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 A study on the employment and wage outcomes of persons living with a same-sex partner

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## **Abstract**

This study examines the labour market disparities faced by same-sex couples across nine countries (Argentina, Brazil, Chile, Colombia, France, Mexico, Thailand, the United States of America and the Bolivarian Republic of Venezuela), extending the focus of previous studies by looking beyond developed countries. Consistent with the existing literature, the findings presented here show that, in many countries, men in same-sex couples participate in the labour market to a lesser extent, experience higher unemployment rates and receive lower wages than comparable men in opposite-sex couples. Conversely, women in same-sex couples are more likely to be employed than comparable heterosexual women and to enjoy a wage premium in some countries. Finally, it makes the case for further research, especially in developing countries.

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## **▶** Introduction

The labour market situation of lesbian, gay, bisexual and transgender (LGBT+)¹ persons remains largely unexplored, even in countries where considerable legal advances have been achieved for such people. This is due partly to the lack of regular data compilation and production of labour statistics focusing on LGBT+ persons. Indeed, methodological efforts to that end have been undertaken in only a few countries (Gammarano 2019). In addition, despite its global relevance, most research on this topic has focused on developed countries, with only a few studies covering developing countries, such as Chile and Uruguay (Brown, Contreras and Schmidt 2019) or South Africa (Nyeck et al. 2019).

Examining the potential disparities faced by LGBT+ individuals in labour markets worldwide is therefore essential to attain a global perspective on the challenges that this community may experience in the world of work. The resulting insights can ultimately facilitate the development of effective policies to address any problems identified.

In the present study, we contribute to the growing literature in this field by analysing the labour market disparities faced by people with same-sex partners across a wider group of countries than has hitherto been the case, namely in Argentina, Brazil, Chile, Colombia, France, Mexico, Thailand, the United States of America and the Bolivarian Republic of Venezuela. Our aim is to arrive at a broader understanding of labour market inequalities based on sexual orientation by examining the situation in countries from various geographical areas. Since in many of the countries covered by this study there is no official statistical measure that allows one to directly identify same-sex partners, we rely on approaches employed in previous studies (Arabsheibani, Marin and Wadsworth 2005; Allegretto and Arthur 2001) and draw on information regarding heads of household and their partners for that purpose. Using the metric of same-sex partnership thus obtained, we investigate differences in various labour market outcomes that have previously been studied in the literature, including labour force participation, unemployment, self-employment and wages (see Appendix I for a review of the literature on earnings gaps and unemployment risks based on sexual orientation).

Our empirical findings can be summarized in three main points. First, in line with the existing literature, we observe that men living with same-sex partners in all of the aforementioned countries are less likely to participate in the labour market than men living with opposite-sex partners. In contrast, women living with same-sex partners tend to be more active in the labour market than their heterosexual counterparts. Secondly, our data reveals that coupled gay men in Brazil, Chile, Colombia, France and Mexico experience higher unemployment rates than men in opposite-sex couples. For women, the outcomes are mixed: coupled lesbians in Colombia and France are less likely to be unemployed than comparable heterosexual women, but in other countries there does not seem to be a significant correlation between same-sex partnership and unemployment rates. Thirdly, when it comes to earnings disparities, we find a wage penalty of around 10 per cent for coupled gay men in France, Thailand and the United States. Conversely, we identify a wage premium for coupled lesbians in Brazil, Chile and the Bolivarian Republic of Venezuela. For the other countries studied, our results do not point to a statistically significant correlation between same-sex partnership and hourly wages. These observations are consistent with well-established findings in the literature on the economics of sexual orientation, which suggest that

<sup>1</sup> The abbreviation LGBT is consistently used with a plus sign in this study (LGBT+) to include other identities.

lesbians often earn more than heterosexual women, while gay men earn less than heterosexual men (Drydakis 2022; Klawitter 2015).

The structure of this study is as follows: Chapter 1 presents the data and provides a summary of the descriptive statistics. Chapter 2 outlines the methodology used. Chapter 3 examines the results from the estimation of the models described in the previous chapter. The last chapter offers some concluding observations.

# ▶ 1 Data and descriptive statistics

This study is based on the analysis of data from nine countries, namely Argentina, Brazil, Chile, Colombia, France, Mexico, Thailand, the United States and the Bolivarian Republic of Venezuela. Our sample was designed to include only countries where same-sex sexual activity is legal, and for which micro-level information on employment and wages is available through the ILO's repository of microdata.<sup>2</sup> Given the data constraints, different survey years and waves were used for each country (see table 1 for a detailed breakdown).

#### ► Table 1. National surveys used in the study

Country	Survey	Year and waves
Argentina	Permanent Household Survey (EPH; Encuesta Permanente de Hogares)	2019 (Q1-Q4)
Brazil	Continuous National Household Sample Survey (PNADC; Pesquisa Nacional por Amostra de Domicílios Contínua)	2019
Chile	National Socio-Economic Characterization Survey (CASEN; Encuesta de Caracterización Socioeconómica Nacional)	2017 and 2020
Colombia	Large Integrated Household Survey (GEIH; Gran Encuesta Integrada de Hogares)	2019 and 2022
France	Employment Survey (EE; Enquête Emploi)	2019 (Q1-Q4)
Mexico	National Occupation and Employment Survey (ENOE; Encuesta Nacional de Ocupación y Empleo)	2019 (Q1-Q4)
Thailand	Labour Force Survey (LFS)	2018 and 2019
United States	Current Population Survey (CPS)	2019
Venezuela (Bolivarian Republic of)	Household Sample Survey (EHM; Encuesta de Hogares por Muestreo)	2017

## Identification of same-sex partnership

Same-sex partners are identified in the data set through the combination of the "relationship to head of the household" variable and the variable indicating an individual's sex. Couples are classified as being in a same-sex relationship if the household head and the reported partner are both of the same sex. We compare the labour market outcomes of the members of such couples with those of their counterparts in an opposite-sex relationship.

On the basis of this approach, we established the number of gay men in the data set for each country as follows: Argentina (444), Brazil (1,212), Chile (366), Colombia (842), France (664), Mexico (439), Thailand (171), United States (837), Bolivarian Republic of Venezuela (177). For lesbians in these countries, the corresponding numbers are: Argentina (478), Brazil (1,936), Chile (291),

<sup>&</sup>lt;sup>2</sup> For more information on the repository see https://ilostat.ilo.org/about/data-collection-and-production/

Colombia (1,085), France (532), Mexico (533), Thailand (433), United States (1,015), Bolivarian Republic of Venezuela (302).<sup>3</sup>

However, the method used by us to identify same-sex partnership has its limitations. First, someone living with other adults or an adult child could erroneously be labelled as having a same-sex partner if these individuals mistakenly report themselves as partners (Black et al. 2000).<sup>4</sup> Incorrect classification of a couple as being in a same-sex partnership could also be caused by measurement errors in the sex variable. We assessed the accuracy of our constructed same-sex partnership variable in Brazil and Chile, where a direct identifier for same-sex partnerships is available, by determining the proportion of such partnerships identified through our method that match those indicated by the direct identifier. In Brazil, our constructed variable consistently identifies same-sex partners, with no difference observed between the two metrics. In Chile, although some discrepancies are observed, there was an 87 per cent overlap between our constructed metric and the measure that directly identifies same-sex partners.<sup>5</sup>

The second concern about using the constructed same-sex partnership variable is that same-sex couples who opt to live together may not reflect the wider demographic of lesbians and gay men. The approach chosen may introduce a "disclosure bias", in the sense that economically advantaged gay men and lesbians are in each case more likely to live together (Valfort 2017; Badgett, Carpenter and Sansone 2021).

To ensure that our estimates reflect the population as a whole, and not just our sample, we apply survey weights to all of them.

## **Descriptive statistics**

Tables 2 and 3 provide a comparison between the characteristics and labour market outcomes of individuals with same-sex partners and those of opposite-sex couples. Table 2 focuses on coupled gay men compared with their heterosexual counterparts, while table 3 compares coupled lesbians and women in opposite-sex couples.<sup>6</sup>

In general, the members of same-sex couples tend to be younger (see row 1 in both tables) and to achieve higher educational levels (rows 2 to 4), and they are also more likely to be employed in managerial and professional occupations (row 5).

Turning to labour market outcomes, coupled gay men are less likely to participate in the labour market than their heterosexual counterparts, with the difference between the two groups' participation rates ranging from 1 to 9 percentage points across the nine countries studied (see row 11 in table 2). By contrast, coupled lesbians exhibit a higher labour force participation rate than coupled heterosexual women, with the difference between the two groups ranging from 10 to 36 percentage points, as can be seen from row 11 in table 3. Similar trends are observed for both gay and lesbian couples when it comes to employment rates (see row 12 in both tables).

<sup>&</sup>lt;sup>3</sup> The sample is limited to individuals aged 18–64 years. Consequently, the count of same-sex partners may not always be an even number for a given country.

The ILOSTAT variables used to identify same-sex relationships are ilo\_relationship\_aggregate and ilo\_sex.

In Appendix III, we check the robustness of our main findings for Chile by using the variable directly identifing same-sex couples that is available for that country. This exercise suggests that, in general, our estimates are robust to the use of a metric that directly identifies same-sex partnership.

<sup>&</sup>lt;sup>6</sup> The corresponding standard errors and numbers of observations are available upon request.

The descriptive evidence suggests that in every country, except for Thailand and the United States, the unemployment rate for coupled gay men exceeds that of their heterosexual counterparts (see row 13 in table 2). Specifically, in Argentina, Brazil, Chile, Colombia, France and the Bolivarian Republic of Venezuela, the difference between the two groups ranges from 2 to 3 percentage points. However, in Mexico, the gap is even more pronounced, with coupled gay men experiencing an unemployment rate that is about 5 percentage points higher.

The evidence regarding the unemployment rates of coupled lesbians in comparison to women in opposite-sex couples is more ambiguous. In Brazil and the United States, unemployment rates for coupled lesbians are higher by 2.1 and 0.8 percentage points respectively (see row 13 in table 3). In contrast, coupled lesbians in Argentina, Colombia and France appear to have lower unemployment rates than their heterosexual counterparts. However, given the limited sample size of same-sex couples, it is crucial to note that these differences may not be statistically significant.

As for self-employment rates, the evidence suggests that such differences are country-specific and not necessarily linked to the gender of same-sex couples. In Argentina, Brazil, Chile, Colombia, Mexico and the United States, members of same-sex couples are less likely to be self-employed than their heterosexual counterparts, with the difference between the average rates of the two groups ranging from 1.3 to 28 percentage points. Conversely, in France and the Bolivarian Republic of Venezuela, members of same-sex couples are more likely to be self-employed, with the difference between the average rates of the two groups ranging from 2.3 to 12 percentage points (see row 14 in tables 2 and 3). Thailand presents a unique case: while coupled gay men in that country are more often self-employed, coupled lesbians are less frequently found to be engaged in self-employment, in both cases relative to their heterosexual counterparts.

In terms of hourly wages, we can see that women consistently earn less per hour than men across all these countries. When comparing the hourly wages of members of same-sex and opposite-sex couples, the differences between the two groups, before adjustments for wage-related factors, vary depending on country and gender. In Argentina, Brazil, Chile, Colombia, Mexico and the Bolivarian Republic of Venezuela a wage premium is observed for coupled gay men. However, in France, Thailand and the United States, coupled gay men tend to have lower average hourly wages than their heterosexual counterparts. When comparing coupled lesbians with women in opposite-sex couples, it emerges that in Brazil, Chile, Mexico, Thailand and the Bolivarian Republic of Venezuela hourly wages are higher for lesbians. Conversely, in Argentina, Colombia, France and the United States, coupled lesbians earn less on average.

With regard to hours worked, coupled gay men consistently work fewer hours per week than their heterosexual counterparts. On the other hand, except in Mexico and Thailand, coupled lesbians work more hours per week than women in an opposite-sex partnership (see row 16 in tables 2 and 3).

In this section we have highlighted some differences in labour market outcomes between samesex and heterosexual couples, covering such key measures as labour force participation rate, unemployment rate, prevalence of self-employment and hourly wages. Simple descriptive statistics are informative about overall differences in the data, but they do not control for any relationships among variables. The next chapter discusses the methodology that we used to determine whether these observed differences hold when comparing same-sex couples with heterosexual couples who are similar in all observable and economically relevant characteristics.

