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The demand for Domestic work in Chile and Uruguay Association with time use patterns

Verónica Amarante* - Cecilia Rossel** - Federico Scalese***

Resumen

Este trabajo analiza la demanda de trabajo doméstico remunerado en Chile y Uruguay, centrándose en la relación entre la contratación del trabajo doméstico y las brechas de género en trabajo no remunerado al interior de los hogares. Los hogares que demandan trabajo doméstico remunerado son similares en Chile y Uruguay, aunque en Chile se concentran más en el quintil superior. En ambos países, la presencia de trabajadores domésticos se asocia con una reducción de la brecha de género en las horas de trabajo no remunerado dentro de los hogares. Sin embargo, en Chile esto se debe principalmente a la reducción del trabajo no remunerado de las mujeres, mientras que en Uruguay también se asocia con cambios en el tiempo de trabajo no remunerado de los hombres.

Palabras clave: servicio doméstico, contratación, género, América Latina, trabajo no remunerado y remunerado, Chile, Uruguay

Código JEL: J2; J4; J7

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Abstract

This paper analyzes the demand for paid domestic work in Chile and Uruguay, focusing on the relationship between the outsourcing of domestic work and gender gaps in unpaid work within households. Households demanding domestic paid work are similar in Chile and Uruguay, although they are more concentrated in the upper quintile in the case of Chile. In both countries, the presence of domestic workers is associated with a reduction in the gender gap in unpaid hours of work within households. However, in Chile, this is mainly due to the reduction of women's unpaid work, while in Uruguay, it is also associated with men's time spent in unpaid work.

Keywords: domestic work, outsourcing, gender, Latin America, paid and unpaid work, Chile, Uruguay

JEL Classification: J2; J4; J7

Introduction

International trends show that higher female participation in paid work has not been accompanied by an increase in hours of unpaid housework by other household members (Bittman, Matheson & Meagher, 1999; Van Der Lippe, Tijdens & De Ruijter, 2004). Therefore, in the light of intrahousehold tensions associated with the allocation of total work time, replacing unpaid household production with market substitutes becomes a potential solution, at least for some households. This process of outsourcing of domestic or unpaid household work can take different forms. It may involve external outsourcing, including dining outside and using external childcare services. It may also involve hiring domestic workers to perform domestic tasks in the household, including cooking, cleaning, washing, or caring activities. In this paper, we address this latter form of outsourcing. ¹

The study of outsourcing domestic work is of paramount importance for a region such as Latin America. Compared to more developed regions, Latin America has a higher proportion of its labor force employed as domestic workers. However, the factors associated with households' decisions regarding hiring domestic workers and how outsourcing domestic work relates to the distribution of unpaid work within households have received little attention from scholars of the region.

Addressing this issue and relating outsourcing of domestic work and gender gaps in unpaid work is crucial because of the dramatic changes that have taken place in the region. On

¹ Throughout the paper, we refer interchangeably to "the outsourcing of domestic work" or "paid domestic labor."

the one hand, the rate of female participation in paid work has increased dramatically in recent decades. However, most of the action took place for low or medium education women, who are also the majority of the Latin American female population. Women with tertiary education already presented very high participation rates two decades ago (ECLAC & ILO, 2019; Gasparini & Marchionni, 2015). On the other hand, there has been a surge in policies oriented to facilitate the conditions for the outsourcing of domestic work, both through the adoption of early childhood education and care (ECEC) policies (Batthyány, 2015; Blofield & Martínez Franzoni, 2014) and regulation to improve working conditions for domestic workers (Blofield, 2012; Lexartza, Chaves & Carcedo, 2016; Valenzuela & Moras, 2009).

In this paper, we focus on two issues that the regional literature has overlooked: (i) what factors are related to the demand for outsourcing of domestic work? and, (ii) to what extent is the outsourcing of domestic work associated with and the distribution of unpaid and paid work within households?. To address these issues, we focus on Chile and Uruguay, two of the most developed Latin American countries, where the proportion of domestic workers is among the highest in the region. However, these two countries differ in terms of gender equality. This key dimension is expected to play a role in how households decide whether to outsource domestic work and how to allocate paid and unpaid work when a domestic worker is hired. Given the differences between the two countries in terms of gender inequality, we should expect demand for domestic service to be less widespread across income sectors in Chile. We should also expect spending on domestic work to impact less on the burden of unpaid work among Chilean women and the unpaid work gap within Chilean households.

In this paper, we (i) characterize the households that hire domestic workers and analyze the importance of outsourcing in domestic budgets, (ii) explore the relationship between the outsourcing of domestic work and gender gaps between partners in unpaid and paid work, and (iii) take advantage of the similarities and differences between Chile and Uruguay to move forward in cross-country comparisons in the study of domestic work and to carry out a first study of the outsourcing of domestic work in the region.

We base our analysis on microdata from expenditure surveys (2006-2007, 2011-2012, and 2016-2017 for Chile and 2005-2006 and 2016-2017 for Uruguay) and time-use surveys (2015 for Chile and 2007 for Uruguay).

In line with our expectations, we find that the demand for domestic work is higher in Chile and more concentrated in high-income households than in Uruguay. Although domestic work is associated with a reduction in the gender gap in unpaid work in both countries, in Uruguay, the presence of a domestic worker affects time devoted to unpaid work for both members of the couple (although more so in the case of women), while in Chile, it only seems to affect women's unpaid work time.

Our paper contributes to shedding light on the factors associated with the demand for paid domestic work outside the developed world, where the relative weight of this type of outsourcing is higher and contextual class and gender inequalities are also higher. Although further research is needed, the differences and similarities between the cases of Chile and Uruguay might help understand how contextual and cultural settings may influence how households demand paid domestic work. They also shed light on how this demand could relate to different paid and unpaid work distribution models within households.

5

The paper is organized as follows: we first discuss the research that analyzes the outsourcing of domestic work and its relationship with the gendered division of labor (section 1). We then present the cases of Chile and Uruguay (section 2), followed by the presentation of data and methods (section 3). Descriptive evidence about the demand for domestic workers in Chile and Uruguay is included in section 4. Section 5 presents the factors associated with the outsourcing of domestic work at the household level and the relationship between the outsourcing and gender gaps in unpaid work within households. Finally, section 6 contains some concluding remarks.

