of 10.7% on average compared to married heterosexual men and a reward of 2.1% more than not married straight men. In case of lesbians the opposite seems to happen. Same-sex female couples are showed to earn 4% more than married straight women and 8% more than heterosexual women living with their partner. Studies conducted before Baumle and Poston (2015) showed that gay men earn 24% (Badgett, 1995) 17% (Badgett 2001) 22%(Berg and Lien, 2002) and even 30% less than heterosexual men (Blandford, 2003). In the case of lesbians, previous research is less consistent, finding either no difference with heterosexual women (Badgett, 1995; Badgett, 2001) and others a reward varying from 6% up to 30% (Berg and Lien, 2002; Blandford, 2003) in annual earnings.

As mentioned, previous research claim that the existence of legal protection for homosexuals and local conservatism, such as levels of faith, do have an effect on salaries and during the hiring process of those who report being homosexuals (Baumle and Poston, 2015). As a matter of fact, Chile and Uruguay had different legal protection for minorities and civil rights when the survey was taken, which is why we think it is interesting to contrast both countries.

One example of legal protection for minorities is the anti-discrimination bill, which safeguards people from being unjustifiably laid off and gives higher sentences to hate crimes. In Chile it was passed only after a tragic hate crime, which thrilled the population and forced the political class to back it up<sup>9</sup>. Uruguay passed a similar law 8 years before the Chilean congress did<sup>10</sup>. There are plenty of examples of stronger conservatism in Chile. In fact divorce was legalized in Uruguay in 1907<sup>11</sup>, almost one hundred years before Chile<sup>12</sup>. Finally abortion is still completely illegal and penalized in Chile, even when the mother's life is under threat. Since 2012, abortion is authorized in Uruguay within twelve weeks and even longer periods are applicable when the woman is a victim of rape, her life is endangered or in the case of a nonviable fetus (Shepard & Becerra 2007).

One way to explain these differences in the legal protection of minorities and women in Chile and Uruguay is the religious conservatism of Chilean society (Cristi and Ruiz, 1990) and the subsequent influence of the Christian churches. Religious organizations have abused the Proactive and Defensive Moralism principle (Hagopian, 2008) to oppose all the previously described laws and other policies related to sexual health, such as campaigns to prevent AIDS, sexual and reproductive education to primary school students, and free delivery of contraceptives in public health centres.

Cultural differences also reflect the advantages of males over females in each country. Social policies in Chile give men a privileged position compared to women while Uruguay shows greater gender neutrality (Pribble, 2006). Pribble, examines

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<sup>9</sup>Ley 20609, Ley Zamudio. Diario Oficial de la República de Chile, Santiago, Chile. 24 de Julio de 2012.

<sup>10</sup>Ley 17817, Lucha contra el racismo, xenofobia y discriminación. Registro Nacional de Leyes y Decretos, República Oriental de Uruguay. 4 de Septiembre de 2004.

<sup>11</sup>Ley 3245, 1907

<sup>12</sup>Ley 19947, Nueva Ley de Matrimonio Civil. Diario Oficial de la República de Chile, Santiago, Chile. 17 de Mayo de 2014.

this subject and finds that gender-based differences in welfare policies and the designation of this benefits only for hired workers in Chile (including family allowances, childcare and maternity leave) negatively affects Chilean women; considering that a large percentage of poor women work without a contract.

Given the cultural and legal differences between Uruguay and Chile, and previous research about differences in the labour market between homosexuals and heterosexuals, we conducted a study that aims to contrast previous findings with the Uruguayan and Chilean reality.

## II. DATA

In order to address to question of difference in the labour supply of straight and gay individuals, we took the data from the 2012 Census in Chile and the 2011 Census in Uruguay<sup>13</sup>. For the first time these surveys included in their questionnaires a question concerning marital and partnership status, but differentiated straight and gay couples. Almost the entire population was surveyed in both countries, totalling 15,621,622 people in Chile, and 3,252,091 people in Uruguay.

Table 1 and 2 present the partnership status of the Chilean and Uruguayan population of 18 years and older by gender. The proportion of people living with a partner or spouse is over 50% in both countries. However, taking into account only people who live with their partners, the percentage of married people is larger than the percentage of unmarried people in both countries. Regarding same-sex couples; the percentage of Chilean gay couples living together is three times the one in Uruguay, 0.3% and 0.1% respectively. All in all, people declaring living with a same-sex partner is more than one hundred times lower in Chile compared to married heterosexual couples, and more than three hundred times lower in Uruguay.