### ▶ Table 2. Descriptive statistics for coupled heterosexual men and coupled gay men in the sampled countries

		_		_							
	Argentina		Brazil		Ch	ile	Colombia		France		
		Heterosex.	Gays	Heterosex.	Gays	Heterosex.	Gays	Heterosex.	Gays	Heterosex.	Gays
1	Age (years)	44.62	39.41	42.69	35.22	46.12	36.10	42.85	35.05	45.19	43.66
	Education:										
	1. Lower secondary or below	41.51%	22.80%	43.49%	7.31%	20.11%	2.76%	44.96%	7.78%	17.66%	13.47%
_	2. Upper secondary	38.84%	46.53%	39.13%	44.69%	50.85%	33.07%	31.83%	29.76%	46.40%	43.49%
4	3. Above upper secondary	19.66%	30.66%	17.38%	48.00%	29.04%	64.17%	23.20%	62.46%	35.94%	43.04%
	Occupation:										
5	1. Managerial or professional	25.78%	40.87%	20.70%	48.83%	28.64%	61.61%	29.36%	51.73%	50.55%	54.24%
_	2. Services	26.61%	35.91%	21.08%	33.23%	16.05%	31.74%	14.49%	32.33%	12.50%	29.46%
•	3. Skilled agricultural	22.41%	10.86%	29.17%	5.89%	23.86%	3.33%	24.52%	6.55%	19.28%	4.66%
	4. Skilled machinery	15.69%	5.58%	14.69%	3.26%	15.37%	0.81%	15.96%	3.66%	10.18%	3.28%
9	5. Elementary occupations	9.50%	6.78%	14.36%	8.79%	16.07%	2.51%	15.67%	5.73%	7.50%	8.35%
10	employment	15.26%	17.61%	9.79%	18.90%	11.80%	13.75%	4.44%	5.23%	15.71%	20.14%
11	Labour force participation rate	93.95%	86.96%	89.22%	88.58%	93.24%	91.26%	94.29%	89.64%	86.80%	84.98%
12	Employment rate	89.14%	80.66%	84.35%	81.28%	88.33%	84.35%	89.65%	82.09%	82.36%	78.46%
13	rate	5.12%	7.24%	5.47%	8.25%	5.27%	7.57%	4.92%	8.43%	5.12%	7.67%
14	Self-employment rate	29.23%	24.28%	37.55%	21.57%	26.80%	19.20%	49.19%	40.24%	16.10%	18.41%
15	Hourly wage	186.49 Argentine posos	212.23 Argentine pesos	15.94 Brazilian reais	24.97 Brazilian reais	3 322.90 Chilean pesos	4 377.70 Chilean pesos	4 939.97 Colombian pesos	8 112.39 Colombian pesos	€ 14.29	€ 12.80
16	Hours worked per week	41.50	39.12	42.40	41.44	46.39	41.42	49.19	45.36	41.00	38.49
17	Urban residence	n.a.	n.a.	84.71%	98.11%	86.53%	96.57%	74.53%	94.49%	83.17%	81.70%
	Number of observations	32 827	444	387 210	1 212	52 558	366	230 702	842	27 708	664

#### Table 2 (cont.)

		Mex	ico	Thail	and	United	States		(Bolivarian blic of)
		Heterosex.	Gays	Heterosex.	Gays	Heterosex.	Gays	Heterosex.	Gays
1	Age (years)	44.18	35.40	47.71	46.25	44.96	43.18	43.46	41.80
	Education:								
	1. Lower secondary or below	63.58%	26.58%	68.37%	65.28%	4.72%	1.50%	45.53%	31.55%
3	2. Upper secondary	20.53%	35.99%	15.55%	23.20%	46.95%	34.04%	31.81%	38.33%
4	3. Above upper secondary	15.90%	37.43%	16.08%	11.52%	48.33%	64.46%	22.66%	30.12%
	Occupation:								
5	<ol> <li>Managerial or professional</li> </ol>	17.55%	47.98%	13.19%	9.56%	51.30%	64.51%	13.99%	17.70%
6	2. Services	19.69%	33.59%	16.40%	25.50%	13.45%	24.00%	30.50%	31.39%
7	agricultural	31.91%	10.57%	48.34%	43.75%	17.01%	4.77%	10.43%	5.49%
8	4. Skilled machinery	15.56%	4.35%	12.97%	8.14%	8.76%	3.28%	43.06%	44.74%
9	5. Elementary occupations	15.28%	3.51%	9.09%	13.06%	9.48%	3.44%	2.02%	0.68%
10	employment	10.18%	11.75%	8.86%	11.87%	11.97%	10.27%	18.53%	18.29%
11	Labour force participation rate	92.63%	91.51%	92.53%	82.99%	89.05%	85.19%	95.60%	84.23%
12	Employment rate	90.84%	85.71%	92.35%	82.99%	87.16%	84.16%	93.62%	80.06%
13	Unemployment rate	1.93%	6.34%	0.20%	0.00%	2.13%	1.20%	2.07%	4.96%
14	Self-employment rate	33.02%	28.36%	55.41%	65.07%	6.79%	5.17%	49.98%	54.18%
15	Hourly wage	36.37 Mexican pesos	55.26 Mexican pesos	82.52 Thai baht	64.46 Thai baht	US\$35.19	US\$31.78	1 771.70 Venezuela n bolívares	1 673.58 Venezuelan bolívares
16	Hours worked per week	63.36	58.58	42.78	42.71	41.26	39.68	41.06	39.08
17	Urban residence	76.79%	96.41%	44.63%	43.53%	82.92%	92.13%		
	Number of observations	245 302	439	257 077	171	58 379	837	10 685	177

n.a. = data not available.

**Note:** The labour force participation rate is the number of persons in the labour force (i.e. either employed or unemployed) expressed as a percentage of the number of persons of working age. The unemployment rate is the number of unemployed persons expressed as a percentage of the total number of persons in the labour force. The self-employment rate is the number of persons who work as self-employed expressed as a percentage of the number of persons in employment. "Urban residence" indicates the proportion of people residing in urban areas. The estimates presented in this table are averages for the population group under consideration (i.e. either coupled gay men or coupled heterosexual men) in each country.

# ▶ Table 3. Descriptive statistics for coupled heterosexual women and coupled lesbians in the sampled countries

		Arger	ntina	Bra	zil	Ch	ile	Colo	mbia	Fran	ice
		Heterosex.	Lesbians	Heterosex.	Lesbians	Heterosex.	Lesbians	Heterosex.	Lesbians	Heterosex.	Lesbian s
1	Age (years)	43.29	41.37	40.77	33.74	44.87	36.01	40.68	32.46	44.04	39.83
	Education:										
2	1. Lower secondary or below	34.53%	30.75%	37.02%	13.96%	20.97%	4.68%	39.55%	18.21%	18.35%	15.95%
3	2. Upper secondary	38.72%	41.67%	41.30%	52.77%	50.09%	52.89%	33.30%	39.66%	38.84%	39.54%
4	3. Above upper secondary	26.75%	27.58%	21.68%	33.27%	28.94%	42.43%	27.15%	42.12%	42.81%	44.51%
	Occupation:										
5	1. Managerial or professional	34.23%	28.76%	28.63%	31.73%	40.64%	40.20%	36.16%	35.35%	49.12%	47.28%
6	2. Services	40.90%	33.55%	39.17%	46.50%	32.83%	38.33%	35.01%	35.35%	33.09%	16.08%
,	3. Skilled agricultural	2.40%	7.03%	8.97%	6.40%	5.11%	2.83%	9.76%	9.06%	3.25%	7.68%
	4. Skilled machinery	2.62%	6.87%	2.72%	2.81%	1.47%	5.48%	4.37%	6.58%	2.50%	7.11%
9	5. Elementary occupations	19.85%	23.78%	20.51%	12.56%	19.94%	13.16%	14.69%	13.66%	12.05%	21.86%
10	Public sector employment	23.38%	22.72%	17.19%	16.21%	19.47%	14.95%	5.57%	2.28%	27.97%	22.24%
11	Labour force participation rate	61.87%	85.87%	62.48%	90.42%	54.81%	89.76%	55.39%	90.48%	76.22%	86.36%
12	Employment rate	56.97%	80.10%	55.99%	79.10%	50.42%	82.64%	49.09%	81.61%	71.46%	82.64%
13	Unemployment rate	7.93%	6.71%	10.39%	12.52%	8.00%	7.94%	11.36%	9.80%	6.24%	4.30%
14	Self-employment rate	25.79%	19.31%	30.50%	26.30%	25.36%	23.02%	48.77%	42.66%	9.68%	13.04%
15	Hourly wage	190.81 Argentine posos	148.49 Argentine pesos	14.00 Brazilian reais	15.67 Brazilian reais	2 805.83 Chilean pesos	2 966.67 Chilean pesos	5 390.93 Colombian pesos	4 865.94 Colombian pesos	€ 12.18	€ 11.79
16	Hours worked per week	29.51	34.78	36.60	40.80	40.21	41.75	39.96	45.87	35.19	36.00
17	Urban residence	n.a.	n.a.	84.62%	97.42%	86.14%	95.15%	74.63%	92.79%	83.20%	79.51%
	Number of observations	34 753	478	412 075	1 936	56 973	291	246 554	1 085	29 804	532

#### Table 3 (cont.)

		Mex	tico	Thail	Thailand		States	Venezuela (Bolivarian Republic of)		
		Heterosex.	Lesbians	Heterosex.	Lesbians	Heterosex.	Lesbians	Heterosex.	Lesbians	
1	Age (years)	42.44	34.42	45.98	45.73	44.14	41.4	41.63	42.53	
	Education:									
2	1. Lower secondary or below	65.10%	40.63%	70.49%	62.83%	4.03%	2.51%	36.54%	46.47%	
3	secondary	21.36%	32.31%	14.03%	18.28%	41.07%	39.85%	31.02%	28.36%	
4	3. Above upper secondary	13.54%	27.06%	15.48%	18.89%	54.90%	57.63%	32.44%	25.17%	
	Occupation:									
5	1. Managerial or professional	24.59%	40.39%	10.95%	15.02%	58.06%	59.22%	31.45%	20.68%	
	2. Services	39.31%	33.19%	28.11%	21.93%	32.72%	28.12%	58.62%	43.50%	
7	3. Skilled agricultural	10.31%	11.68%	41.15%	41.36%	2.71%	4.80%	1.71%	9.05%	
8	4. Skilled machinery	4.53%	6.60%	6.77%	11.63%	1.98%	3.69%	7.93%	26.37%	
9	5. Elementary occupations	21.27%	8.14%	13.02%	10.06%	4.54%	4.18%	0.29%	0.39%	
10	Public sector employment	16.54%	27.26%	7.71%	12.77%	18.17%	18.29%	33.32%	20.11%	
11	Labour force participation rate	44.45%	81.02%	72.13%	83.17%	70.94%	82.71%	58.14%	72.53%	
12	Employment rate	43.52%	79.28%	72.02%	83.17%	69.23%	80.09%	55.80%	69.37%	
13	Unemployment rate	2.08%	2.15%	0.15%	0.00%	2.41%	3.17%	4.02%	4.36%	
14	Self-employment rate	39.62%	11.76%	58.48%	53.36%	5.61%	4.31%	39.62%	51.96%	
15	Hourly wage	40.10 Mexican pesos	42.28 Mexican pesos	74.62 Thai baht	101.05 Thai baht	US\$29.80	US\$29.22	1 585.69 Venezuelan bolívares	1 610.00 Venezuelan bolívares	
16	Hours worked per week	54.25	49.73	41.93	40.70	35.12	37.25	36.75	37.53	
17	Urban residence	76.56%	96.79%	44.20%	40.73%	82.56%	85.54%			
	Number of observations	259 033	533	281 371	433	62 096	1 015	11 304	302	

n.a. = data not available.

**Note:** The labour force participation rate is the number of persons in the labour force (i.e. either employed or unemployed) expressed as a percentage of the number of persons of working age. The unemployment rate is the number of unemployed persons expressed as a percentage of the total number of persons in the labour force. The self-employment rate is the number of persons who work as self-employed expressed as a percentage of the number of persons in employment. "Urban residence" indicates the proportion of people residing in urban areas. The estimates presented in this table are averages for the population group under consideration (i.e. either coupled lesbian women or coupled heterosexual women) in each country.

# ▶ 2 Methodology for studying the employment and earnings disparities faced by persons with a same-sex partner

To further analyse inequalities in the labour market based on sexual orientation, we first examine the relationship between sexual orientation and employment (labour force participation, unemployment and self-employment) by estimating the following logistic regression model separately for men and women:

$$\Pr(y_i = 1 \mid SameSex_i, X_i) = \frac{1}{1 + e^{-(\alpha_0 + \alpha_1 SameSex_i + X_i\theta)}} \left(1\right)$$

Where  $Y_i$  is a binary variable equal to 1 if individual i is in the labour force and zero otherwise. The above model is also estimated for unemployment and self-employment. The variable  $SameSex_i$  is a binary variable equal to 1 if individual i is in a same-sex partnership. The excluded category is composed of individuals who report living in a household with a partner of the opposite sex.  $X_i$  is a vector of observable characteristics. In the main specification we include age, education and a location dummy for residence in an urban area.  $\alpha_1$  is the coefficient of interest estimating the differences in labour market outcomes of coupled lesbians and gay men compared with their heterosexual counterparts. Following estimation of the logistic regression models, we report the coefficients in Chapter 3 as odds ratios, which involves comparing the odds of labour force participation (or unemployment or self-employment) for same-sex partners with the odds for the members of heterosexual couples.

We further explore the inequalities in the labour market by considering the relationship between sexual orientation and the hourly wages of men and women. In particular, we estimate the following model:

LogHourlyWages<sub>i</sub> = 
$$\alpha_0 + \alpha_1$$
SameSex<sub>i</sub> +  $X_i \theta + \epsilon_i$  (2)

where the dependent variable is the log of hourly wages. The variable  $SameSex_i$  is defined as above.  $X_i$  is, again, a vector of observable characteristics. In the main specification, we include age and age squared, education, a location dummy for residence in an urban area, occupation, hours worked and whether the individual is employed in the public sector.  $\alpha_1$  is the coefficient of interest estimating the differences in the log of hourly wages for coupled lesbians and gay men compared with their heterosexual counterparts. The model is estimated using the ordinary least squares method.

When estimating the equation for self-employment, we include dummy variables for occupation. In all countries where two years of data are used, we also include year fixed effects.

<sup>&</sup>lt;sup>8</sup> We also estimate linear probability models – these results are available upon request.