1. The gendered division of labor and the outsourcing of domestic work

Even after decades of increase in women's participation in paid labor and slow cultural change, evidence from developed and developing regions shows that there is a systematic gender bias in the distribution of unpaid work (Budlender 2004, 2012; Kalenkoski, Ribar, and Stratton 2005, 2006; Krantz-Kent 2009; Treas and Drobnic 2010; Antonopoulos and Hirway 2010). As a result, women frequently add hours of unpaid work to the time they devote to paid work, hence facing a double burden (Hochschild 1989; Shelton 1992).

One of the ways women avoid this burden is by outsourcing part of the unpaid work by hiring domestic workers. The persistence and even re-emergence of domestic service as a relevant occupational category have attracted scholarly attention in recent years. This body of research seeks to explain the size and characteristics of domestic work through individual-level factors, such as the availability of resources (both money and time) or the level of demand or need for domestic service, and macro-level factors, such as policy environments, societal trust, cultural preferences, and gender ideology.

At the individual level, the literature emphasizes the importance of disposable income or discretionary time for housework, which are closely related to the outsourcing processes. This resource explanation -grounded in an economic rationale- posits that households are expected to outsource if they have more material resources at their disposal. The empirical support for this hypothesis is strong, although it has not been reconfirmed recenly. High-income households are more likely to outsource domestic service in contexts as different as Australia (Baxter et al., 2009; Bittman et al., 1999), the Netherlands (De Ruijter, 2004), and the United States (Spitze, 1999). Comparative studies among OECD countries have also confirmed this result (Estevez-Abe, 2015). It has also been found that female income is more strongly related to the outsourcing of domestic work than male income in the United States (Treas & de Ruijter, 2008) and the Netherlands (Van Der Lippe et al., 2004). Moreover, in their study for the United States, Treas & de Ruijter (2008) also find that the wife's income is strongly related to decisions about expenditures on childcare and housekeeping but not to decisions about dining out (see Treas & De Ruijter, 2008).

Also, within this literature, the outsourcing of domestic work is expected to increase when time is less available. In this vein, Hiller (1984) argues that, in the distribution of unpaid work within families, the amount of domestic work to be done in a household is the residual that remains after other obligations have been fulfilled. Thus, restrictions arising from time allocation decisions, such as the number of hours of paid work, will influence the decision to seek outsourcing services. Studies from the Netherlands show that the time availability hypothesis is

7

more convincing for dining out expenditures than for housekeeping services (Van Der Lippe et al., 2004). They also show that the likelihood of outsourcing housekeeping work is positively related to the number of hours a person devotes to paid work (De Ruijter, 2004; Van der Lippe, Frey & Tsvetkova, 2013). In their Australian case study, Baxter et al. (2009) show that this is especially true when the worker is a woman.² Following this literature, since the outsourcing of domestic work substitutes hours of unpaid work, especially those of women. Hence, it is expected to affect gender gaps and gender inequality within households. However, the relationship between the outsourcing of domestic work and the distribution of paid and unpaid work within households remains mostly unexplored. An exception is the study led by Craig and Baxter (2016) for the Australian case, who show that "domestic outsourcing does not substitute for much household time, reduces domestic time for men at least as much as for women, and does not ameliorate gender gaps in domestic labor". Also, Gonalons-Pons (2015) addresses a similar issue for the case of Spain.

The other strand of the literature argues that context matters for understanding the size and characteristics of domestic outsourcing. Policies and labor market contexts at the national

²Coverman (1985) posits that factors such as the presence and age of children, the number of household members, and their health status influence the use of paid housework. For example, Bittman, Matheson & Meagher (1999) for the case of Australia, and De Ruijter (2004), De Ruijter & Van der Lippe (2009), and Van der Lippe, Frey & Tsvetkova (2013) for the Netherlands, confirm that the presence of young children increases the probability of outsourcing domestic service.

level may also influence the likelihood of outsourcing of domestic work, as discussed in a comparative study for OECD countries by Estevez-Abe (2015). The availability of public care systems or other interventions—such as household service checks, service vouchers, or tax subsidies-influences the outsourcing of domestic work. Labor market institutions, such as wage bargaining, minimum wages, and domestic work regulations are also relevant. The abundance of unskilled labor, immigration policies, and the levels of income inequality, especially among women, may affect domestic work outsourcing (Estevez-Abe, 2015).³ Interpersonal trust and individual preferences have also been found relevant for the outsourcing of domestic work. Scholars studying the Netherlands have also argued that trust issues matter in outsourcing decisions because an outsider enters the privacy of the household and takes over tasks of particular value, such as childcare or food preparation (De Ruijter, Van der Lippe & Raub, 2003; De Ruijter & Van der Lippe, 2009). These studies found evidence that the general level of trust increases the likelihood of outsourcing domestic tasks. Finally, the context of gender equality and gender ideology has also been proposed as relevant factors. The extent to which domestic work is considered a women's responsibility is expected to influence households' predisposition to outsource housework, as well as the possible changes in the allocation of paid and unpaid work once a domestic worker is hired. As Baxter, Hewitt & Western (2009) explain, "Employing paid help to undertake domestic tasks challenges cultural expectations about the responsibility of wives for housework and is thus less likely in households where there are high levels of support

³ However, the causality direction is unclear, as preexisting demand for domestic workers may attract unskilled foreign workers (see Bettio, Simonazzi & Villa, 2006).

for the traditional view of the family." (3). Previous studies find that when men's gender role expectations are more egalitarian, some tasks are outsourced more often, whereas women's gender role expectations do not appear significant. Similarly, general preferences about whether domestic work should be outsourced (Baxter, Hewitt & Western, 2009) have also been found to influence outsourcing decisions in countries such as Australia or the United States.