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<sup>13</sup>Survey design and field work done by the National Institute of statistics of each country. Instituto Nacional de Estadísticas de Chile <http://www.ine.cl>. Instituto Nacional de Estadística, Uruguay. <http://www.ine.gub.uy>

**Table 1:** Relationship status by gender in Chile

Relationship Status	Men		Women		Total	
	Freq.	%	Freq.	%	Freq.	%
Married	2,397,206	40.9	2,395,576	37.6	4,792,782	39.2
Opposite sex partner	1,041,830	17.8	1,022,894	16.0	2,064,724	16.9
Same sex partner	14,077	0.2	19,831	0.3	33,908	0.3
No partner	2,343,622	40.0	2,880,630	45.2	5,224,252	42.7
Single or ignored	64,094	1.1	57,683	0.9	121,777	1.0
<b>Total</b>	5,860,829	100.0	6,376,614	100.0	12,237,443	100.0

*Source:* Based on Chile's 2012 Census

**Table 2:** Relationship status by gender in Uruguay

Relationship Status	Men		Women		Total	
	Freq.	%	Freq.	%	Freq.	%
Married	422,573	37.4	422,297	33.0	844,870	35.1
Opposite sex partner	247,344	21.9	243,801	19.1	491,145	20.4
Same sex partner	1,724	0.2	1,050	0.1	2,774	0.1
Single	413,406	36.6	569,064	44.5	982,470	40.8
Not revealed	44,211	3.9	43,349	3.4	87,560	3.6
<b>Total</b>	1,129,258	100.0	1,279,561	100.0	2,408,819	100.0

*Source:* Based on Uruguay's 2011 Census

To introduce the differences between individuals with different sexual orientation, we present a summary of some of the most relevant demographic variables in Table 3.

The first variable is age. It is clear that in both countries married people are on average 10 years older than those who live together but are not married, regardless of their sexual orientation and gender.

Educational attainment is higher for women regardless of their partnership status in Uruguay, except for gay male couples. In Chile married and single women have less year of education than their male counterparts. In both societies, partnered gay men have more years of schooling than partnered heterosexual or single men. In Chile relationship status does not determine women's educational level, whereas in Uruguay, lesbians exhibit more years of education than heterosexual partnered and single women. Last but not least, unmarried partners in Chile are more educated than married individuals; whereas the reverse situation occurs in Uruguay.

The third variable we wish to discuss is the number of children living in the household<sup>14</sup>. As we mentioned in the previous section, the amount of children that a person have affects his or her decision to participate in the labour market. Since, it was not possible to identify the relationship between all the individuals in a household in both censuses, we used this variable as a proxy to study parenthood. Although in both countries same-sex partners live with fewer children than heterosexual couples, there are differences when comparing lesbian households. On the one hand, specifically in Chile, lesbians share households with almost the same amount of children than heterosexual couples. However, when looking at gay men households, the pres-

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<sup>14</sup>Individuals are considered as children when are under 18

ence of children is less than half than the one found in any other type of relationship. This dynamic is similar to the one found by Badgett (2001) in the USA. On the other hand, in Uruguay, lesbians live with almost the same amount of children as gay men. This amount is considerably lower than the amount of children heterosexual couples have in their households.

When comparing participation rates, it is worth pointing out that the work-related question in each census is different. In Uruguay, a person is considered to be in the labour force if he or she worked at least one hour in the previous week, did not work but had a job to return to or looked for a job in the last four weeks. In Chile the questionnaire is less specific and it allows for self-interpreting employment status. The question asks for employment status, giving the following options: working for an income, having a job but not working (on vacations for example), working ad honorem, studying, or unemployed but looking for one. Besides, if the person is studying and working at the same time, the question allows selecting only the principal activity.

Despite this fact, it is not our endeavour to compare absolute participation rates between countries, but rather the difference between the participation rates of heterosexuals and homosexuals, which makes this issue irrelevant.