## ▶ 3 Estimation results

In this chapter, we analyse the differences in labour market outcomes between same-sex partners and heterosexual couples, taking observable factors into account. The first section discusses the estimates of the labour force participation rates; the second section sheds light on the unemployment data; and the third section discusses the results for self-employment. In these sections, we estimate equation (1) from Chapter 2 and report the results as odds ratios. Finally, the last section discusses wage disparities, presenting the estimates from equation (2). Only the primary coefficient of interest,  $\alpha_{1'}$  is reported in these sections. Estimates of other explanatory variables may be found in Appendix II. It is important to note that while we aim to take all observable characteristics into account, our estimates do not capture the causal effect of being in a same-sex partnership on labour market outcomes; they should be interpreted simply as correlations.

## Labour force participation

In panel I, part A of table 4 further down, columns 1 to 9 present estimates of the odds of participation in the labour market for men living with a same-sex partner relative to coupled heterosexual men across all the countries studied. In all cases, gay men consistently exhibit lower odds of being in the labour force than their heterosexual counterparts. The corresponding odds ratio ranges from 0.2 in the Bolivarian Republic of Venezuela to 0.66 in France. The odds ratio of 0.2 for the Bolivarian Republic of Venezuela indicates that coupled gay men in that country are 80 per cent less likely to be in the labour market, while the value of 0.66 for France suggests that coupled gay men there are approximately 34 per cent less likely to participate in the labour market than their heterosexual counterparts. Notably, the odds ratios are statistically significantly different from 1 in all these countries.

Part B of panel I in table 4 sheds light on the labour market participation of women with a same-sex partner relative to coupled heterosexual women. Lesbians in every country studied are more likely to be present in the labour market than their heterosexual counterparts. The corresponding odds ratio ranges from 1.9 in the United States to a staggering 6.1 in Colombia. To put these values into context, the ratio for the United States indicates that women in a same-sex partnership there are 1.9 times more likely to be in the labour force than their heterosexual counterparts. All these odds ratios are statistically significantly different from 1 at the 1 per cent significance level.

These observations are in line with previous studies on the labour supply of gay men and lesbians in Chile and Uruguay (Brown, Contreras and Schmidt 2019) and in the United States (Tebaldi and Elmslie 2006; Leppel 2009; Badgett, Carpenter and Sansone 2021). One explanation for these differences put forward in the literature is that the conventional patterns of specialization based on the comparative advantage of partners in a heterosexual couple are either absent (Siminski and Yetsenga 2022) or different for same-sex couples, with such specialization being more prevalent among gay couples than lesbian ones (Hofmarcher and Plug 2022; Martell and Roncolato 2016).

# **Unemployment**

Panel II in table 4 focuses on the relationship between same-sex partnership and the unemployment rate. From part A it can be seen that coupled gay men residing in Brazil, Chile, Colombia, France and Mexico experience a higher unemployment rate than their heterosexual counterparts.

The odds ratio ranges from 1.7 in France to 3.1 in Mexico, indicating that while French men in a same-sex partnership are 1.7 times more likely to be unemployed than coupled heterosexual men, Mexican men in such a partnership are 3.1 times more likely to be unemployed than their heterosexual counterparts. In both Argentina and the Bolivarian Republic of Venezuela the difference is not statistically significant. In the United States, we do not observe a greater unemployment risk among coupled gay men. Given that the unemployment rate in Thailand is very low (less than 1 per cent in 2019), our small sample of same-sex partners does not allow us to estimate the relationship between same-sex partnership and unemployment.

▶ Table 4. Same-sex partnership and labour market outcomes in the sampled countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
I. Labour	force partic	ipation ra	te						
A. Men						_			
Gays	0.264***	0.339***	0.379***	0.358***	0.663***	0.452**	0.367***	0.573***	0.209***
	(.0577)	(.0522)	(.1006)	(.0756)	(8080.)	(.1113)	(.1085)	(.0652)	(.0527)
B. Womer	n								
Lesbians	3.896***	4.032***	5.443***	6.073***	1.844***	4.454***	1.918**	1.897***	2.177***
	(.7192)	-0.3609	(1.1360)	(1.1553)	(.3331)	(.9021)	(.4636)	(.1810)	(.3366)
II. Unemp	loyment ra	te							
A. Men									
Gays	1.818	2.015***	1.721*	1.741**	1.676**	3.105***	n.a.	0.621	2.478
	(.8514)	(.3078)	(.4552)	(.3450)	(.3054)	(.9458)	n.a.	(.2116)	(1.4555)
B. Womer	1								
Lesbians	0.713	1.043	0.795	0.638*	0.567*	0.733	n.a.	1.303	1.114
	(.2304)	(.1010)	(.2068)	(.1119)	(.1334)	(.2593)	n.a.	(.3135)	(.4381)
III. Self-en	nployment i	ate							
A. Men									
Gays	0.896	0.740**	0.986	1.249	1.417**	1.43	1.915**	0.922	1.330
	(.1789)	(.0711)	(.1987)	(.1747)	(.1778)	(.3045)	(.4261)	(.1771)	(.2751)
B. Womer	1								
Lesbians	0.563*	0.923	1.105	1.067	1.447*	0.237***	0.834	0.803	1.064
	(.1351)	(.0817)	(.2803)	(.1306)	(.2334)	(.0513)	(.1994)	(.1555)	(.2146)

n.a. = not applicable.

**Note:** The table presents the odds ratios obtained by estimation of logistic regression models, with the standard error given inside parentheses below each estimate. The odds ratio reports the odds of the outcome variable for men (women) living with a same-sex partner relative to the odds for men (women) living with an opposite-sex partner. An odds ratio equal to 1 shows that living with a same-sex partner does not affect the odds of the outcome of interest. An odds ratio larger (smaller) than 1 indicates that being in a same-sex partnership increases (decreases) the likelihood of the outcome of interest. The regression models control for age, education, urban residence, occupation (only for self-employment), and year fixed effects if more than two years of data are used in the analyses. Significant values are denoted by \*, \*\*\*, \*\*\*\* at the 10%, 5% and 1% significance levels respectively.

Our findings for gay men are in line with the conclusion from previous studies that these experience a higher unemployment rate than heterosexual men (see Drydakis 2012 for Greece; Fric

2021 for the European Union (EU) countries; and Laurent and Mihoubi 2017 for France). In the United States, drawing on an older wave of the Current Population Survey than the one used for the present study (2000 vs 2019), Leppel (2009) noted unemployment gaps that depended on the population group with which men and women with same-sex partners are compared.<sup>9</sup>

The reasons advanced to explain the higher unemployment rates observed among gay men in the few existing studies on this topic include factors linked to discrimination. In that regard, a recent meta-analysis of studies covering member countries of the Organisation for Economic Cooperation and Development (OECD) has revealed a substantial level of sexual orientation-based discrimination at the first stages of the hiring process (Flage 2020). Beyond mere disapprobation on the part of employers, unemployment induced by discriminatory behaviours may also arise when homosexuality is perceived as having a cost for the employer and the firm, which could, for instance, be the case if a large proportion of employees, or the consumers, are homophobic (Laurent and Mehoubi 2017). In line with this argument, a number of studies have also highlighted that some employers may regard homosexuality as a signal of a greater likelihood of HIV infection, which is associated with a risk of lower productivity and higher absenteeism rates.<sup>10</sup>

The results for women, presented in panel II, part B, of table 4, are less conclusive. We find that women in a same-sex partnership in Colombia and France are less likely to be unemployed than their heterosexual counterparts. However, the odds ratios in question are only marginally statistically different from 1 (at the 10 per cent significance level). In other countries we do not find that same-sex partnership for women is related to unemployment rates. In general, the findings on unemployment rates among lesbians relative to heterosexual women are more mixed in the literature. For instance, Leppel (2009) reports higher unemployment rates for lesbian couples in the United States, while Fric (2021), using a logistic regression model, finds no significant unemployment differences for coupled lesbians across EU countries.

## Self-employment

The relationship between same-sex partnership and self-employment is not immediately obvious. Discrimination against same-sex couples could limit their access to credit markets and business networks, potentially narrowing their opportunities for self-employment. On the other hand, employer prejudices could push them to choose self-employment as a way of avoiding such discrimination, as argued by Leppel (2016).

Our findings on the differences in self-employment of men and women with same-sex partners and their heterosexual counterparts are reported in panel III of table 4. Even when adjusting for observable factors such as geographical location and occupation, the self-employment trends for coupled gay men and lesbians vary considerably across countries. For instance, while men in same-sex partnerships in Brazil are less likely to be self-employed than their heterosexual counterparts, coupled gay men in France and Thailand lean towards self-employment (see columns 2, 5 and 7 of panel III, part A). In Brazil, coupled gay men are about 26 per cent less likely to be self-employed than their heterosexual counterparts, while in France and Thailand, the odds of being self-employed are, respectively, 43 per cent and 92 per cent higher for men in a same-sex partnership. In other countries, the results are not statistically significant, making them difficult

Leppel (2009) found that same-sex partners were more likely to be unemployed than married opposite-sex partners, but less likely than unmarried opposite-sex partners.

This type of discrimination is often called "statistical discrimination", meaning that it arises when decision-makers use observable characteristics of individuals as a proxy for otherwise unobservable characteristics. See Appendix I for a definition.

to interpret. Turning to women, coupled lesbians in Argentina and Mexico are, respectively, 44 per cent and 76 per cent less likely to be self-employed than women in opposite-sex couples. In contrast, in France they are about 40 per cent more likely to be self-employed than their heterosexual counterparts (see columns 1, 5 and 6 in panel III, part B).

In the United States we do not find a statistically significant relationship between sexual orientation and self-employment. However, studies of this topic in the US context drawing on American Community Survey data have found that coupled gay men show a reduced likelihood of self-employment compared to heterosexual married men, while self-employment rates among coupled lesbians are similar to those of heterosexual married women (Jepsen and Jepsen 2017). Leppel (2016) concluded that the individuals most likely to be self-employed were heterosexual men, followed by gay men, then lesbians and, lastly, heterosexual women. The findings of these studies suggest that the incidence of self-employment is more likely to be gendered and not to depend so much on sexual orientation. The gendered aspect of self-employment has also been noted by Marlow, Greene and Coad (2018), who studied entrepreneurial activity among gay men and lesbians in the United Kingdom of Great Britain and Northern Ireland.

Our results for France are in line with a study by Germon et al. (2020) on entrepreneurship among the LGBT+ community in Paris. They found that LGBT+ individuals exhibited a higher level of entrepreneurial intention than heterosexual individuals. Consistent with their findings, we noted above how the odds of being self-employed for coupled gay men and lesbians in France were higher than for their heterosexual counterparts.<sup>11</sup>

## Wages

In this section we investigate whether the well-established observation in the literature that gay men typically earn less than heterosexual men, whereas lesbians earn more than heterosexual women (for related reviews, see Klawitter 2015; Drydakis 2022; Badgett et al., forthcoming) holds in our sample of countries. The corresponding estimations are presented in table 5.

Our findings highlight a wage penalty for men in a same-sex partnership in France, Thailand and the United States (see columns 5, 7 and 8 of panel A). Specifically, coupled gay men in these countries experience a respective wage penalty of approximately 11 per cent, 15 per cent and 10 per cent compared to their heterosexual counterparts. In contrast, we observe an unexpected wage premium of 15 per cent for coupled gay men in Colombia (see column 4). However, it is important to bear in mind that these estimates could be affected by disclosure bias. <sup>12</sup> Gay men in Colombia who opt to openly cohabit may be in a relatively advantaged economic position, making them potentially unrepresentative of the broader population of gay couples in the country. This could introduce a positive bias in our results. Additionally, we observe a wage premium for coupled lesbians in Brazil, Chile and the Bolivarian Republic of Venezuela, with respective differentials of 7 per cent, 18 per cent and 35 per cent (see columns 2, 3 and 9 of panel B in table 5). Although the estimated coefficients on the link between same-sex partnership and women's hourly wages are not statistically significant for the other countries studied, in four cases they also suggest a positive relationship (Colombia, France, Mexico and Thailand).

The results for labour force participation, unemployment and self-employment are robust to the inclusion of having children as an additional explanatory variable and also to the estimation of linear probability models. These additional estimates are available upon request

Household survey data is usually anonymous, but some respondents may fear that this is not actually the case or may be reluctant to disclose some information to the survey interviewer.

Recent research findings from the United States drawing on the American Community Survey indicate a wage penalty of 11.7 per cent for coupled gay men and a wage premium of 7.8 per cent for coupled lesbians compared to their married heterosexual counterparts for the year 2018 (Jepsen and Jepsen 2022). While our findings align with theirs regarding the wage penalty for gay men, we do not observe a wage premium for lesbians in the United States. This discrepancy may be due to our smaller sample size and the fact that we used the Current Population Survey instead.