In sum, while the available literature provides interesting insights to understand the outsourcing of paid domestic work, it has not explored how this process relates to gender gaps within households. Also, it focuses primarily on developed countries, where this type of outsourcing is, in comparative terms, very low (see also Cheung & Lui, 2017). In fact, in less developed regions, such as Latin America, domestic workers account for a large share of the working population compared to developed countries (CEPAL, 2013). However, there is still limited knowledge regarding the main factors associated with the demand for domestic work in the region. Also, except for Estevez-Abe (2015) in her analysis of 22 OECD countries, there are no studies analyzing how country context may intervene in households' decisions to outsource domestic work.

This paper aims to start closing this knowledge gap by analyzing the demand for paid domestic work in Latin America. We focus on two of the more advanced countries - Chile and Uruguay-, which are also among those with a higher proportion of domestic workers in the region (see Table A.1 in the Appendix). At the individual level, we describe the outsourcing of domestic work and analyze the variables associated with it and its relationship to intrahousehold gender gaps in unpaid work. At the macro level, we analyze whether the differences in gender norms and equality that Chile and Uruguay portray are relevant to the dynamics of the

10

outsourcing of domestic work. In the following section, we describe the main features of the two countries concerning domestic workers and gender equity and explain why focusing on its comparison allows us to shed light on these unexplored issues.

2. Chile and Uruguay: main characteristics

Chile and Uruguay represent two similar—yet still different—contexts for analyzing the outsourcing of domestic work. They are among the most developed countries in Latin America and exhibit similar socioeconomic performance (see table 1) and among the countries with the highest proportion of domestic workers in the region- 6.97% and 9.96% respectively-, only behind Brazil and above countries like Mexico, Colombia, Peru, and Ecuador (see table A.1).

Chile and Uruguay also share other characteristics. Both countries have deployed relevant policies to reduce women's burden of unpaid work and facilitate different forms of outsourcing of domestic work. The two countries have expanded public childcare services for children aged 2 and 3 -especially among the low-income sectors- and created a parental component of employment-related leaves. They have also introduced labor market regulations for domestic workers. ⁴

⁴ Chile passed Law 20279 (2008), establishing that the domestic workers' salary should equal the minimum wage, and Law 20786 (2014), which equaled the rights of domestic workers to those of other workers. Uruguay's Law 18065 (2006) limited the working hours of domestic workers to a legal maximum of 8 hours a day and 44 hours a week. Domestic workers were also included in the wage bargaining process to ensure that the minimum wage arises from the discussion

	Chile	Uruguay	Year	Source
GDP per capita (USD PPP)	22,688	20,118	2015	World Bank Indicators
Gini index	0.453	0.392	2015	ECLAC (ECLACStat)
Poverty incidence (%), ECLAC threshold	13.7	4.1	2015	ECLAC (ECLACStat)
Poverty incidence (%), World Bank (5,5 USD/day)	5.2	3.9	2015	World Bank (Povcalnet)
Poverty incidence (%), national threshold	11.7	9.7	2015	Mideplan (Chile), INE (Uruguay)
Female labor force participation (%)	46.7	50.5	2015	ECLAC (ECLACStat)
Male labor force participation (%)	70.0	68.2	2015	ECLAC (ECLACStat)
Female hours of paid work (workers)	43.5	35.8	Chile: 2015 / Urug.: 2007	Time Use Surveys
Male hours of paid work (workers)	49.7	47.2	Chile: 2015 / Urug.: 2007	Time Use Surveys
Female hours of unpaid work	30.4	37.9	Chile: 2015 / Urug.: 2007	Time Use Surveys
Male hours of unpaid work	12.7	13.8	Chile: 2015 / Urug.: 2007	Time Use Surveys
Gender Values Index	2.89	3.43	2010-2014	World Value Survey
Gender Social Norms Index, % 1 + bias	74.4	74.6	2010-2014	UNDP
Gender Social Norms Index, % 2+ bias	42.2	36.7	2010-2014	UNDP
Gender Social Norms Index, % no bias	25.6	25.4	2010-2014	UNDP
Childcare attendance (0 to 3)	21,5	33,0	2017	Household Surveys
Childcare attendance (3 to 5)	78,8	89,1	2017	Household Surveys

Table 1. Economic and social indicators of Chile and Uruguay

Source: authors' elaboration

between the parties (the employer, the employee, and the government) (Goldsmith, 2013). In addition, social security affiliation became mandatory, and domestic workers became entitled to severance pay and unemployment insurance. Despite these similarities, Chile and Uruguay differ in crucial aspects. Chile is considered a 'very strong breadwinner model' (Pribble, 2006) and more unequal than Uruguay in terms of gender. Drawing on an index based on a set of questions from the World Values Survey (wave 2010–14), proposed by Amarante & Rossel (2018)⁵, we find that gender values in Uruguay are less sexist than in Chile. The Gender Social Norms Index (UNDP, 2020)⁶, which measures how social beliefs hinder gender equality in politics, work, and education, also suggests that Uruguay is more gender-equal, although the differences are minor. These differences are reflected in women's paid work and the distribution of unpaid work between men and women. In fact, Chile

⁵ The Gender Values Index is based on the following questions from the World Values Survey, which asks the interviewee to declare whether she/he agrees or disagrees with each phrase: (1) "When jobs are scarce, men should have more right to a job than women;" (2) "If a woman earns more money than her husband, it is almost certain to cause problems;" (3) "Having a job is the best way for a woman to be an independent person;" (4) "When a mother works for pay, the children suffer;" (5) "On the whole, men make better political leaders than women do;" (6) "A university education is more important for a boy than for a girl;" (7) "On the whole, men make better business executives than women do;" and (8) "Being a housewife is just as fulfilling as working for pay." The index values range from -8 to 0, with more negative values indicating a greater degree of sexism.

⁶ The Gender Social Norms Index (UNDP, 2020) measures how social beliefs impede gender equality. The index comprises four dimensions (political, educational, economic, and physical integrity) and is constructed based on seven questions from the World Values Survey. has one of the region's lowest female participation rates in paid work. By contrast, although female labor force participation is higher in Uruguay, women's average number of hours of paid work is lower in Uruguay; that is, more women work, but their workdays are shorter than in Chile (see table 1).