As expected, women participate less than men. Both married and single individuals have lower participation rates. In both countries lesbians have the highest participation rate among women, while married women have the lowest. Partnered gay men's participation rates are higher than married and single men's, and lower than straight men who are in a relationship. The difference brought by the relationship status is bigger for women than for men.



**Table 3:** Relevant summarized variables by country, relationship status and gender

	Age			Education (yrs)			Children			Participation		
	M	W	All	M	W	All	M	W	All	M	W	All
<b>Chile</b>												
Married	51.2	48.5	49.8	10.9	10.7	10.8	1.1	1.1	1.1	78.76	37.77	58.27
Opposite sex partner	39.4	36.9	38.1	11.1	11.1	11.1	1.3	1.2	1.3	90.29	51.58	71.11
Same sex partner	36.3	39.4	38.1	13.6	11.1	12.2	0.3	0.9	0.7	84.49	63.93	72.46
No partner	35.8	43.7	40.2	11.3	11.0	11.1	0.8	0.9	0.9	64.42	47.84	55.28
<b>Total</b>	42.8	44.4	43.6	11.1	10.9	11.0	1.0	1.0	1.0	74.87	44.59	59.09
<b>Uruguay</b>												
Married	53.8	50.5	52.1	9.1	9.7	9.4	0.9	0.9	0.9	72.41	54.45	63.43
Opposite sex partner	38.6	35.5	37.1	8.6	9.3	8.9	1.3	1.3	1.3	92.91	67.89	80.49
Same sex partner	37.6	35.4	36.8	11.5	11.6	11.6	0.2	0.4	0.3	88.57	92.86	90.19
No partner	39.0	49.6	45.2	8.9	9.2	9.0	0.5	0.7	0.6	74.06	53.54	62.17
<b>Total</b>	44.6	47.3	46.1	8.9	9.4	9.1	1.0	0.9	0.9	77.74	56.71	66.54

*Note:* Columns of age, education and children represent the average value for each category. Participation is expressed in percentages

*Source:* Based on Chile's 2012 and Uruguay's 2011 Censuses

In table 4 we present data on household structure. Emancipated individuals<sup>15</sup> seem to be more likely to participate in the labour market than those who live with their parents, therefore it is important to explore the home composition of each kind of couple.

The first column shows the percentage of individuals who are either head of household or the partner of the head of household. The second column shows the same information but for a sample of people over 18 and under 35. The first thing to point out is that married people are more likely to be emancipated than unmarried individuals. Secondly, same-sex couples are more likely to be emancipated than heterosexual cohabiters. Third, when looking at the younger sample, the previous gap widens but married people is still more likely to be emancipated. Fourth, in Chile lesbians are more likely to be emancipated than gay men, whereas in Uruguay the proportion is almost the same.

The third column shows the percentage of individuals that are sons or sons in law of the householder or its partner<sup>16</sup>. The fourth column has the same information but for individuals over 18 and under 35 years old. We interpret this as another way of measuring the emancipation of each partnership status. When looking at the full sample, married individuals are less likely to live with their parents or in-laws compared to both heterosexual and homosexual cohabiters from both countries. When looking at the younger sample, we can see that this ranking changes both in Uruguay and Chile, as same-sex couples are the least likely to live with either parents or in-laws.

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<sup>15</sup>Individuals are considered emancipated when they report being head of household or the partner of the head of household

<sup>16</sup>If they lived with their parents (or in-laws) but the parents were not the householders they would not be counted. This will happen in all categories equally, thus the percentages should still be comparable.

One hypothesis that arises is that homosexual couples are less likely to be accepted by their family (Cramer and Roach, 1988); subsequently they emancipate in order to live together and to be part of the labour force earlier than their heterosexual counterparts. Although with the data above we cannot prove this, the results do not contradict our hypothesis and even support it. Regarding gender, data shows that this effect may be stronger for Chilean lesbians.