Laurent and Mihoubi (2017), using data from France's Employment Survey covering the 1996–2007 period, found that men in a same-sex partnership earned 6.5 per cent less than their heterosexual counterparts in the private sector and 5.8 per cent less in the public sector. Women in same-sex couples earned 2.1 per cent more than their heterosexual counterparts in the private sector but only 0.3 per cent more in the public sector. In our study, we find that coupled gay men, in general, earn 11 per cent less than their heterosexual counterparts, while the difference is not statistically significant for women in same-sex relationships, which may be due to the relatively small size of our sample.<sup>13</sup>

#### ▶ Table 5. Same-sex partnership and wages in the sampled countries

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
A. Men									
Gays	0.004	0.050	-0.015	0.146**	-0.111***	0.041	-0.151*	-0.099**	-0.246
	(.0624)	(.0389)	(.0883)	(.0481)	(.0217)	(.0481)	(.0740)	(.0334)	(.1849)
B. Wome	3. Women								
Lesbians	-0.098	0.066**	0.175**	0.012	0.013	0.105	0.076	-0.014	0.349**
	(.0531)	(.0254)	(.0651)	(.0471)	(.0174)	(.0537)	(.0634)	(.0406)	(.1186)

**Note:** The table presents, as decimal values, the wage premiums or penalties experienced by men and women in a same-sex partnership relative to their heterosexual counterparts, with the standard error given inside parentheses below each estimate. The dependent variable is the log of hourly wages. The regression model controls for age (through a quartic specification), education, occupation, employment in the public sector, hours worked, urban residence, and year fixed effects if more than two years of data are used in the analyses. Significant values are denoted by \*, \*\*\*, \*\*\*\* at the 10%, 5% and 1% significance levels respectively.

When we further checked the robustness of our results to the inclusion of having children as an additional explanatory variable, we obtained qualitatively similar findings. These additional estimates are available upon request.

## **▶** Conclusion

This study has examined the disparities faced by members of same-sex couples in the labour market and considered legal frameworks that can be used to address unjustifiable gaps in that regard. While most earlier investigations of this topic have focused on developed countries, the labour market experiences of same-sex couples in developing countries remain underexplored. Our research opens up a broader perspective by analysing potential disparities experienced by coupled gay men and lesbians across nine different countries with regard to labour force participation, unemployment and self-employment rates, and wages.

Despite limitations such as a small sample size and the absence of a direct identifier for same-sex partnership in most of the countries studied, our findings tie in with those of previous studies. We observe that the members of same-sex couples in the countries in our sample tend to be younger and better educated than their heterosexual counterparts. Consistent with the existing literature, we find that coupled gay men participate in the labour market to a lesser extent while coupled lesbians are more likely to be in the labour market compared to, respectively, men and women with opposite-sex partners.

Our results indicate that in most of the countries studied, namely Brazil, Chile, Colombia, France and Mexico, coupled gay men face higher unemployment rates than their heterosexual counterparts. Conversely, coupled lesbians are less likely to be unemployed in Colombia and France. In terms of self-employment, our findings suggest that both coupled gay men and coupled lesbians in France are more likely to be self-employed than their opposite-sex counterparts. On the wage front, in line with previous research, coupled gay men in France, Thailand and the United States receive lower hourly wages, while coupled lesbians in Brazil, Chile and the Bolivarian Republic of Venezuela enjoy a wage premium.

While the empirical evidence presented here provides insights into labour market disparities between same-sex and heterosexual couples across various countries, our findings cannot be extrapolated without caution. They reflect primarily the situation of same-sex couples, so they may not be representative of the broader population of lesbians and gay men in the countries studied. Our findings may also be influenced by disclosure bias, especially if same-sex couples in a better economic situation are more likely to live together. Further research in developing countries – drawing on larger samples and using improved methods to identify same-sex individuals – is necessary to attain a more comprehensive overview of the labour market situation of LGBT+ individuals.

# Appendix I. Earnings gaps and unemployment risks based on sexual orientation: A literature review<sup>14</sup>

### A.I.1. Introduction

One reason why we know little about the economic effects of sexual orientation is that data matching sexual orientation to economic outcomes is extremely rare (ILO 2022; OECD 2020; Drydakis 2019; Badgett and Frank 2007). The purpose of this appendix is to review studies of earnings gaps and unemployment risks based on sexual orientation, with an emphasis on those studies that compare the experiences of individuals in opposite-sex and same-sex relationships. The literature review offered here seeks to outline contemporary knowledge of the subject matter (Drydakis 2024; Ozeren 2014).

Although increasing numbers of people have started to self-identify as having a minority sexual orientation (that is, identifying as gay men or as lesbians, among other categories), at the time of writing in 2023, being a gay man or a lesbian was illegal in approximately 67 countries (Human Rights Watch, n.d.). Legal sanctions against same-sex relationships vary in scope and application; sentences range from fines to life imprisonment, and in some cases may even entail capital punishment (Human Rights Watch, n.d.). In general, Australia, Canada, the United States and the EU countries have the strongest measures in place for the protection of rights related to sexual orientation, including workplace anti-discrimination laws (ILO 2022; OECD 2020; Drydakis 2014), and some studies of these countries have examined labour market outcomes for gay men and lesbians (ILO 2022; FRA 2020; OECD 2020). However, in most of Africa and Asia, same-sex unions are illegal, which by default precludes the conduct of such studies (ILO 2022; OECD 2020; Drydakis 2014).

The OECD (2019) has indicated that the United States is the country with the largest proportion of the population who identify as having a minority sexual orientation (3.8 per cent), followed by New Zealand (3.3 per cent), Canada (3.3 per cent) and Australia (3.0 per cent). Surveys in the Member States of the United Nations, the EU and the OECD have shown that sexual orientation minority individuals face societal biases in everyday life, such as at school or work, when looking for housing, and in accessing healthcare or social services (ILO 2022; FRA 2020; OECD 2020). Previous review studies have noted how sexual orientation minority individuals reported a greater number of incidents of harassment and were more likely to report having suffered discriminatory treatment in the labour market (OECD 2020; Drydakis 2014). Additionally, they experienced a lower level of life satisfaction (ILO 2022; FRA 2020; OECD 2020) and poorer physical and psychological well-being than their heterosexual peers (Semlyen, Curtis and Varney 2019; Hafeez et al. 2017). The inadequate well-being of sexual minority people has been primarily attributed to the negative consequences of exclusion and biased treatment (Meyer 2003).

Having a minority sexual orientation can be associated with adverse economic outcomes (Badgett 2021; OECD 2020; Drydakis and Zimmermann 2020; Drydakis 2019, 2014). Available studies dealing with the United States have indicated that same-sex couples are more likely to be living in poverty than opposite-sex ones (Schneebaum and Badgett 2019). In the EU and the United States, members of same-sex couples have been found to experience higher levels of unemployment

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than their heterosexual counterparts (Fric 2021a; Gruberg and Madowitz 2020; Leppel 2009). Moreover, in OECD countries, job applicants who identified as gay men or as lesbians during the initial stage of the hiring process were discriminated against in favour of comparable heterosexual applicants (Flage 2020). Hiring discrimination potentially leads to increased rates of unemployment and poverty, which can adversely affect mental health and well-being (Drydakis 2019). In addition, in Australia, Canada, the EU, the United Kingdom and the United States, studies have indicated that men in a same-sex partnership receive lower earnings than comparable men in an opposite-sex partnership, while women from same-sex couples earned more than comparable women from heterosexual couples (Jepsen and Jepsen 2022; Bridges and Mann 2019; Waite 2015; La Nauze 2015). However, despite the higher earnings of lesbians, studies focusing on the United States, Canada and Europe have reported lower job satisfaction among them than among heterosexual women (Drydakis 2019). A similar pattern was found to hold for gay men (Drydakis 2019).

These findings imply that legislative protection constitutes but a small step towards improving the employment circumstances and general well-being of people with a minority sexual orientation, highlighting the need for additional policy interventions (Drydakis 2019). Owing to limited data sets on sexual orientation and labour outcomes, there are very few studies on the topic. Without data, pattern generalizations based on previous studies cannot be made for countries that have yet to be examined. Nevertheless, investigating such questions as whether earnings penalties for gay men and lesbians exist in other countries is of great importance for policy action. Because labour market discrimination based on gender and race is ubiquitous and requires policy intervention, it is likely that discrimination based on sexual orientation, too, is widespread and therefore warrants policymakers' attention (Drydakis 2019). Significantly, the scarcity of studies and the limited data sets make it difficult to examine how age, ethnicity, health, education, occupation, country and other key socio-economic, productivity and industrial characteristics affect the relationship between sexual orientation and labour market outcomes (Drydakis 2019).

The rest of the appendix is structured as follows. Section A.I.2 investigates how studies have identified and classified the sexual orientation of individuals in data sets. Section A.I.3 evaluates empirical approaches used to study earnings gaps and unemployment risks based on sexual orientation. Section A.I.4 discusses the earliest studies in the literature on earnings gaps based on sexual orientation, and offers an overview of relevant aggregated patterns. Studies on earnings gaps between the members of opposite-sex and same-sex couples, and on unemployment rates according to sexual orientation, are considered in sections A.I.5 and A.I.6 respectively. Finally, section A.I.7 reviews theoretical approaches for evaluating the earnings penalties for gay men and lesbians, and the risk of unemployment based on sexual orientation.

# A.I.2. Strategies for identifying sexual orientation

Unlike the demographic characteristics of sex and ethnicity, which are easily captured and coded, sexual orientation is measured in several different ways; this makes it challenging to test for sexual orientation discrimination in employment (Drydakis 2014). In the literature, three broad strategies for identifying sexual orientation have been proposed: (a) responses to questions on the gender of partners (couple status); (b) self-identification as gay or lesbian, etc. (self-evaluation); and (c) responses to questions on the gender of former sex partners (sexual behaviour).

Although meta-analyses have indicated that the same qualitative patterns emerge when using all three identification strategies – that is, gay men receiving lower earnings than heterosexual

men, and lesbians being paid more than heterosexual women – the strategy chosen could affect the magnitude of estimated earnings differences (Klawitter 2015; Drydakis 2022a).

A critical advantage is gained by focusing on couples when examining earnings differences based on sexual orientation. If unexplained earnings gaps are to be interpreted as being potentially due to labour market discrimination, employers must be certain of an employee's sexual orientation. It is reasonable to assume that gay men and lesbians in relationships will be less likely and/or less willing than their single peers to conceal their sexual orientation in the workplace (Waite 2015). However, this approach has the drawback of not being informative about those individuals who are not living with a partner at the time of the interview (Dilmaghani 2018). Furthermore, the data constraints associated with such a sampling approach tend to cause the extent of earnings gaps to be overestimated (Carpenter 2008). Sexual orientation minority individuals in a same-sex partnership may be less anxious to pass for heterosexual, which may also increase their visibility and, consequently, the opportunities for discrimination (Waite 2015). If an employer is prejudiced against sexual orientation minorities, then individuals in same-sex couple arrangements can become an easy target for biased evaluations because their sexuality is more conspicuous. Studies focusing on couples when assessing earnings differences based on sexual orientation generally report wider earnings gaps because sexual orientation minority individuals are more noticeable in the workplace and face differential treatment (Drydakis 2022a; Carpenter 2008).

In contrast, studies that rely on self-reported classifications of sexual orientation, rather than on couple status, report the smallest estimated earnings differences (Klawitter 2015; Drydakis 2022a).

# A.I.3. Empirical approaches used to study earnings gaps and unemployment risks based on sexual orientation

If discrimination occurs and results in similarly qualified and productive people being treated differently only because of their sexual orientation, one might expect to observe differences in earnings and unemployment levels (Badgett 1995). In the literature, the most common econometric approach for capturing the effects of earnings discrimination is to assess whether employees who are similar in all observable and economically relevant ways have similar labour market outcomes (Badgett 1995). Meta-analyses have found that the great majority of studies examining earnings differences based on sexual orientation used a basic ordinary least squares model of earnings determination, with the log of income as the dependent variable; this may be referred to as the "sexual orientation dummy variable approach" (Klawitter 2015; Drydakis 2022a). Separate equations for male and female employees take into account any differences in men's and women's labour market decisions and experiences (Badgett 1995). Independent variables include individual characteristics related to productivity, such as human capital and working experience, occupational heterogeneity, demographic characteristics and country of residence. The main effect of earnings discrimination, if any, is captured by the coefficient for a dummy variable indicating whether an individual is a gay man or a lesbian (according to the strategy adopted to identify sexual orientation). A statistically significant negative coefficient for a sexual orientation minority individual would imply discrimination in the form of lower earnings (Badgett 1995).

Only a few studies have used Oaxaca–Blinder decomposition and the Heckman selection correction technique (Klawitter 2015; Drydakis 2022a). An Oaxaca–Blinder approach involves dividing the earnings gap between sexual orientation majority and minority individuals into a part that is "explained" by group differences in productivity characteristics and a residual part that cannot be accounted for by such differences in earnings determinants, and which is used as a measure of earnings discrimination. The sexual orientation dummy variable approach and the

Oaxaca–Blinder decomposition approach lead to the same conclusions about the presence or absence of earnings discrimination (Cahuc, Carcillo and Zylberberg 2014). On the other hand, a Heckman selection correction addresses the sample selection bias that arises because earnings are only observed if individuals make the decision to enter the workplace. Consistent estimators can be obtained by jointly estimating the decision to enter the workplace (selection equation) and the earnings equation, including the expected value of the selection equation residuals (Heckman 1979). Thus, using a Heckman selection correction can result in estimating lower earnings differences between sexual orientation majority individuals and those with a minority orientation (Klawitter 2015; Drydakis 2022a).

In the literature, comparable approaches (that is, the sexual orientation dummy variable approach, Oaxaca–Blinder decomposition and the Heckman selection correction technique) have been used to assess whether gay men and lesbians experience higher unemployment rates than equally productive heterosexual men and women (Fric 2021a; Gruberg and Madowitz 2020; Nyeck et al. 2019; Laurent and Mihoubi 2017; Drydakis 2012; Leppel 2009).