Drawing on the literature, these differences between the two countries lead to expect differences in how the outsourcing of domestic work substitutes hours of unpaid work within households. Given its more traditional gender culture, in Chile, we expect the demand for domestic service to be less widespread across income sectors than in Uruguay. In the same vein, spending on domestic work in Chile should have less impact on the burden of unpaid work among women than in Uruguay due to a less dynamic labor market for them. It should also be less related to men's allocation of unpaid work due to the higher certain rigidity of gender roles. As a result, in Chile, the outsourcing of domestic work should be less related to reducing the gender gap in unpaid work within households than in Uruguay.

3. Data and methods

To analyze the demand for domestic workers in Chile and Uruguay, we first characterize the households that hire domestic workers and analyze the importance of outsourcing in domestic budgets. As a second step, we explore the factors associated with this demand for domestic workers. Finally, we explore the relationship between the outsourcing of domestic work and gender gaps in unpaid and paid work between partners.

Table 2 presents a synthesis of the data and methods used to address each of these three research questions. The identification of household demand for domestic service and its importance in household budgets is based on the Household Expenditure survey from 2006-2007, 2011-2012, and 2016-2017 for Chile and 2005-2006 (INE, 2021) and 2016-2017 for Uruguay (INE, 2018). Since household expenditures are coded under the International Standard Industrial Classification of All Economic Activities (ISIC) Code, the demand for domestic service is easy to measure. This allows us to identify the households that hire domestic service providers and how much they spend on it.

Question	Question Methodology		
Who demands domestic workers?	Descriptive of analysis about domestic service demand: by income level, type of household, importance in household expenditure	Household expenditure surveys. Chile: 2006- 2007, 2011-2012 and 2016-2017 (INE, 2021); Uruguay: 2005-2006 and 2016-2017 (INE, 2018).	
What are the factors associated with domestic outsourcing?	OLS estimation. Dependent variable: demand of domestic service at the household level. Dependent variables: female and male absolute earnings, share of female earnings, hours of paid and unpaid work, presence of children and presence of other adults	Time use surveys. Chile: 2015 (INE, 2015); Uruguay: 2007 (INE, 2008)	
Does domestic outsourcing affect the gender gaps in unpaid and paid work within the household?	 OLS estimations. 1. Dependent variable: gender gap in unpaid work (female-male) within households. Independent variables: age and age squared, absolute income (for male and females), share of female earnings, presence of children in the household, presence of other adults in the household, presence of domestic workers in the household 2. Dependent variable: gender gap in paid work (male-female) within households. Independent variables: age and age squared, educational level (for male and females), share of female earnings, presence of children in the household, presence of domestic work (male-female) within households. 	Time use surveys. Chile: 2015 (INE, 2015); Uruguay: 2007 (INE, 2008)	

Table 2. Research questions, data and methods

Source: Authors' elaboration

Time-use surveys allow us to consider the factors associated with the demand for domestic service and its relationship with paid and unpaid work of household members. A timeuse survey was carried out for Chile in 2015 (INE, 2015) and Uruguay in 2007 (INE et al., 2008) as an additional module within the regular household survey. In both cases, time-use information is obtained through survey questions instead of diary information. It is important to notice that time-use diaries, which are the usual way of gathering time-use information in Europe, are not commonly used in Latin America (see Aguirre & Ferrari, 2014), mainly because questionnaires are a cheaper instrument (Kitterød & Lyngstad, 2005). In Chile, each household member responds directly, while in Uruguay, one person is an informant for the rest of the household members.⁷ Unpaid hours of work include time devoted to traditional household tasks such as cooking, shopping, cleaning, and childcare. In these surveys, the identification of households that demand domestic service is based on the following questions: "Last week, did any domestic service person work in this household?" in the case of Chile, and "Does this household have domestic service?" for Uruguay. Both questions allow for a wide range of activities to be included in the outsourcing of domestic work (cleaning, laundry, maintenance, cooking, childcare). It is important to note that the identification of domestic workers through household

7 The use of proxy respondents is a potential source of biases in time use information, as underlined by Charmes (2021). In the case of the time use survey in Uruguay, this practice was chosen as it facilitates data collection and lowers costs. While recognizing that this is a limitation of our data, we highlight that previous studies have confirmed the quality of the data and the consistent patterns arising from this survey (Amarante & Rossel, 2018). surveys and the outsourcing of domestic work through expenditure surveys are internally consistent.

Table 3 summarizes the main characteristics of the surveys mentioned above. More details about the characteristics of time-use surveys are presented in the Appendix (Table A.2).

	Survey	Year	Coverage	Observations		
	Survey	Ital	Coverage	People	Households	
	Time-Use Survey	2015	National	34,575	10,706	
Chile		2006-2007	National	35,770	10,092	
	Expenditure Surveys	2011-2012	National	35,669	10,528	
		2016-2017	National	48,308	15,239	
	Time-Use Survey	2007	National	11,492	4,024	
Uruguay Exj	Expenditure Surveys	2005-2006	National	20,772	7,043	
	Experience Surveys	2016-2017	National	18,709	6,889	

Table 3. Characteristics of surveys used for Chile and Uruguay

Source: Authors' elaboration based on Household expenditure surveys (INE, 2018, 2021) and Time use surveys (INE, 2008, 2015)

It is important to notice that two of these sources of data provide information about the number of hours per week that a household outsources: the time use survey for Chile (2015) and the expenditure survey for Uruguay (2016-2017). The analysis of this information illustrates that the outsourcing of domestic work implies different situations. Around 55% of households, both in Chile and Uruguay, hire less than 10 hours per week, whereas 28% in Chile and 26% in Uruguay hire 20 or more hours per week.

To explore the factors associated with household outsourcing decisions and the association between the outsourcing of domestic work and time-use gender gaps within households, we restrict our sample to households where we can identify the main couple. The total number of households reduces to 2185 in Chile and 1653 in Uruguay, which represent 20 and 41% of total households, respectively. The gap in unpaid hours is defined as the difference between female and male hours (for the main couple in the household) dedicated to housework

(female minus male). In contrast, the gap in paid hours is defined as male minus female hours dedicated to paid work (so that in both cases, the average gaps are positive).