**Table 4:** Household composition for over 18 population by relationship and gender

	Householder			Householder 18 - 35			Lives with parents			Lives with parents 18 - 35		
	M	W	All	M	W	All	M	W	All	M	W	All
<b>Chile</b>												
Married	94.88	93.11	93.99	85.42	85.96	85.73	3.33	3.34	3.34	11.48	9.85	10.54
Opposite sex partner	80.02	80.31	80.16	66.67	69.94	68.41	12.84	12.92	12.88	22.82	21.15	21.93
Same sex partner	81.76	89.05	86.02	75.98	81.18	78.83	5.02	3.86	4.34	7.49	7.35	7.41
<b>Total</b>	90.34	89.28	89.81	74.10	77.07	75.74	6.21	6.20	6.20	18.23	16.07	17.04
<b>Uruguay</b>												
Married	96.22	96.23	96.23	91.45	93.06	92.41	1.82	1.80	1.81	7.18	5.81	6.37
Opposite sex partner	89.63	90.19	89.91	82.76	85.65	84.33	8.07	7.58	7.83	14.20	11.78	12.88
Same sex partner	94.90	93.62	94.41	92.10	90.09	91.27	2.44	3.52	2.85	4.02	5.41	4.59
<b>Total</b>	93.79	94.02	93.91	85.21	88.03	86.78	4.12	3.91	4.02	12.21	9.85	10.89

*Note:* Numbers represent percentages

*Source:* Based on Chile's 2012 and Uruguay's 2011 Censuses

### III. METHODOLOGY

Our research strategy consists in using a logit model through which we will analyse the relationship between sexual orientation and participation.

For the first model the dependent variable reflects the decision to participate in the labour market (i.e. would be one if he or she has a job or is looking for one). We controlled for individual characteristics such as education (number of years of education completed), gender, the number of children in the house, age, age squared, any indigenous heritage and health status. We consider the individual as having a disability (bad health) when blind, deaf or when having a serious physical disability.

Censuses do not directly collect information about sexual orientation, therefore it is not possible to discern between homosexual and heterosexual individuals that are single or do not report living with a partner. In order to compare gay and heterosexuals individuals we took only people living with their partners, totalling for 5.785.835 in the case of Chile and 1.070.583 in the case of Uruguay. Taking partnership status as a signal of homosexuality is not innocuous and could foster one of the mechanisms (Ueno et al, 2015) explaining lower opportunity cost for gay men and a higher one for lesbians (See Section V).

We generated two binary variables. One takes the value one if the person lives with a partner of the opposite-sex to whom he or she is not married; and the other that indicates if the person lives with a same-sex partner (i.e. is currently in a homosexual relationship). This way, with each coefficient we will capture the effect of being in one of the relationships we just described versus being married. In addition, we interacted gender and partnership status in order to compute gender

differences within any of the possible partnership status. Thus we created two extra binary variables that identify lesbians and heterosexual unmarried women.

Before we present our results, it is worth emphasizing that most of the research conducted on homosexuality concludes that sexual orientation is not correlated to any environmental factor. The APA states:

*“There is no consensus among scientists about the exact reasons that an individual develops a heterosexual, bisexual, gay, or lesbian orientation. Although much research has examined the possible genetic, hormonal, developmental, social, and cultural influences on sexual orientation, no findings have emerged that permit scientists to conclude that sexual orientation is determined by any particular factor or factors. Many think that nature and nurture both play complex roles; most people experience little or no sense of choice about their sexual orientation.”*

Consequently, our results are econometrically clean due to the lack of a consistent correlation between sexual orientation and other explanatory variables. In other words, the coefficients will not be biased, given the exogeneity of homosexuality.

## IV. RESULTS

Table 5 shows the coefficients and standard deviation of the model for Chile and Uruguay. The first and third columns are the models that do not include the variables of interest. The second and fourth columns do include sexual orientation as explanatory variables.

The results show that first, the coefficients do not change considerably when comparing basic models and models including sexual orientation, supporting the previous claim that the variables of interest are exogenous. Second, variables studied in previous research (see Section I) have the expected signs, being negative for woman, age-squared, children in the household for women, health disability and indigenous origins for Chile, while for Uruguay indigenous origins have the opposite sign. Education, women's education and age are positive as expected for both countries. Third, all the coefficients for sexual orientation and gender are significant at a 1% p-value. Fourth, the results show that homosexual men have a lower probability to participate in the labour market compared to those men married and to men partnered out of wedlock. Finally, the foregoing seems to happen in the opposite way for women, having lesbian a considerably higher probability to participate in the labour market compared to married women and unmarried straight women.