# A.I.4. The earliest studies of earnings gaps based on sexual orientation, and aggregated patterns

The first study to examine earnings differences based on sexual orientation dealt with the United States (Badgett 1995). It drew on the 1989–91 rounds of the General Social Survey, which collected information on sexual behaviour with partners of either sex. In the sample, 698 respondents were heterosexual women and 34 were lesbian or bisexual women, while 901 respondents were heterosexual men and 47 were gay or bisexual men. The study found that gay and bisexual male employees earned between 11 and 27 per cent less than heterosexual male employees with the same experience, education, occupation, couple status and country of residence. There was also evidence that lesbian and bisexual women earned less than heterosexual women, by between 12 and 30 per cent, but this result was not consistently statistically significant across different specifications.

The second such study in the literature used data from the 1990 US census (Klawitter and Flatt 1998), collected from approximately 13,000 married couples and 6,800 same-sex couples. For the first time, the 1990 US census made it possible to identify same-sex couples by adding an "unmarried partner" category to the list of household relationships (Klawitter and Flatt 1998). In terms of identification strategy, if one partner was designated as the "householder" in the census, then the other partner could be identified as the householder's unmarried partner (Klawitter and Flatt 1998). At that time, same-sex couples could not marry in the United States; hence, married couples were by default opposite-sex couples. The study found that men in same-sex couples earned 30 per cent less than equally productive men in married (opposite-sex) couples, whereas women in same-sex couples earned 16 per cent more than equally productive women in married (opposite-sex) couples.

Since the first studies on this topic (Badgett 1995; Klawitter and Flatt 1998), approximately 60 papers have been published on earnings differences based on sexual orientation. Among these, two meta-analyses provide a picture of average patterns (Klawitter 2015; Drydakis 2022a). Klawitter (2015) studied the sexual orientation and earnings findings of 34 papers published between 1995 and 2012. Subsequently, Drydakis (2022a) conducted a meta-analysis of sexual orientation and earnings based on 24 papers published between 2012 and 2020.

In Klawitter's meta-analysis (2015), 69 per cent of the studies drew on US data. Sexual orientation was captured through couple status in 45 per cent of the studies, through sexual behaviour in 34 per cent and through self-identification in the rest. Some 73 per cent of the studies used annual or monthly earnings, while 27 per cent used hourly earnings. In addition, 63 per cent of the studies employed a sexual orientation dummy variable approach (as in Badgett 1995), 18 per cent adopted Oaxaca–Blinder decomposition approaches and 19 per cent used Heckman selection correction. Klawitter (2015) estimated an earnings penalty of 11 per cent for gay men and an earnings premium of 9 per cent for lesbians. On average, studies drawing on US data sets after the year 2000 found smaller earnings penalties for gay men, by about 4 to 7 percentage points, than those drawing on data sets covering periods before 2000. The earnings penalty for gay men was about 6 percentage points smaller for studies that used a measure of sexual identity than for studies using a couple status measure. Studies using sexual behaviour measures showed impacts similar in magnitude to those using couple status. Moreover, in those cases where Heckman selection correction was applied, lesbian women's earnings premiums were about 16 percentage points smaller.

In Drydakis (2022a), the United States was the focus of 30 per cent of the studies, followed by Canada (20 per cent), Australia (16.6 per cent) and the United Kingdom (13.3 per cent), with the remainder covering EU countries. In half of the studies, questions on same-sex living arrangements captured sexual orientation. The other half used questions on sexual behaviour and/or self-identification. Moreover, in 40 per cent of the studies, the earnings considered were annual earnings, while the remainder looked at hourly or weekly earnings. The Heckman selection correction technique was applied in 30 per cent of the studies. Drydakis (2022a) found that gay men's earnings were 6.8 per cent lower than those of comparable heterosexual men, whereas lesbians' earnings were 7.1 per cent higher than those of comparable heterosexual women. This meta-analysis found that, after 2010, the earnings penalty for gay men was lower by 5 percentage points than before 2010. Additionally, the US studies estimated penalties for gay men that were higher by 5.3 percentage points than those estimated by the studies covering all other countries, and also earnings premiums for lesbians that were higher by 6.2 percentage points in the United States compared with other countries. It was also found that the earnings penalty for gay men was higher by 4.5 percentage points in studies capturing sexual orientation through same-sex living arrangements than in those using sexual behaviour and/or self-identification for that purpose.

# A.I.5. Earnings gaps based on sexual orientation in opposite-sex and same-sex couples

During the past decade, at least ten papers have examined potential earnings discrimination against individuals in same-sex couples (Jepsen and Jepsen 2022, 2017; Bridges and Mann 2019; Aksoy, Carpenter and Frank 2018; Humpert 2016; Waite 2015; La Nauze 2015; Hammarstedt, Ahmed and Andersson 2015; Ahmed, Andersson and Hammarstedt 2013; Laurent and Mihoubi 2012). The aforementioned studies cover the United States, Canada, the United Kingdom, Germany, France, Sweden and Australia, drawing on data collected in various periods between 1996 and 2019. Half of the studies reported estimates based on the sexual orientation dummy variable approach, while the rest used Oaxaca–Blinder decompositions. In 20 per cent of the studies, Heckman selection correction techniques were employed. Consistent patterns emerged indicating that men in same-sex couples experienced approximately 9.4 per cent lower earnings than comparable men in opposite-sex couples. On the other hand, it was consistently found that women in same-sex couples earned approximately 7.9 per cent more than comparable women in opposite-sex couples. These studies are reviewed in greater depth below.

In the United States, Jepsen and Jepsen (2022) used American Community Survey data covering the period 2000-19, and found that, in 2001, men in same-sex couples experienced 12.4 per cent lower annual earnings than comparable men in opposite-sex couples, while in 2018 they were earning 11.7 per cent less per year than their heterosexual counterparts. In 2001, women in same-sex couples experienced 16 per cent higher earnings per year than comparable women in opposite-sex couples, while in 2018 they were earning 7.8 per cent more per year than their heterosexual counterparts. The authors found no evidence that the earnings of men in same-sex couples were improving relative to men in opposite-sex couples. For women in same-sex couples, they observed mixed evidence of convergence relative to women in opposite-sex couples. The earnings gap between women in same-sex and opposite-sex couples narrowed between 2001 and 2008, though the premium for women in same-sex couples declined slightly in later years (that is, from 2009 to 2018). In an earlier study of the same country, lepsen and lepsen (2017) also drew on American Community Survey data, in this case covering the period 2007–11 for self-employed individuals. They found that men in same-sex couples experienced 20.4 per cent lower annual earnings than comparable men in opposite-sex couples, and that women in same-sex couples earned 21.2 per cent more per year than their heterosexual counterparts.

In Canada, Waite (2015) used data from the 2001 and 2006 censuses and the 2011 National Household Survey, finding that men in same-sex couples earned 7.2 per cent less per week than comparable men in opposite-sex couples in 2001; 6.3 per cent less in 2006; and 6.7 per cent less in 2011. In contrast, women in same-sex couples earned 6.6 per cent more per week than comparable women in opposite-sex couples in 2001, 9.2 per cent more in 2006 and 6.9 per cent more in 2011. The author concluded that there was no evidence of earnings gaps having attenuated for gay men, and that there had been only a small reduction of the wage gap for lesbians, in both cases relative to heterosexual men. The lesbian earnings premium, vis-á-vis heterosexual women, did not appear at initial labour market entry; rather, it developed with time. Earnings gaps were larger for younger gay men than for older ones, which potentially suggested a "coming-out penalty" in the labour market. One explanation for this phenomenon advanced by the author is that younger gay men may be less concerned about passing for heterosexual, which may induce them to make occupational choices that are gender non-conforming and less highly paid (that is, to take up female-oriented occupations). It may also increase their visibility, exposing younger gay men more frequently to discrimination by those who have a preference for working with heterosexual people (Waite 2015).

In the United Kingdom, Aksoy, Carpenter and Frank (2018) drew on data from the 2012–14 Integrated Household Surveys, finding that men in same-sex couples experienced 2.7 per cent lower weekly earnings than comparable men in opposite-sex couples, although the difference was statistically insignificant. On the other hand, women in same-sex couples earned 5.4 per cent more per week than comparable women in opposite-sex couples. Also in the United Kingdom, Bridges and Mann (2019) used Labour Force Survey data covering the period 2010–15. The authors found that men in same-sex couples experienced 3.8 per cent lower hourly earnings than comparable men in opposite-sex couples, whereas women in same-sex couples earned 5.8 per cent more per hour than their heterosexual counterparts.

In Germany, drawing on data from the 2009 wave of the Mikrozensus, Humpert (2016) concluded that men in same-sex couples experienced 5.5 per cent lower annual earnings than comparable men in opposite-sex couples, whereas women in same-sex couples earned 9.6 per cent more per year than comparable heterosexual women.

In France, Laurent and Mihoubi (2012) studied Employment Survey data covering the period 1996–2007. They found that, in the private sector, men in same-sex couples experienced 6.5 per

cent lower monthly earnings than comparable men in opposite-sex couples. In the public sector, men in same-sex couples earned 5.8 per cent less per month than their heterosexual counterparts. By contrast, in the private sector, women in same-sex couples received 2.1 per cent higher monthly earnings than comparable women in opposite-sex couples. In the public sector, women in same-sex couples earned 0.3 per cent more per month than their heterosexual counterparts, although this difference was statistically insignificant.

In Sweden, Ahmed, Andersson and Hammarstedt (2013) drew on 2007 data from the Longitudinal Integration Database for Health Insurance and Labour Market Studies (LISA). They found that men in same-sex couples experienced 11 per cent lower annual earnings than comparable men in opposite-sex couples. Moreover, women in same-sex couples earned 6.7 per cent more per year than their heterosexual counterparts, a difference that was statistically insignificant. In a subsequent study, Hammarstedt, Ahmed and Andersson (2015) drew on the results from a nationwide Swedish survey on public attitudes towards gay men and lesbians, conducted in 1999, and again on 2007 data from the LISA database. They found that men in same-sex couples experienced 18.6 per cent lower annual earnings than comparable men in opposite-sex couples, whereas women in same-sex couples earned 0.6 per cent more per year than comparable heterosexual women. However, in the latter case the difference was statistically insignificant.

Finally, in Australia, La Nauze (2015) used data from the Household Income and Labour Dynamics in Australia (HILDA) Survey covering the period 2001–10, and found that men in same-sex couples experienced 13.6 per cent lower hourly earnings than comparable men in opposite-sex couples, whereas women in same-sex couples earned 12.8 per cent more per hour than their heterosexual counterparts.

## A.I.6. Unemployment risks based on sexual orientation

The literature generally sheds little light on differences in unemployment status based on sexual orientation. Only a few studies have investigated such gaps, namely in the United States, the EU countries and South Africa (Fric 2021a; Gruberg and Madowitz 2020; Nyeck et al. 2019; Laurent and Mihoubi 2017; Drydakis 2012; Leppel 2009). These studies covered the period between 1996 and 2019, and most of them focused on couple status as the strategy for identifying same-sex partnership. All studies used the "sexual orientation dummy variable approach" to capture unemployment differences based on sexual orientation. However, each study has reported its findings differently. Hence, consistent presentation and comparison of the findings related to unemployment (as was the case for earnings patterns) cannot be provided.

In the United States, Gruberg and Madowitz (2020) used Current Population Survey data from the period 2014–19. They found that same-sex couples experienced higher unemployment rates than opposite-sex couples for nearly every year between 2014 and 2019. For instance, in 2014, same-sex couples faced an unemployment rate of 4.2 per cent, compared with 3.8 per cent for opposite-sex couples. In 2019, same-sex couples faced an unemployment rate of 2.7 per cent, compared with 2.2 per cent for opposite-sex couples. Examining data from the 2000 Decennial Census, Leppel (2009) found that 3.3 per cent of men in same-sex couples in the United States were unemployed, whereas it was the case of 2.1 per cent of men in married opposite-sex couples. On the other hand, 2.9 per cent of women in same-sex couples were unemployed, compared with 2.3 per cent for women in married opposite-sex couples. The highest unemployment rate was observed among men in an unmarried opposite-sex relationship. The study concluded that discrimination on the basis of sexual orientation appeared to drive up the unemployment rate among same-sex partners relative to married opposite-sex partners. Employment probabilities

were very similar for gay men and lesbians. In addition, Leppel (2009) found that anti-discrimination laws had a positive effect on the unemployment rate of same-sex partners. This may suggest an insufficient willingness among employers to hire the many gay men and lesbians who move to states with such laws.

In France, Laurent and Mihoubi (2017), drawing on Employment Survey data for the period 1996–2009, found that men in same-sex couples experienced an unemployment rate of 4.7 per cent, compared with 1.5 per cent for men in opposite-sex couples. In addition, men in same-sex couples had a likelihood of unemployment that was 1.6 percentage points higher than that of comparable men in opposite-sex couples.

Fric (2021a) used EU Labour Force Survey data for the period 2008–15, focusing on the following countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Estonia, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, United Kingdom. The author found that men in same-sex couples experienced a 31.1 per cent higher unemployment rate than comparable men in opposite-sex couples. Women in same-sex couples recorded 4 per cent higher unemployment than comparable women in opposite-sex couples, although the difference was statistically insignificant. The study found that men in same-sex couples experienced longer spells of joblessness than comparable men in opposite-sex couples, whereas women in same-sex couples experienced shorter periods of joblessness than comparable women in opposite-sex couples. Similarly, Fric (2021b) examined EU Labour Force Survey data from the years 2008–16, this time focusing on Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, Poland and Slovenia. The study found that those in male and female same-sex couples experienced a shorter employment tenure than members of opposite-sex couples.