To explore the factors associated with outsourcing, we estimate an OLS regression where the dependent variable identifies those households which hire domestic workers. The model is estimated using time-use surveys for both countries, as this data source allows us to test the role of paid and unpaid hours of work in the household. We also control for individual and household characteristics.

We considered three specifications for each country; these specifications differ in how they operationalize resources. In all of them, the dependent variable DS_h values one if the household demands domestic service and zero otherwise. The first specification considers as explanatory variable the female share of household earnings (ratio of female earnings to the total earnings of the household, *Sh*) (equation 1). In the second specification, resources are operationalized by male and female income (*FEh* and *MEh*, in log terms) separately (equation 2). In the third specification, resources are operationalized by hours dedicated to paid and unpaid work by women (*FPW_h* and *FUW_h*, respectively) and men (*MPW_h* and *MUW_h*, respectively) (equation 3). All models consider a set of controls as independent variables (*Zh*), including the age of each member of the couple and its square and the household composition, measured by binary variables that indicate the presence of children of different ages and other adults. Finally, in all equations, ε_h reflects the error term.

$$DS_h = \beta_0 + \beta_1 S_h + \beta_Z Z_h + \varepsilon_h \tag{1}$$

$$DS_h = \beta_0 + \beta_1 F E_h + \beta_2 M E_h + \beta_Z Z_h + \varepsilon_h$$
⁽²⁾

20

$$DS_h = \beta_0 + \beta_1 FPW_h + \beta_2 MPW_h + \beta_3 FUW_h + \beta_4 MUW_h + \beta_Z Z_h + \varepsilon_h$$
(3)

To analyze the relationship between the demand for domestic service and the gender gap between partners in paid and unpaid hours, we run OLS regressions considering as dependent variables, alternatively, the unpaid working gap within the household, UWG_h (equations 4 and 5), and the paid wage gap within the household PWG_h (equations 6 and 7), both expressed in hours per week. Among the explanatory variables, in all cases, we include a binary variable that indicates if the household hires domestic service (outsourcing), DS_h , which is our interest variable. For each gap, we estimate two specifications. One is associated to the share of female earnings, S_h (equations 5 and 7). The other specification considers absolute female and male earnings (FE_h and ME_h) in the case of unpaid hours gap (equation 4) or female and male years of education (FYE_h and MYE_h) (equation 6) in the case of paid hours gap. In all cases, we consider a set of controls, Z_h , including the age of woman and man and their squares, binary variables for the presence of children of different ages in the household, and a binary variable for the presence of other adults). Finally, in all cases, ε_h reflects the error term.

$$UWG_h = \beta_0 + \beta_1 DS_h + \beta_2 FE_h + \beta_3 ME_h + \beta_Z Z_h + \varepsilon_h$$
⁽⁴⁾

$$UWG_h = \beta_0 + \beta_1 DS_h + \beta_2 S_h + \beta_Z Z_h + \varepsilon_h$$
⁽⁵⁾

$$PWG_h = \beta_0 + \beta_1 DS_h + \beta_2 FYE_h + \beta_3 MYE_h + \beta_Z Z_h + \varepsilon_h$$
(6)

$$PWG_h = \beta_0 + \beta_1 DS_h + \beta_2 S_h + \beta_Z Z_h + \varepsilon_h$$
⁽⁷⁾

Finally, to get a better understanding of the results referring to unpaid and paid wage gaps, we estimate equations (4) to (7), considering as dependent variables the corresponding hours (paid or unpaid) dedicated by the man and the woman of the couple within the household (instead of the gap).

It is important to note that our estimations of the relationship between the demand for domestic workers and economic resources (female share of earnings, absolute earnings, or hours of work) may suffer from endogeneity problems. For example, women can provide more paid hours to the labor market and increase their earnings because the household hires a domestic worker. Unfortunately, we cannot solve this endogeneity problem due to the lack of panel data or suitable instrumental variables. This means that we are not testing for causal directionality but only providing evidence about significant associations between the presence of domestic workers and gender differences in the household and between the presence of domestic workers and

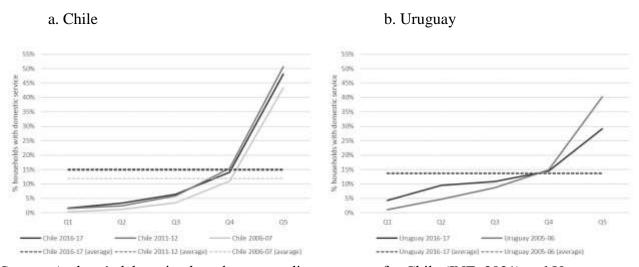
4. Who demands domestic workers?

Today, around 14% and 15% of households in Uruguay and Chile demand domestic service, and the pattern is increasing with household income (Figure 1).⁸ In Chile, 48% of households from the upper quintile demand this service, whereas the figure for the same quintile is 29% in

⁸ Quintiles are calculated by dividing the population into five equal-sized groups according to per capita household income distribution, after ordering this population from the poorest to the richest. So the first quintile represents the 20% of the population with lower per capita incomes.

Uruguay. A comparison of information from the most recent expenditure survey in each country indicates that the outsourcing of domestic work slightly increased among Chilean households between 2006 and 2017. In contrast, in Uruguay, no relevant changes on average were detected between 2005 and 2017. But there are changes at different income levels: the figure depicts an increase in domestic service demand by the lowest quintile and a reduction for the higher, a change that deserves further research.