Table 6 compares marginal effects for the variables of interest where the omitted variable is marriage. These margins are computed keeping all the other variables (i.e. Age, Education, children in household, health and indigenous origins) at the mean value for each population. The foregoing means that the margins obtained for a straight unmarried women would show the difference on the probability of participating in the labour market compared to an identical married straight woman.

**Table 5:** Logit participation model

	Chile		Uruguay	
	(1)	(2)	(3)	(4)
	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE	$\beta$ / SE
Age	0.173*** (0.001)	0.202*** (0.001)	0.198*** (0.002)	0.213*** (0.002)
Age squared	-0.002*** (0.000)	-0.002*** (0.000)	-0.003*** (0.000)	-0.003*** (0.000)
Education (yrs)	0.068*** (0.001)	0.075*** (0.001)	0.081*** (0.003)	0.084*** (0.003)
Woman	-4.700*** (0.010)	-5.123*** (0.011)	-3.570*** (0.028)	-3.681*** (0.030)
Woman $\times$ Education	0.121*** (0.001)	0.121*** (0.001)	0.091*** (0.003)	0.093*** (0.003)
N <sup>o</sup> of Children	-0.048*** (0.001)	-0.041*** (0.001)	0.040*** (0.007)	0.045*** (0.008)
Woman $\times$ N <sup>o</sup> of Children	-0.168*** (0.002)	-0.165*** (0.002)	-0.238*** (0.008)	-0.245*** (0.008)
Bad health	-0.330*** (0.004)	-0.351*** (0.004)	-0.205*** (0.009)	-0.213*** (0.009)
Indigenous	-0.010*** (0.004)	-0.027*** (0.004)	0.153*** (0.013)	0.143*** (0.013)
Heterosexual partner		-0.493*** (0.007)		-0.050** (0.020)
Heterosexual partner $\times$ Woman		1.087*** (0.007)		0.259*** (0.021)
Homosexual partner		-1.764*** (0.028)		-1.550*** (0.094)
Homosexual partner $\times$ Woman		3.128*** (0.033)		3.181*** (0.165)
Constant	-0.464*** (0.017)	-1.049*** (0.018)	-0.318*** (0.041)	-0.776*** (0.044)
Observations	5785835	5785835	1070583	1070583
Pseudo $R^2$	0.350	0.358	0.256	0.258
LR chi2	2414942.015	2470185.674	239051.968	241193.256
Prob > chi2	0.000	0.000	0.000	0.000

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



Looking at Table 6 it is possible to conclude that first, differences between married men and straight men cohabitating are statistically significant for Chile, but small in terms of magnitude (-1.2%). In case of Uruguay there is no appreciable difference between married men and unmarried straight men. Second, the probability to participate in the labour force for homosexual men is significantly lower than married straight men, being 4.6% lower in case of Uruguay and 8.1% lower in case of gay men in Chile. Third, differences between unmarried straight men and homosexual men are 4.6% and 6.9% for Uruguay and Chile respectively. These differences are significant at a 5% p-value.

Women follow an opposite pattern. First, there are considerably significant differences between married women and straight women cohabitating with their opposite sex partner. Indeed, the probability to participate in the labour force is 5% higher in case of Uruguay and 14.4% higher in case of Chile for unmarried straight women. Secondly, lesbians seem to participate substantially more than married straight women. In fact lesbians have a 17.4% and 29.5% higher probability to participate in the labour force in Uruguay and Chile respectively. Third, differences between unmarried straight women and lesbians are still significant in both countries, 12.4% for Uruguay and 15.1% for Chile.

Last but not least, the hypothesis that the existence of differences in the participation rates between countries within groups seems to be true as the results previously showed. In fact the gap between gay men and unmarried straight men is 2.3% smaller in Uruguay (4.6% v/s 6.9%). The difference between the probability of straight women participating in the labour force compared to married women is substantially higher in Chile than in Uruguay (14.4% v/s 5%). Finally, the likeliness of lesbians participating in the labour force compared to married women is much more in Chile than in Uruguay, being 29.5% and 17.4% respectively. In Chile, lesbians

have a bigger probability to participate in the labour force than straight unmarried but cohabiting females (14.7%). In Uruguay, this probability is lower: 12.4%. This suggests that sexual orientation and gender are more important variables in the Chilean labour market than in the Uruguayan labour market.