In South Africa, Nyeck et al. (2019), drawing on data from the 2011 census, found that the unemployment rates for same-sex Black African, Coloured and White households stood at 30.9 per cent, 16.7 per cent and 4.2 per cent respectively, compared with 26.4 per cent, 14.1 per cent and 3.8 per cent for opposite-sex households from these race groups. This indicates that those in same-sex couples experienced higher unemployment rates than opposite-sex households.

In Greece, Drydakis (2012) applied a Heckman selection correction model to data from the 2008–09 Athens Area Study and found that gay and bisexual men experienced probabilities of unemployment that were, respectively, 8.1 and 8.8 percentage points higher than those of equally productive heterosexual men. These findings suggested that sexual orientation discrimination could explain the differences in hiring between equally qualified gay and heterosexual men.

# A.I.7. Earnings patterns and unemployment risks for gay men and lesbians: Possible reasons and theoretical considerations

#### A.1.7.a. Earnings penalties for gay men

Historical, sociological and psychological research demonstrates the existence of homophobia, heterosexism and sexual prejudice, and the effects that such attitudes have in the everyday experiences of sexual orientation minority individuals. The term "homophobia" is used to label heterosexual individuals' dread of being in close quarters with homosexual individuals, and also potential self-loathing among the latter (Weinberg 1972). Distastes and phobia focus on homosexual people's behaviour, lifestyle and culture. "Heterosexism" is used as a term analogous to sexism and racism, describing an ideological system that denies, denigrates and stigmatizes

any non-heterosexual form of behaviour, identity, relationship or community (Herek 1990). The term highlights the parallels between anti-gay sentiment and other forms of prejudice, such as racism and sexism. "Sexual prejudice" refers to all negative attitudes based on sexual orientation; however, the prejudice is almost always directed at people who engage in homosexual behaviour (Herek 2000).

The question of whether discrimination drives inferior labour market outcomes for minority population groups has been attracting the attention of economists for decades (Badgett 2020). As posited by the "taste for discrimination" theory (Becker 1957, 1993), employers might want to maintain a physical distance from certain minority groups because they dislike interacting with them. Under this theory, "discrimination coefficients" capture the influence of characteristics unrelated to productivity, such as homophobic attitudes against gay men. According to the theory, if employers are homophobic, they may pay minority individuals lower wages for similar productivity in order to compensate for the psychological loss they experience in associating with members of such groups. Hence, the labour market penalties for gay men can be expected to be directly linked to the strength of employers' antipathy towards minority populations (Charles and Guryan 2008).

The statistical theory of discrimination (Phelps 1972; Arrow 1974, 1998) posits that the use of average group characteristics to predict individuals' productivity and set corresponding wages can lead to an incorrect evaluation of the productivity of workers who are atypical of their minority demographic characteristic. Statistical discrimination is usually discussed in relation to discrimination against women and ethnic minorities. In these cases, gender roles and cultural norms may lead to differences in average education and productivity, leaving the minority group at a disadvantage. This is not the case for gay men, who are usually well educated (Badgett, Carpenter and Sansone 2021). However, since gay men enjoy lower societal approval than heterosexual people (OECD 2020), potential biases might cause employers to predict differences in labour market commitment and labour behaviour between heterosexual and gay men, which tie in with standard models of statistical discrimination (Phelps 1972; Arrow 1974, 1998). Accordingly, if employers have strong misgivings about gay men's productivity and commitment, they may consider employing them at a lower salary. These actions are not motivated specifically by distaste towards a class of individuals, but rather are based on what the employers believe to be valid inferences about productivity (Pager and Karafin 2009). According to statistical discrimination theory, if gay men do not conform to traditional gender roles related to masculinity and leadership that are perceived to boost employees' performance, such a situation could result in unfavourable evaluations and earnings penalties (Drydakis 2015a; Blandford 2003). Studies have found that such penalties for gay men may stem from employers' distastes and uncertainties over their credentials (Baert 2014; Drydakis 2012).

However, other explanations for the earnings differentials faced by gay men are also possible. Under the economic theory of specialization (Becker 1981), expectations of marriage and acceptance of traditional gender roles impinge on the relationship between sexual orientation and earnings. Young gay men may invest less in human capital formation than their heterosexual counterparts because of rational, sexual orientation-based expectations about their future partners and domestic arrangements. Some studies have argued that gay men do not expect to support a partner and children, so they will invest less in labour market-specific human capital than heterosexual men, which in turn reduces their earnings (Black et al. 2003). Since gay men are less likely to have children on average, they may invest in human capital to a lesser extent, in particular because their expected future investments in children are lower (Black et al. 2003). Similarly, other studies have argued that gay men choose levels of work effort that differ from those of heterosexual men because of their different budgetary constraints (Berg and Lien 2002).

### A.1.7.b. Earnings premiums for lesbians

The earnings premiums observed for lesbians in most countries are something of a puzzle (Drydakis 2014). On the one hand, every qualitative study suggests that lesbians face prejudices in the labour market (Drydakis 2014). Field studies on access to job vacancies indicate that lesbians were discriminated against during the initial stage of the hiring process to a greater extent than heterosexual women (Drydakis 2015a). Job satisfaction studies also suggest that lesbians are less contented with their jobs than heterosexual women (Drydakis 2015b). On the other hand, most country studies have found that lesbians earn more than heterosexual women with comparable skills and experience (Klawitter 2015; Drydakis 2022a). The observation that lesbian employees enjoy an earnings premium vis-à-vis their heterosexual female counterparts might seem inconsistent with the notion that employers discriminate on the basis of sexual orientation (Becker 1957, 1993; Phelps 1972; Arrow 1974, 1998). However, this pattern is consistent with theories of human capital accumulation and specialization within the household (Jepsen 2007; Elmslie and Tebaldi 2007; Black et al. 2003).

The Becker (1965) model posits that, in traditional households, men will devote more time and effort to market production, while women will focus on household production. There is evidence to suggest that lesbians may invest more heavily in market-oriented human capital by choosing to complete their school education and to embark subsequently on a university course that leads to higher earnings and longer working hours, with such choices positively influencing their workplace outcomes (Jepsen 2007; Elmslie and Tebaldi 2007; Black et al. 2003). Furthermore, a peripheral explanation for the lesbian earnings premium is that women with children earn less than women without children (Antecol and Steinberger 2013; Waldfogel 1998). Lesbians are less likely to have children than married women, so it makes sense for them to earn more because of their commitment to pursuing their career (Baert 2014; Waldfogel 1998). In addition, lesbians may show greater dedication to the labour market because it is less probable that they will engage with a higher-earning (male) partner who would provide for them (Antecol and Steinberger 2013). Hence, employers may be more interested in promoting lesbians, who are less likely to move in and out of the labour market, a factor that contributes to their wage premium. It seems that labour markets financially compensate women who invest their lives in their careers (Drydakis 2011).

Arguments focusing on lesbian women's earnings premiums in relation to their masculine characteristics, which stereotypically characterize lesbians as demonstrating leadership, have also been invoked to explain their labour market experiences (Drydakis 2011; Clain and Leppel 2001). Various studies indicate that employers, colleagues and consumers may prefer the personality characteristics of men, and that lesbians may exhibit more of those characteristics than heterosexual women (Clain and Leppel 2001). Evidence suggests that, as far as women are concerned, professional skills are not always sufficient to signal authority and competence, and that masculine characteristics, stereotypically associated with lesbians, can fulfil that external signalling function in the workplace (Drydakis 2011; Badgett and Frank 2007; Clain and Leppel 2001). The higher earnings among lesbians may, therefore, reflect discrimination in favour of masculine traits (Drydakis 2011; Badgett and Frank 2007). Indeed, lesbians tend to self-select into male-dominated occupations that offer higher salaries (Drydakis 2011; Badgett and Frank 2007; Clain and Leppel 2001). Finally, there are indications that lesbians who are open about their sexual orientation respond to the threat of discrimination by working harder. It has been suggested that lesbians may be able to overcome the stigma of their sexual orientation if they are sufficiently educated and productive (Clain and Leppel 2001; Klawitter and Flatt 1998).

Whether a biased treatment of lesbians at the hiring stage can lead to earnings premiums later in their careers is a moot point (Drydakis 2014). There are no quantitative studies on how gender identity and personality characteristics may affect labour market prospects for lesbians; hence, it is still not clear whether lesbian employees possess unobservable characteristics that enhance job advancement and earnings potential. Interesting findings could well be revealed by examining the interactions between gender identity characteristics, personality traits, strategies for coping with discrimination, commitment to work and labour market prospects related to sexual orientation (Drydakis 2014).

### A.I.7.c. Unemployment risks among sexual orientation minorities

Since sexual orientation may affect whether an individual is hired or fired, it clearly has an impact on their employment status (Becker 1957, 1993; Phelps 1972; Arrow 1974, 1998). As previously discussed, according to the "taste for discrimination" theory (Becker 1957), if distastes for sexual orientation minority individuals are strong enough, employers may decide not to employ them in their firms. Moreover, under the statistical discrimination theory (Phelps 1972; Arrow 1974, 1998), if employers are highly uncertain about the productivity and commitment of gay men and lesbians, they may end up not hiring them.

It has also been argued that the lower earnings received by gay men could reduce the "shadow price" of their time: they are likely to use more time-intensive search methods, increasing the probability of unemployment (Leppel 2009; Flanagan 1978). Moreover, gay men and lesbians may seek jobs that are less likely to expose them to adverse working conditions related to discrimination and harassment (Klawitter and Flatt 1998). A standard vacancy description can lead to self-elimination by applicants who do not conform to the required stereotypes (Fric 2021a), and jobseekers may avoid applying for openings where they believe that they would face discrimination. During the review and selection of CVs, equally qualified gay men and lesbian women applicants may be assessed less positively, rejected or invited to an interview only as a backup option (Drydakis 2009, 2022b; Fric 2021a). Moreover, during the job interview, sexual orientation minority applicants may be treated less helpfully, subjected to interpersonal discrimination or even be downright rejected by potential employers (Fric 2021a). A firm may offer gay men and lesbians less attractive terms, or no employment at all (Fric 2021a). Hence, a limited availability of acceptable work environments, coupled with bias during the hiring stage, could lengthen the expected duration of job search, which further increases the probability of unemployment for gay men and lesbians (Leppel 2009).

Moreover, discriminatory attitudes make jobs more difficult to find, so some sexual orientation minority individuals may become discouraged and drop out of the labour force (Leppel 2009). In addition, in male same-sex couples there is no female partner to take on the traditional role of homemaker; one male partner thus has to act as the primary caregiver and is less likely to participate in the labour force (Tebaldi and Elmslie 2006). Evidence indicates that institutional constraints, such as a lack of employment protection, domestic partnership benefits and legal marriage, reduce the probability of gay men and lesbians being full-time homemakers (Leppel 2009; Giddings 2003).

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# Appendix II. Estimates of other explanatory variables

In this appendix, we report the estimates of other explanatory variables from the estimation of equations (1) and (2) in Chapter 2. In addition to a constant (referred to as the "intercept" in the tables below), equation (1) includes these explanatory variables: age, education, urban residence and occupation (occupation is only added for self-employment). We use three age categories to capture differences in work experience both linearly and non-linearly: 18–34 years, 35–54 years and 45–64 years, with the reference category being those aged between 18 and 34 years. As for education, individuals are categorized into three groups: those with secondary education or below, those with upper secondary education and those with education beyond upper secondary. The reference category is those with secondary education or below. We also take urban residence into account. The excluded category comprises individuals residing in a rural area. We classify occupations into five categories: managerial and professional occupations; services; skilled agricultural; skilled machinery; and basic occupations. The reference category is basic occupations.

The regression models (equation (2)) take account of age, education, urban residence, occupation, hours worked and employment in the public sector. With regard to age, we follow Lemieux (2006) and estimate the equation with a quartic polynomial to take years of experience into account. Hours worked are divided into three categories: below 20 hours, 21 to 40 hours, and above 40 hours. The reference category is those working below 20 hours. "Public sector" is a binary variable equal to 1 if the individual works in a public job and 0 otherwise. The other variables are the same as for equation 1.