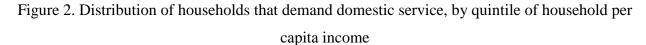
Figure 1. Households that demand for domestic service by income quintile (as % of total



households)

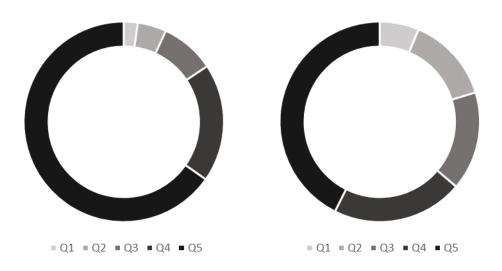
Source: Authors' elaboration based on expenditure surveys for Chile (INE, 2021) and Uruguay (INE, 2018).

Households that decide to outsource spend around 6.8% of total household spending in the case of Chile and 5.5% in the case of Uruguay (Table A.3 in the Appendix). This proportion has been relatively stable over time, decreasing in Chile between 2006 and 2011. No clear patterns are observed by income quintile. Another way of looking at this is that households demanded fewer hours of domestic work in the face of an increase in prices (salaries) and fixed budgetary allowance. Despite this apparent association between the outsourcing of domestic work and household income, not all households that purchase domestic services are rich. According to expenditure surveys, the concentration of outsourcing of domestic work in highincome households is higher in Chile than in Uruguay (Figure 2). In Chile, 65.3% of households that hire domestic workers belong to the upper quintile, whereas this figure is 42.6% in Uruguay. Moreover, whereas 15.6% of total households that outsource domestic work belong to the three lower quintiles in Chile, this figure is 36.2% for Uruguay.





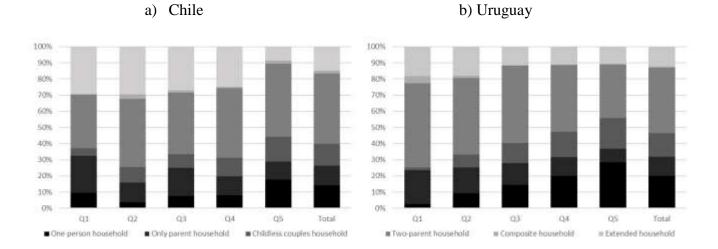




Source: Authors' elaboration based on expenditure surveys for Chile (INE, 2021) and Uruguay (INE, 2018).

The demand for domestic service is related not only to household income but also to the composition of the household. Figure 3 shows that, of the total households that require domestic service, more than 40% are couples with children, both in Chile and Uruguay. In the case of Chile, extended, single-person, childless-couple, and single-parent households represent similar portions of the demand for domestic service (14.8%, 14.2%, 13.5%, and 12.1%, respectively). In Uruguay, the main difference is that 20.1% of households that demand domestic service are single-person households.

Figure 3. Distribution of households that demand domestic service, by quintile of household per capita income and type of household



Note: Extended households are those that include a nuclear family and other relatives. Composite households are those that include a nuclear family and individuals who are not relatives (other non-nuclear relatives may also integrate these households). Source: Authors' elaboration based on expenditure surveys for Chile (INE, 2021) and Uruguay (INE, 2018).

Similar patterns are observed in both countries when considering the distribution of

households that demand domestic service. As the income quintile increases, the percentage of

one-person households and childless-couple households increases. In contrast, the percentage of single-parent households decreases in Chile and Uruguay. Moreover, in Uruguay, the percentage of extended and two-parent households decreases as the income quintile increases. Although the pattern is not linear in Chile, a lower percentage is observed for single-parent, two-parent, and extended households in the lowest quintiles. The percentage of composite households is exceptionally low in both countries. In all income quintiles in Chile and Uruguay, demand for domestic service is most significant among two-parent households.⁹

5. A CLOSER LOOK AT COHABITING PARTNERS

Factors associated with the outsourcing of domestic work

We explore the factors associated with the outsourcing of domestic work for each country through an OLS estimation, where the dependent variable is binary and indicates that the household hires domestic workers. Our sample is restricted to households where we can identify the main couple. We present three specifications (equations 1 to 3 in the methodological section). In the first one (columns 1 and 4 in Table 4), the female share of earnings (female ratio over total household earnings) is included to operationalize economic resources. Results indicate that, in both countries, higher female bargaining power is associated with the outsourcing process, as

⁹ In both countries, when we analyze by both income quintile and household type, the demand for domestic service increases with income for all types of households (see Table A.4 in the Appendix).

indicated by higher relative earnings. The second specification separately operationalizes resources by male and female income (in log terms) (Table 4, columns 2 and 5). The demand for domestic work is more responsive to male than female income in Uruguay but not in Chile. A 10% increase in female income in Chile produces a 0.09% increase in the probability of the household demanding domestic service; the result in the case of male income in Chile is 0.07% In Uruguay, the same 10% increase in female income would imply an increase of 0.12% in the probability of demanding domestic service. In contrast, the same percentual change in Uruguayan male income produces a more substantial increase, of 0.020%, in the probability of demanding domestic service. Statistical tests indicate that male and female income coefficients are significantly different in Uruguay but not Chile.¹⁰

In the third specification (Table 4, columns 3 and 6), resources are operationalized by female and male hours of paid and unpaid work. In our definition, as discussed in section 3, unpaid work includes traditional household tasks and childcare. Female hours of paid work are associated with a higher probability of the outsourcing of domestic work in both countries, with similar coefficients. In contrast, male hours of paid work are significantly associated, with a positive coefficient, only for Uruguay. As expected, the demand for the outsourcing of domestic work is associated with fewer hours of female and male unpaid work in Uruguay, but in Chile, the coefficient is not significant for women. This is consistent with a more traditional pattern of

¹⁰ The F-test for the null hypothesis of no difference between the coefficients is 1.86 for Chile and 6.19 for Uruguay, indicating that the null hypothesis cannot be rejected in Chile. In contrast, in Uruguay, the null hypothesis is rejected.

time use in Chile, where the time use of men (both in terms of paid and unpaid work) is not associated with the demand for domestic help. As discussed in section 3, we cannot solve potential endogeneity problems in our estimations, so we are not claiming causality in our results.