**Table 6:** Marginal effects ( $dy/dx$ )

	Chile	Uruguay
<b>Men</b>		
Heterosexual partner	-1.147% *** (0.00017) [-1.18%, -1.11%]	0.063% ** (0.00025) [0.01%, 0.11%]
Homosexual partner	-8.066% *** (0.00243) [-8.54%, -7.59%]	-4.607% *** (0.00520) [-5.63%, -3.59%]
<b>Women</b>		
Heterosexual partner	14.388% *** (0.00069) [14.25% , 14.52%]	4.982% *** (0.00116) [4.75% , 5.21%]
Homosexual partner	29.950% *** (0.00306) [28.90% , 30.09%]	17.364% *** (0.00706) [15.98%, 18.75%]
<b>Variables means</b>		
Age	41.9	40.8
Education (yrs)	11.4	9.6
N° of Children	1.3	1.3
Bad health	0.1	0.1
Indigenous	0.1	0.05

*Notes:* Standard deviation in parenthesis. 95% confidence intervals in brackets.

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

The values of interactive variables are not shown, given that these values depend on the means of its constituents and the case we are evaluating. For example, age squared in Chile would be set at  $41.9^2$  and not in the mean value for this variable in the sample. When obtaining the margin for being an heterosexual cohabiter men instead of a married one, the value of the variable "Heterosexual partner  $\times$  Woman" is 0 ( $1 \times 0$ ), and the variable woman is 0 (even though the mean of this variable is over 0.5). The same procedure applies to all interactive variables.

## V. DISCUSSION

Our findings suggest that there are differences in the labour supply depending on gender, sexual orientation and the type of partnership. Moreover magnitudes differ between countries, Uruguay being the nation where differences in the probability of participation are the smallest. In addition, there are differences in family composition and educational levels between homosexual and heterosexual partners and the magnitudes differ between Chile and Uruguay.

It is worth emphasizing that this paper describes but does not discuss the causes of the results. Moreover, it seems empirically difficult to prove any of the possible causes given the fact that this paper is about participation probabilities and not employment or hiring probabilities. The foregoing means that the individual's behaviour and their willingness to search for a job is being discussed, rather than the willingness of employers to hire them. However, many hypotheses arise when trying to explain differences in labour supply depending on gender and sexual orientation. The literature reviewed in Section I give us an indirect approach that is worth discussing. Summarizing the literature review, gay men experience penalties in salaries and also discrimination in the hiring process while lesbians experience an income premium compared to their straight counterparts but are discriminated when their sexual orientation is revealed.(Tilcsik, 2011; Baumle and Poston, 2015; Badgett, 2001; Weichselbaumer, 2003).

Mechanisms that explain the idea that homosexuals seem to choose gender-atypical careers (Ueno et al, 2015) can shed light on labour force participation decisions. People forecast possible discrimination in labour market, and take it into account in order to choose careers and maximize utility, with discrimination as one of

the restrictions. In fact four of these mechanisms could explain some of our findings.

Firstly, married women have a lower probability of being part of the workforce. Moreover, the effect of children in households is higher for women than for men in both countries, meaning that a married mother would be less likely to participate in the work force. According to the concept of family-status discrimination (Ueno et al, 2015), employers would perceive married mothers as unfit for certain male-typical occupations, due to behavioural expectations for those occupations among other possible explanations (Budig and England, 2001). The foregoing would give women an income penalty, lowering the opportunity cost of participating in the work force.

Secondly gay men participate less in the work force than their straight married and unmarried counterparts. Gender-type behaviour mechanism suggests that gay men focus on female-typical occupations due to their tendency to engage in female-typical behaviour (Ueno et al, 2015). One typical occupation for women is being in charge of the household<sup>17</sup>, due to their possible higher productivity in housework and lower opportunity costs than straight men in the job-market (Becker, 1965). Although the authors do not specifically test for housework, they found no correlation between gender-type behaviours and career choices.