## A.II.1. Labour force participation

#### ▶ Table A.II.1. Same-sex partnership and labour force participation rate

	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I. Men									
Gays	0.264***	0.339***	0.379***	0.358***	0.663***	0.452**	0.367***	0.573***	0.209***
	(.0577)	(.0522)	(.1006)	(.0756)	(.0808)	(.1113)	(.1085)	(.0652)	(.0527)
Age 35 to 54	0.683*	0.849***	0.900	0.782***	0.918	0.805***	1.111	1.035	1.129
	(.1116)	(.0238)	(.0964)	(.0507)	(.0916)	(.0447)	(.0884)	(.0621)	(.2913)
Age 45 to 64	0.148***	0.190***	0.308***	0.196***	0.201***	0.171***	0.160***	0.324***	0.210***
	(.0194)	(.0043)	(.0267)	(.0104)	(.0155)	(.0079)	(.0106)	(.0155)	(.0423)
Education: Upper secondary	1.484***	1.689***	1.302***	0.945	1.633***	1.202***	0.877***	0.939	0.994
	(.1109)	(.0291)	(.0698)	(.0356)	(.0766)	(.0434)	(.0270)	(.0633)	(.12180)
Education: Beyond upper secondary	2.642***	2.420***	2.432***	1.080	4.266***	1.016	0.607***	1.799***	0.960
	(.2939)	(.0660)	(.1796)	(.0457)	(.2481)	(.0352)	(.0165)	(.1242)	(.1283)
Urban residence	n.d.	1.559***	1.182**	0.747***	1.075	0.850***	0.715***	1.280***	n.d.
	n.d.	(.0218)	(.0661)	(.0309)	(.0577)	(.0268)	(.0148)	(.0440)	n.d.
Intercept	45.367***	11.994***	26.611***	63.809***	9.929***	46.363***	71.623***	10.818***	58.630***
	(5.992)	(.280)	(2.664)	(4.080)	(.9303)	(2.390)	(4.825)	(.8864)	(11.77)
Number of observations	33 252	383 426	52 829	231 525	28 320	245 459	255 382	59 216	10 850
II. Women									
Lesbians	3.896***	4.032***	5.443***	6.073***	1.844***	4.454***	1.918**	1.897***	2.177***
	(.7192)	(.3609)	(1.136)	(1.155)	(.3331)	(.9021)	(.4636)	(.1810)	(.3366)
Age 35 to 54	1.366***	1.297***	0.928	1.325***	1.405***	1.404***	1.427***	1.027	1.887***
	(.0671)	(.0167)	(.0536)	(.0257)	(.0777)	(.0229)	(.0317)	(.0308)	(.1137)
Age 45 to 64	0.821***	0.651***	0.598***	0.773***	0.703***	1.004	0.802***	0.786***	1.216***
	(.0355)	(.0075)	(.0234)	(.0137)	(.0302)	(.0152)	(.0153)	(.0198)	(.0647)
Education: Upper secondary	1.737***	1.946***	1.501***	1.382***	2.621***	1.281***	0.988	2.372***	1.451***
	(.0688)	(.0207)	(.0488)	(.0244)	(.1031)	(.0201)	(.0190)	(.1175)	(.0767)
Education: Beyond upper secondary	5.956***	4.280***	5.208***	3.422***	5.313***	2.649***	1.332***	4.862***	3.312***
	(.3119)	(.0653)	(.2225)	(.0702)	(.2373)	(.0519)	(.0256)	(.2408)	(.1872)
Urban residence	n.d.	1.804***	1.626***	1.902***	0.948	1.673***	0.789***	0.954	n.d.
	n.d.	(.0177)	(.0566)	(.0353)	(.0422)	(.0252)	(.0095)	(.0234)	n.d.
Intercept	0.880**	0.654***	0.617***	0.570***	1.393***	0.404***	2.970***	0.869*	0.666***
	(.0369)	(.0073)	(.0313)	(.0122)	(.0823)	(.0066)	(.0603)	(.0475)	(.0345)
Number of observations	35 208	410 019	57 172	247 623	30 244	259 345	280 080	63 111	11 597

n.d. = no data.

**Note:** The dependent variable is labour force participation rate. The table presents the odds ratios obtained by estimation of logistic regression models, with the standard error given inside parentheses below each estimate. The odds ratio reports the odds of being in the labour force for men (women) living with a same-sex partner relative to the odds of being in the labour force for men (women) living with an opposite-sex partner. An odds ratio equal to 1 shows that living with a same-sex partner does not affect the odds of being in the labour force. An odds ratio larger (smaller) than 1 indicates that being in a same sex partnership increases (decreases) the likelihood of being in the labour force. The regression models control for age, education and urban residence. Significant values are denoted by \*, \*\*\*, \*\*\*\* at the 10%, 5% and 1% significance levels respectively.

## A.II.2. Unemployment

#### ► Table A.II.2. Same-sex partnership and unemployment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
I. Men									
Gays	1.818	2.015***	1.721*	1.741**	1.676**	3.105***	n.a.	0.621	2.478
	-0.8514	-0.3078	-0.4552	-0.345	-0.3054	-0.9458	n.a.	-0.2116	-1.456
Age 35 to 54	0.970	0.820***	0.904	0.983	0.719**	0.963	n.a.	0.864	0.633
	-0.1151	-0.0244	-0.0865	-0.0468	-0.0833	-0.0603	n.a.	-0.0893	-0.1477
Age 45 to 64	0.962	0.802***	1.136	1.217***	0.701***	1.001	n.a.	0.869	0.643*
	-0.1054	-0.0223	-0.0961	-0.0508	-0.0648	-0.0566	n.a.	-0.0761	-0.1264
Education: Upper secondary	0.536***	0.667***	0.881	0.876**	0.435***	0.996	n.a.	0.660**	0.806
Education: Beyond upper secondary	0.265***	0.341***	0.441***	0.782***	0.253***	1.158*	n.a.	0.385***	0.811
	-0.0442	-0.0152	-0.0398	-0.0361	-0.0283	-0.077	n.a.	-0.0544	-0.1924
Urban residence	n.d.	1.259***	1.205**	2.363***	1.381***	1.525***	n.a.	1.028	n.d.
	n.d.	-0.0304	-0.0846	-0.1277	-0.1315	-0.0958	n.a.	-0.0949	n.d.
Intercept	0.084***	0.074***	0.034***	0.025***	0.120***	0.014***	n.a.	0.044***	0.032***
	-0.0081	-0.002	-0.0036	-0.0015	-0.0162	-0.0009	n.a.	-0.0072	-0.0056
Number of observations	30 753	331 072	48 907	216 752	24 092	226 995	n.a.	52 364	10 288
II. Women									
Lesbians	0.713	1.043	0.795	0.638*	0.567*	0.733	n.a.	1.303	1.114
	-0.2304	-0.101	-0.2068	-0.1119	-0.1334	-0.2593	n.a.	-0.3135	-0.4381
Age 35 to 54	0.738**	0.595***	0.923	0.607***	0.675***	0.585***	n.a.	0.849	0.516***
	-0.0729	-0.014	-0.0851	-0.0213	-0.0569	-0.0435	n.a.	-0.084	-0.0897
Age 45 to 64	0.491***	0.361***	0.689***	0.364***	0.379***	0.363***	n.a.	0.749***	0.245***
	-0.0501	-0.0096	-0.0531	-0.0145	-0.031	-0.0322	n.a.	-0.0644	-0.0473
Education: Upper secondary	0.702***	0.740***	0.922	0.930	0.495***	1.164*	n.a.	0.519***	0.980
	-0.0637	-0.0174	-0.0764	-0.037	-0.0401	-0.0896	n.a.	-0.0885	-0.1927
Education: Beyond upper secondary	0.252***	0.354***	0.363***	0.664***	0.255***	1.146	n.a.	0.337***	0.905
	-0.0323	-0.011	-0.0365	-0.0275	-0.0237	-0.105	n.a.	-0.0573	-0.1641
Urban residence	n.d.	1.518***	1.067	1.534***	0.996	1.427***	n.a.	0.971	n.d.
	n.d.	-0.0381	-0.0956	-0.0735	-0.0782	-0.1308	n.a.	-0.0834	n.d.
Intercept	0.206***	0.178***	0.086***	0.157***	0.255***	0.024***	n.a.	0.072***	0.082***
	-0.0189	-0.0048	-0.01	-0.0077	-0.0272	-0.0024	n.a.	-0.0136	-0.0136
Number of observations	21 216	235 183	29 802	142 179	22 772	124 237	n.a.	45 302	6 776

n.d. = no data.

Note: The dependent variable is being unemployed. The table presents the odds ratios obtained by estimation of logistic regression models, with the standard error given inside parentheses below each estimate. The odds ratio reports the odds of being unemployed for men (women) living with a same-sex partner relative to the odds of unemployment for men (women) living with an opposite-sex partner. An odds ratio equal to 1 shows that living with a same-sex partner does not affect the odds of unemployment. An odds ratio larger (smaller) than 1 indicates that being in a same-sex partnership increases (decreases) the likelihood of being unemployed. The regression models control for age, education and urban residence. Significant values are denoted by \*, \*\*, \*\*\* at the 10%, 5% and 1% significance levels respectively.

# A.II.3. Self-employment

#### ▶ Table A.II.3. Same-sex partnership and self-employment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
I. Men									
Gays	0.896	0.740**	0.986	1.249	1.417**	1.43	1.915**	0.922	1.330
	-0.1789	-0.0711	-0.1987	-0.1747	-0.1778	-0.3045	-0.4261	-0.1771	-0.2751
Age 35 to 54	1.628***	1.461***	1.442***	1.250***	1.286**	1.572***	1.977***	1.305***	1.092
	-0.1050	-0.0228	-0.0893	-0.0267	-0.104	-0.0358	-0.052	-0.0847	-0.0741
Age 45 to 64	2.389***	2.154***	1.868***	1.775***	2.070***	2.558***	3.662***	1.780***	1.275***
	-0.1425	-0.0319	-0.1062	-0.035	-0.1511	-0.0536	-0.0862	-0.1019	-0.0799
Education: Upper secondary	0.731***	0.746***	0.745***	0.579***	1.080	0.845***	0.791***	0.540***	0.804***
	-0.0366	-0.0099	-0.0299	-0.0112	-0.0755	-0.0181	-0.0163	-0.0431	-0.046
Education: Beyond upper secondary	0.434***	0.781***	0.467***	0.332***	1.746***	1.042	0.535***	0.359***	0.566***
	-0.0324	-0.0154	-0.0284	-0.008	-0.1526	-0.0302	-0.0125	-0.032	-0.0408
Occupation: Managerial/profession	3.093***	2.173***	2.059***	1.935***	7.913***	2.550***	2.555***	1.085	5.141***
	-0.2857	-0.0513	-0.1316	-0.0535	-1.628	-0.1069	-0.0916	-0.0833	-2.054
Occupation: Services	1.260**	2.635***	1.511***	1.275***	11.499***	5.417***	10.215***	0.849	7.768***
	-0.1131	-0.0555	-0.111	-0.0376	-2.402	-0.1958	-0.3256	-0.075	-3.094
Occupation: Skilled agricultural	3.412***	5.462***	3.101***	1.990***	30.804***	12.460***	14.505***	1.277**	20.227***
	-0.2931	-0.1036	-0.1489	-0.0523	-6.3	-0.4012	-0.3957	-0.0975	-8.219
Occupation: Skilled machinery	1.016	1.871***	1.370***	1.418***	4.937***	1.682***	2.351***	0.795*	13.170***
	-0.0994	-0.0422	-0.0793	-0.0416	-1.271	-0.0659	-0.0776	-0.0772	-5.249
Urban residence	n.d.	0.730***	0.695***	0.812***	0.703***	0.594***	0.790***	0.653***	n.d.
	n.d.	-0.0088	-0.0275	-0.0166	-0.0356	-0.0108	-0.0117	-0.0294	n.d.
Intercept	0.152***	0.220***	0.220***	0.764***	0.012***	0.089***	0.093***	0.143***	0.107***
	-0.0136	-0.0044	-0.0154	-0.0227	-0.0026	-0.003	-0.0032	-0.0153	-0.044
Number of observations	27 250	310 191	45 885	204 062	22 624	219 112	234 200	51 341	10 036

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
II. Women									
Lesbians	0.563*	0.923	1.105	1.067	1.447*	0.237***	0.834	0.803	1.064
	-0.1351	-0.0817	-0.2803	-0.1306	-0.2334	-0.0513	-0.1994	-0.1555	-0.2146
Age 35 to 54	1.332***	1.224***	1.283***	1.101***	1.033	1.179***	2.255***	1.527***	1.061
	-0.1026	-0.0234	-0.0893	-0.0296	-0.0874	-0.0338	-0.0639	-0.1116	-0.0884
Age 45 to 64	1.716***	1.574***	1.539***	1.435***	1.442***	1.748***	4.427***	1.780***	1.071
	-0.1264	-0.0293	-0.0963	-0.038	-0.1088	-0.0462	-0.1189	-0.1155	-0.0863
Education: Upper secondary	0.535***	0.617***	0.517***	0.540***	1.153	0.546***	0.762***	0.799	0.820*
	-0.0409	-0.0118	-0.0315	-0.0153	-0.1451	-0.015	-0.0209	-0.1257	-0.0636
Education: Beyond upper secondary	0.209***	0.578***	0.258***	0.243***	1.642***	0.290***	0.400***	0.729	0.394***
	-0.0196	-0.0141	-0.0231	-0.0075	-0.2166	-0.0117	-0.0119	-0.1206	-0.0358
Occupation: Managerial/profession	27.766***	4.332***	2.353***	1.932***	48.721***	2.230***	1.484***	1.239	3.78
	-4.5	-0.1291	-0.1982	-0.0696	-24.78	-0.091	-0.0706	-0.165	-3.823
Occupation: Services	22.570***	8.709***	2.855***	1.698***	30.076***	4.364***	15.108***	1.388*	12.679*
	-3.382	-0.2087	-0.1819	-0.0577	-15.29	-0.13	-0.4618	-0.1775	-12.81
Occupation: Skilled agricultural	144.843***	34.450***	14.822***	2.994***	308.826***	6.210***	30.074***	1.678**	24.588**
	-33.77	-1.072	-1.38	-0.1447	-157.6	-0.2441	-0.8505	-0.2796	-25.38
Occupation: Skilled machinery	36.178***	5.731***	1.587**	1.993***	9.916***	0.299***	1.136**	1.366	37.388***
	-8.074	-0.2503	-0.2622	-0.1207	-5.563	-0.026	-0.052	-0.2659	-37.98
Urban residence	n.d.	0.503***	0.816**	0.496***	0.703***	0.489***	0.790***	0.782***	n.d.
	n.d.	-0.0088	-0.0523	-0.016	-0.05	-0.0131	-0.0148	-0.0418	n.d.
Intercept	0.027***	0.158***	0.264***	1.858***	0.002***	0.480***	0.082***	0.049***	0.091*
	-0.0041	-0.0043	-0.0226	-0.0814	-0.0011	-0.0172	-0.003	-0.0088	-0.0924
Number of observations	18 537	212 286	27 036	125 084	21 104	119 254	201 117	44 272	6 489

#### n.d. = no data.

Note: The dependent variable is being self-employed. The table presents the odds ratio obtained by estimation of logistic regression models, with the standard error given inside parentheses below each estimate. The odds ratio reports the odds of being self-employed for men (women) living with a same-sex partner relative to the odds of self-employment of opposite-sex partners. An odds ratio equal to 1 shows that living with a same-sex partner does not affect the odds of self-employment. An odds ratio larger (smaller) than 1 indicates that being in a same sex relationship increases (decreases) the likelihood of being self-employed. The regression models control for age, education, occupation and urban residence. Significant values are denoted by \*, \*\*, \*\*\* at the 10%, 5% and 1% significance levels respectively.