Regarding control variables, age is relevant in the case of female members of the couple in Uruguay and, to a lesser extent, in Chile, exhibiting an inverse U pattern: the outsourcing increase of domestic work increases with the age of women in the household, up to a certain age, and then decreases. The presence of children younger than 3 is strongly and positively associated with the outsourcing of domestic work in both countries. The presence of children aged 3 to 5 in the household is significant for Chile, but the association is weaker, in statistical terms, for Uruguay. The presence of children aged 6 to 12 or 13 to 18 (whether boys or girls) is not significantly related to the probability of outsourcing domestic tasks in either country, whereas the presence of other adults in the household (besides the main couple) has a negative association with outsourcing in Chile. These results again suggest a more traditional pattern of family configuration in Chile, where other adults living in the household (probably grandparents) tend to substitute for the outsourcing of domestic work.

		Chile			Uruguay		
	(1)	(2)	(3)	(4)	(5)	(6)	
Age (female)	0.016**	0.014**	0.015**	0.032***	0.025***	0.026***	
	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)	(0.006)	
Age^2 (female)	-0.000**	-0.000*	-0.000**	-0.000***	-0.000***	-0.000***	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Age (male)	0.016***	0.010*	0.013**	0.003	-0.009	-0.001	
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)	(0.007)	
Age^2 (male)	-0.000***	-0.000	-0.000**	-0.000	0.000	0.000	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
Female income (log)		0.009***			0.012***		
		(0.001)			(0.002)		
Male income (log)		0.007***			0.020***		
		(0.002)			(0.003)		
Share of female earnings	0.118***			0.077***			
	(0.022)			(0.026)			
Hours of paid work (women)			0.001***			0.002***	
			(0.000)			(0.000)	
Hours of paid work (men)			0.000			0.001***	
			(0.000)			(0.000)	
Hours of unpaid work (women)			-0.001***			-0.002***	
			(0.000)			(0.000)	
Hours of unpaid work (men)			0.001*			-0.002***	
			(0.001)			(0.000)	
Presence of children <3	0.062**	0.075***	0.084***	0.079***	0.078***	0.112***	
	(0.024)	(0.024)	(0.025)	(0.028)	(0.027)	(0.028)	
Presence of children 3-5	0.083***	0.084***	0.090***	0.033	0.049**	0.055**	
	(0.023)	(0.022)	(0.023)	(0.023)	(0.023)	(0.023)	
Presence of children 6-12	0.019	0.020	0.025	0.010	0.028	0.038**	
	(0.015)	(0.015)	(0.016)	(0.018)	(0.018)	(0.019)	
Presence of children 13-18 (female)	-0.017	-0.013	-0.013	-0.011	-0.009	-0.015	
	(0.017)	(0.016)	(0.016)	(0.022)	(0.021)	(0.022)	
Presence of children 13-18 (male)	-0.033**	-0.027*	-0.027*	-0.016	-0.005	-0.010	
	(0.015)	(0.015)	(0.015)	(0.021)	(0.021)	(0.021)	
Presence of other adults in hh	-0.056***	-0.056***	-0.054***	-0.031	-0.033*	-0.029	
	(0.012)	(0.012)	(0.012)	(0.019)	(0.019)	(0.019)	
Constant	-0.664***	-0.649***	-0.598***	-0.670***	-0.574***	-0.521***	
	(0.129)	(0.126)	(0.127)	(0.168)	(0.163)	(0.163)	
Observations	2,185	2,185	2,185	1,653	1,653	1,653	
R-Squared	0.048	0.082	0.063	0.022	0.072	0.073	
AIC	487	409	456	893	807	810	
BIC	555	483	542	958	878	891	

 Table 4. Dependent variable: household demand for domestic service (binary variable). OLS estimation. Couples.

Source: Authors' estimates based on Time use surveys (INE, 2015) and (INE, 2008).

Notes: *** stands for statistical significance at 1%, ** stands for statistical significance at 5%, and * stands for statistical significance at 10%.

As mentioned, in the case of Chile the time use survey includes the number of hours of domestic work hired by each household. This allows to estimate the three specifications of the demand for domestic service considering as dependent variable the hours of domestic service that the household hires, instead of a binary variable as in Table 4. In the case of Uruguay, the time use survey does not include this information, but the expenditure survey includes the number of hours of domestic work outsourced by the household. This implies that, using this source of data, only the first and second specifications can be estimated for Uruguay, considering hours of domestic work as the dependent variable. The third specification which includes hours of unpaid work by male and females as explanatory variables, cannot be estimated for this country. Results of these estimations are presented in table A.5 in the Appendix. The main conclusions remain unchanged. The only difference in results is given by the fact that in these estimations, the presence of children aged 6 to 12 is positively associated to the demand for domestic work expressed in hourly terms, but with a smaller impact on hours than the presence of children ages.

The outsourcing of domestic work and gender gaps within the household

In Table 5 we present the results regarding the relationship between the demand for domestic service and the gender gap in unpaid hours of work within couples, and also the gender gap in paid hours. To facilitate the interpretation of our results, the gap in unpaid hours is defined as the difference between female and male hours dedicated to housework (female minus male),

30

whereas the gap in paid hours is defined as male minus female hours dedicated to paid work (such that in both cases the average gaps are positive).

For each dependent variable, two specifications are presented (equations 4 to 7 in the methodological section). In the case of the difference in unpaid work between members of the couple, one specification includes male and female earnings (columns 1 and 3 in Table 5), and the other includes the female share of earnings (columns 2 and 4 in Table 5). In both countries, the hiring of domestic workers is associated with a reduction of the male-female gap in unpaid work hours: hiring domestic service is associated with an implied gap reduction of approximately 6 or 7 hours per week, depending on the model.

To analyze the gender gap in paid work, the first specification includes male and female educational levels (instead of earnings, to avoid all econometric problems related to labor supply estimation) (columns 5 and 7 in Table 5), and the second specification includes the female share of earnings (columns 6 and 8 in Table 5). The hiring of domestic work is related to a reduction in the gender gap in paid work only for Chilean couples. The reduction of this gap associated to the presence of domestic service is almost 9 o 4 hours per week, depending on the specification. It has no significant association with the gap in paid work for Uruguayan couples.