Thirdly, gay men and lesbians do have fewer children than their straight counterparts. Discriminations based on family-status penalize married mothers and reward married fathers due to differences in perceived work commitment (Ueno et al, 2015). Employers reward masculine behaviours and penalize feminine ones, considering the latter unfit for certain positions. Since gay men seem to have fewer children, em-

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<sup>17</sup>There is a higher concentration of women than men in housework duties.

ployers could penalize them and as a result pay them a lower salary. On the other hand, employers could reward lesbians for having fewer children and a subsequently stronger commitment to their jobs. The consequence of family-status discrimination is that gay men would have a lower opportunity cost for not participating in the labour force and lesbians would participate more due to a higher opportunity cost for not doing so (i.e. higher salary). As it was mentioned in the methodology part of this article, due to the fact that we took only partnered individuals and relationship status as signal for homosexuality, family-status discrimination could be reinforced when partnership status is revealed in either the curriculum or during an interview (Ueno et al, 2015).

Fourthly, gay men spend more years studying than both married and unmarried straight men. The concepts of “discrimination against sexual minorities” and “human-capital accumulation” (Ueno et al, 2015) suggest that gay men would foresee discrimination against sexual minorities due to family status or stereotypes (Tilcsik, 2011). Consequently, gay men would counterbalance those disadvantages by specializing in their careers in order to be indispensable in the workplace, as straight women would do. Also, studying more would keep them out of the workforce and subsequently would give them a lower probability of labour force participation.

Differences between gender and sexual orientation groups in Chile are larger than in Uruguay. Even though the signs of the variables of interest were the same for Chile and Uruguay, magnitudes differ greatly in some cases. For example, married women are 14.4% less likely to participate in the workforce in Chile but only 5% less in case of Uruguay, compared to straight unmarried women. Chilean gay men are 6.9% less likely to participate in the workforce compared to their straight counterparts, whereas in Uruguay that difference is only 4.6%. Chilean homosexual women are 15.1% more likely to participate compared to straight unmarried women, whereas

this difference in Uruguay is 12.4%.

As previously mentioned, Chile and Uruguay differ in both levels of conservatism and legal protection against discrimination based on sexual orientation. We cannot impute one specific cause to these differences, but previous research (Tilcsik, 2011; Baumle and Poston, 2015) had found that both anti-discrimination laws and societies' levels of conservatism could explain income premium for lesbian and income penalties against gay men as well as discrimination during the hiring process. In addition, conservatism and anti-discrimination laws are related with discrimination in the hiring process for gay men. If this applies to the South American reality<sup>18</sup>, Chile as the most conservative society and lacking anti-discrimination laws, would penalize more women's motherhood and marriage and men homosexuality within the context of labour markets.

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<sup>18</sup>Although experimental studies proving discrimination against homosexuals have not been conducted in Latin America, recent polls show that homosexuals reported being discriminated in the hiring process and in the workplace. Moreover 80% of homosexuals hide their sexual orientation at the work place. For more information see: Gestión Cultural, Iguales Chile, 2016

## VI. CONCLUSIONS

In this paper we delivered an account of the behaviour of both straight and homosexual couples within the labour market in two countries in South America. Although being almost equally developed in economic terms, Chile and Uruguay have followed different paths concerning gender roles and civil rights during the XX and XXI centuries.

Using census data, we found that gay men have more years of education, share their household with fewer children, emancipate earlier than their heterosexual counterparts. Lesbians, on the other hand, have the same years of education than straight women in Chile, but are showed to be more educated in Uruguay compared to straight married and unmarried women. Moreover, lesbian women do share their household with almost the same amount of children in Chile compared to their straight counterparts while Uruguayan lesbians share their household with considerably fewer children. In addition, homosexual women are more likely to be the head of household than heterosexual cohabiters, but less likely than married women.

Concerning labour market, gay men are showed to participate less in the labour market than their married and unmarried counterparts. On the opposite side, lesbians have a higher probability to participate in the labour force than both female cohabiters and married women. Married women have considerably fewer chances to participate in the labour force and those chances are even lower in Chile.

We find that differences in the probability to participate in the labour force widens in the case of Chile. Even though our paper does not prove so, previous research found that this difference could be due to Chile's levels of conservatism



and the fact that before the antidiscrimination law was passed, there was no legal framework designed to safeguard sexual minorities from being discriminated.

In this paper, several theories were discussed but further research can be done to deconstruct homosexuals' behaviour in the labour market and to prove the existence of discrimination against sexual and gender minorities in Latin America. §

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