# A.II.4. Wages

#### ► Table A.II.4. Same-sex partnership and wages

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
I. Men									
Gays	0.004	0.050	-0.015	0.146**	-0.111***	0.041	-0.151*	-0.099**	-0.246
	-0.0624	-0.0389	-0.0883	-0.0481	-0.0217	-0.0481	-0.074	-0.0334	-0.1849
Age	0.065	0.016	0.167	0.015	0.158**	-0.063	0.085*	0.004	0.685*
	-0.1121	-0.0296	-0.1149	-0.0468	-0.0576	-0.0404	-0.0348	-0.0553	-0.2867
Age^2	-0.001	0.000	-0.005	-0.000	-0.005*	0.002	-0.004**	0.002	-0.025*
	-0.0043	-0.0011	-0.0042	-0.0018	-0.0022	-0.0016	-0.0013	-0.0021	-0.0108
Age^3	-0.000	-0.000	0.000	-0.000	0.000	-0.000	0.000***	-0.000	0.000*
	(7.0e-05)	(1.9e-05)	(6.6e-05)	(2.9e-05)	(3.5e-05)	(2.6e-05)	(2.1e-05)	(3.4e-05)	(1.7e-04)
Age^4	0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000***	0.000	-0.000*
	(4.1e-07)	(1.1e-07)	(3.8e-07)	(1.8e-07)	(2.1e-07)	(1.6e-07)	(1.3e-07)	(2.0e-07)	(1.0e-06)
Education: Upper secondary	0.235***	0.265***	0.178***	0.151***	0.066***	0.121***	0.239***	0.259***	0.132***
	-0.016	-0.0042	-0.0121	-0.0062	-0.0074	-0.0067	-0.0059	-0.0148	-0.0359
Education: Beyond upper secondary	0.412***	0.836***	0.576***	0.657***	0.271***	0.422***	0.757***	0.518***	0.182***
	-0.0231	-0.0078	-0.0206	-0.0092	-0.0095	-0.0108	-0.0077	-0.0158	-0.0516
Occupation: Managerial/professional	0.485***	0.585***	0.806***	0.331***	0.212***	0.667***	0.627***	0.410***	-0.053
	-0.0284	-0.0075	-0.0217	-0.0094	-0.0105	-0.0112	-0.0089	-0.0118	-0.0919
Occupation: Services	0.208***	0.128***	0.206***	0.070***	-0.028*	0.302***	0.329***	0.039**	-0.252**
	-0.0241	-0.006	-0.0197	-0.0088	-0.011	-0.009	-0.007	-0.014	-0.0852
Occupation: Skilled agricultural	0.086**	0.196***	0.181***	0.080***	0.009	0.414***	0.187***	0.174***	-0.190
	-0.0263	-0.0056	-0.014	-0.0081	-0.0105	-0.009	-0.0054	-0.0123	-0.0997
Occupation: Skilled machinery	0.182***	0.260***	0.192***	0.090***	0.023*	0.378***	0.386***	0.059***	-0.090
	-0.0273	-0.006	-0.0158	-0.0083	-0.0113	-0.0089	-0.0059	-0.0136	-0.0864
Public sector	0.114***	0.313***	0.124***	0.338***	-0.038***	0.140***	0.086***	-0.026**	0.075*
	-0.0165	-0.0068	-0.0172	-0.0109	-0.0084	-0.0089	-0.0076	-0.0099	-0.0335
Hours worked: 21–40	-0.060	-0.012	-1.288***	-0.071	0.075*	-0.270***	-0.511***	-0.592***	-0.257
	-0.042	-0.0147	-0.0782	-0.0636	-0.031	-0.0281	-0.0264	-0.0433	-0.2221
Hours worked: 41 or more	-0.300***	-0.076***	-1.428***	-0.288***	0.094**	-0.678***	-0.647***	-0.625***	-0.445*
	-0.0423	-0.0147	-0.076	-0.0628	-0.032	-0.0282	-0.0263	-0.0435	-0.2235
Urban residence	n.d.	0.283***	0.091***	0.084***	0.065***	0.296***	0.197***	0.074***	n.d.
	n.d.	-0.0046	-0.0138	-0.0069	-0.0075	-0.0076	-0.0042	-0.008	n.d.
Intercept	3.448**	0.887**	6.338***	7.536***	0.085	3.993***	3.291***	2.234***	0.688
	-1.071	-0.2766	-1.132	-0.4477	-0.5553	-0.3757	-0.3344	-0.5341	-2.757
Number of observations	16 339	179 208	19 065	95 722	18 768	119 041	91 874	40 740	4 197

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Argentina	Brazil	Chile	Colombia	France	Mexico	Thailand	United States	Venezuela (Bolivarian Republic of)
II. Women									
Lesbians	-0.098	0.066**	0.175**	0.012	0.013	0.105	0.076	-0.014	0.349**
	-0.0531	-0.0254	-0.0651	-0.0471	-0.0174	-0.0537	-0.0634	-0.0406	-0.1186
Age	0.042	0.066*	0.246	0.029	0.089	-0.083	0.162***	0.131*	0.413
	-0.1429	-0.0317	-0.1753	-0.0689	-0.0609	-0.0693	-0.037	-0.0654	-0.42
Age^2	0.000	-0.001	-0.007	0.000	-0.003	0.003	-0.007***	-0.003	-0.016
	-0.0055	-0.0012	-0.0066	-0.0026	-0.0023	-0.0027	-0.0014	-0.0025	-0.0159
Age^3		0.000	0.000	-0.000	0.000	-0.000	0.000***	0.000	0.000
	(9.0e-05)	(2.1e-05)	(1.1e-04)	(4.4e-05)	(3.9e-05)	(4.6e-05)	(2.4e-05)	(4.0e-05)	(2.6e-04)
Age^4	0.000	-0.000	-0.000	0.000	-0.000	0.000	-0.000***	-0.000	-0.000
	(5.4e-07)	(1.3e-07)	(6.1e-07)	(2.6e-07)	(2.3e-07)	(2.9e-07)	(1.5e-07)	(2.4e-07)	(1.5e-06)
Education: Upper secondary	0.258***	0.179***	0.120***	0.183***	0.081***	0.205***	0.204***	0.210***	0.161*
	-0.0237	-0.0056	-0.0214	-0.0112	-0.0084	-0.012	-0.0067	-0.0192	-0.065
Education: Beyond upper secondary	0.489***	0.686***	0.510***	0.654***	0.238***	0.506***	0.647***	0.494***	0.519***
	-0.0283	-0.0079	-0.0385	-0.013	-0.01	-0.0159	-0.0088	-0.0201	-0.0631
Occupation: Managerial/professional	0.507***	0.492***	0.732***	0.404***	0.315***	0.527***	0.604***	0.467***	0.494
	-0.0278	-0.0076	-0.0342	-0.0128	-0.0104	-0.0173	-0.0098	-0.0168	-0.281
Occupation: Services	0.215***	0.060***	0.164***	0.047***	0.031***	0.236***	0.213***	0.090***	0.449
	-0.0237	-0.0058	-0.0205	-0.0113	-0.0088	-0.0141	-0.0065	-0.0159	-0.2814
Occupation: Skilled agricultural	0.202	0.088***	0.084	0.101***	0.049*	0.098***	-0.028***	0.089***	-0.129
	-0.1272	-0.0113	-0.0479	-0.0177	-0.0234	-0.022	-0.0077	-0.0231	-0.3226
Occupation: Skilled machinery	0.087	0.127***	0.167***	0.129***	0.112***	0.457***	0.264***	0.089***	0.096
	-0.0719	-0.0108	-0.038	-0.0219	-0.0143	-0.0141	-0.0071	-0.0241	-0.305
Public sector	0.135***	0.149***	0.022	0.507***	0.009	0.115***	0.202***	-0.018	0.253***
	-0.0168	-0.0063	-0.0191	-0.0133	-0.0062	-0.0126	-0.0086	-0.0101	-0.044
Hours worked: 21–40	-0.082***	-0.190***	-0.424***	0.000	-0.051***	-0.352***	-0.527***	-0.182***	0.021
	-0.0191	-0.0078	-0.0457	-0.0258	-0.0143	-0.0131	-0.0296	-0.0205	-0.1946
Hours worked: 41 or more	-0.338***	-0.263***	-0.521***	-0.148***	-0.107***	-0.833***	-0.622***	-0.188***	-0.341
	-0.0274	-0.0083	-0.0432	-0.0245	-0.0179	-0.0154	-0.0296	-0.0226	-0.2074
Urban residence	n.d.	0.283***	0.158***	0.173***	0.046***	0.247***	0.172***	0.114***	n.d.
	n.d.	-0.0059	-0.0216	-0.0149	-0.0065	-0.0146	-0.0045	-0.0091	n.d.
Intercept	3.505**	0.595*	4.285*	6.773***	0.848	4.032***	2.563***	0.503	2.106
	-1.351	-0.2917	-1.69	-0.6523	-0.5728	-0.6346	-0.3501	-0.6248	-4.028
Number of observations	11 698	137 052	11 324	61 519	18 780	60 712	68 945	36 600	3 579

#### n.d. = no data.

Note: The table presents, as decimal values, the wage premiums or penalties experienced by men and women in a same-sex partnership relative to their heterosexual counterparts, with the standard error given inside parentheses below each estimate. The dependent variable is the log of hourly wages. The regression models control for age (through a quartic age specification), education, occupation, employment in the public sector, hours worked, urban residence, and year fixed effects if more than two years of data are used in the analyses. Significant values are denoted by \*, \*\*, \*\*\* at the 10%, 5% and 1% significance levels respectively.

# Appendix III. Robustness check using a direct measure to identify same-sex partnership: The case of Chile

The method used in our analyses to identify same-sex partnership has its limitations. An individual living with other adults or an adult child could erroneously be labelled as having a same-sex partner. Misclassification into same-sex partnership could also happen as a result of measurement errors in the sex variable. In this appendix, we assess the accuracy of our results using the constructed same-sex partnership variable for Chile, where a direct measure of same-sex partnership is available. We observed an 87 per cent overlap between our constructed measure and the direct measure, meaning that around nine in ten people directly identified as having a same-sex partner by the Chilean survey questionnaire are also identified as such by the methodology used for this study.

We estimate our main specifications from the main text, replacing our constructed measure of same-sex partnership with the direct measure. The results are presented in table A.III below. Panel A reports the results for men, and Panel B those for women. Our labour force participation results for both men and women remain consistent when using the direct measure of sexual partnership (see columns 1 and 5). The unemployment results are qualitatively similar to our main results, but the higher unemployment of gay men relative to their heterosexual counterparts is no longer statistically significant (see columns 2 and 6). Consistent with our main findings, we do not find a statistically significant relationship between sexual orientation and self-employment (see columns 3 and 7). In line with our main estimates, the wage premium for lesbians becomes more pronounced, while we do not observe a statistically significant wage penalty for gay men (see columns 4 and 8).

# ► Table A.III. Labour market outcomes and same-sex partnership identified with a direct measure: the case of Chile

		A) Me	en	B) Women					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	LFPR	Unemployment	Self-employment	Log hourly wages	LFPR	Unemployment	Self-employment	Log hourly wages	
Gay/Lesbian	0.464***	1.503	1.093	-0.032	4.791***	0.734	1.057	0.224**	
	(.1045)	(.4125)	(.2127)	(.0900)	(.9674)	(.1995)	(.2757)	(.0772)	

LFPR = labour force participation rate.

Note: Columns 1–3 and 5–7 present the odds ratios obtained by estimation of logistic regression models, with the standard error given inside parentheses below each estimate. An odds ratio equal to 1 shows that living with a same-sex partner does not affect the odds of the outcome variable. An odds ratio larger (smaller) than 1 indicates that being in a same-sex partnership increases (decreases) the likelihood of the outcome variable. Columns 4 and 8 report the results from ordinary least squares estimation of the wage equation (that is, equation (2) in Chapter 2). The regression models control for age, education, occupation, public employment, hours worked and urban residence. Significant values are denoted by \*, \*\*, \*\*\* at the 10%, 5% and 1% significance levels respectively.

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