Table 5. Dependent variable: gender gaps in unpaid (women-men) and paid (men-women) hours of work. OLS estimates. Couples.

	Unpaid work gap				Paid work gap				
ALL COUPLES	Chile		Ur	Uruguay		Chile		Uruguay	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Age (female)	-0.194	-0.315	-0.863	-0.941	0.294	0.015	-1.196**	-0.944*	
	(0.605)	(0.610)	(0.734)	(0.732)	(0.412)	(0.431)	(0.519)	(0.536)	
Age^2 (female)	0.003	0.005	0.010	0.012	-0.002	0.002	0.015***	0.013**	
	(0.007)	(0.007)	(0.008)	(0.008)	(0.004)	(0.005)	(0.006)	(0.006)	
Age (male)	0.063	-0.047	0.991	0.571	-0.278	-0.193	1.241**	1.242**	
	(0.597)	(0.596)	(0.737)	(0.726)	(0.424)	(0.448)	(0.530)	(0.547)	
Age^2 (male)	-0.001	0.000	-0.011	-0.005	0.001	0.001	-0.016***	-0.016***	
	(0.006)	(0.006)	(0.008)	(0.008)	(0.004)	(0.005)	(0.006)	(0.006)	
Female income (log)	-1.430***		-2.277***		-3.384***		-4.013***		
	(0.081)		(0.153)		(0.055)		(0.108)		
Male income (log)	1.161***		1.387***		3.702***		4.748***		
	(0.175)		(0.290)		(0.090)		(0.195)		
Share of female earnings		-34.675***		-35.507***		-86.243***		-71.478***	
-		(2.042)		(2.454)		(1.435)		(1.780)	
Presence of children <3	13.345***	14.135***	8.008***	8.305***	2.555**	3.942***	1.252	1.764	
	(1.869)	(1.858)	(2.210)	(2.168)	(1.174)	(1.276)	(1.373)	(1.377)	
Presence of children 3-5	5.131***	5.366***	6.533***	7.327***	2.648**	3.155***	-0.474	-0.100	
	(1.602)	(1.591)	(1.793)	(1.784)	(1.072)	(1.181)	(1.322)	(1.376)	
Presence of children 6-12	5.505***	5.609***	8.423***	9.270***	0.844	1.137	1.865*	2.213**	
	(1.149)	(1.154)	(1.417)	(1.405)	(0.805)	(0.890)	(1.045)	(1.070)	
Presence of children 13-18 (female)	2.014	2.187*	2.804*	2.513	1.551	1.997*	-0.051	-0.771	
	(1.230)	(1.225)	(1.621)	(1.622)	(0.956)	(1.038)	(1.306)	(1.319)	
Presence of children 13-18 (male)	2.949**	2.981**	0.496	0.774	1.674*	1.527	0.594	0.345	
	(1.261)	(1.267)	(1.710)	(1.743)	(0.908)	(1.003)	(1.281)	(1.309)	
Presence of other adults in hh	2.033**	1.712*	4.542***	4.502***	1.292*	0.683	-0.186	0.022	
	(1.036)	(1.039)	(1.586)	(1.581)	(0.759)	(0.824)	(1.182)	(1.193)	
Domestic service	-6.177***	-7.536***	-5.569***	-6.645***	-2.158*	-3.788***	-1.854	-0.076	
	(1.655)	(1.592)	(1.822)	(1.763)	(1.196)	(1.397)	(1.474)	(1.422)	
Constant	15.820	32.086***	19.021	36.360***	-0.533	44.455***	2.769	35.487***	
	(11.084)	(10.963)	(13.742)	(13.646)	(8.057)	(8.775)	(10.207)	(10.618)	
Observations	2,185	2,185	1,653	1,653	2,185	2,185	1,653	1,653	
R-squared	0.229	0.221	0.211	0.210	0.716	0.660	0.562	0.548	

Source: Authors' estimates based on Time use surveys (INE, 2015) and (INE, 2008).

Notes: *** stands for statistical significance at 1%, ** stands for statistical significance at 5%, and * stands for statistical significance at 10%.

These changes in gender gaps for paid or unpaid work may derive from changes in male or female hours dedicated to unpaid (or paid) work. To understand which one is operating or prevailing, we regress women's and men's hours of unpaid work (Table 6) and paid work (Table 7), using the exact specifications as for the gaps (equations 4 to 7 in the methodological section, but with male or female hours instead of gaps as dependent variables). In the case of unpaid work, in Uruguay, domestic service is associated with a reduction in these hours for both couple members. However, the decrease is more significant for women (see Table 6), resulting in a decrease in the gender gap (as presented in Table 5). In Chile, the decrease in the gender gap in unpaid work is mainly associated with a decrease in women's unpaid work hours (the coefficient for men is positive but not significant). Again, this result is consistent with a more traditional pattern of behavior among couples in Chile, where the hiring of domestic workers only affects the time use of women in the household. In Uruguay, the association with both men and women's hours of work suggests a more shared responsibility on households' chores.

^	Chile				Uruguay			
	Women		Men		Women		Men	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age (female)	-0.027	-0.165	0.167	0.150	-0.927	-1.087*	-0.064	-0.146
	(0.524)	(0.534)	(0.331)	(0.334)	(0.621)	(0.625)	(0.370)	(0.368)
Age^2 (female)	-0.000	0.002	-0.003	-0.003	0.011	0.013*	0.000	0.001
	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)	(0.004)	(0.004)
Age (male)	-0.188	-0.510	-0.251	-0.463	1.219*	0.773	0.229	0.201
	(0.525)	(0.533)	(0.332)	(0.334)	(0.628)	(0.629)	(0.374)	(0.370)
Age ² (male)	0.002	0.007	0.004	0.006*	-0.012*	-0.007	-0.002	-0.001
	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)	(0.004)	(0.004)
Female income (log)	-1.182***		0.248***		-1.711***		0.566***	
	(0.069)		(0.044)		(0.126)		(0.075)	
Male income (log)	0.228*		-0.933***		0.545***		-0.842***	
	(0.122)		(0.077)		(0.208)		(0.124)	
Relative income (female/male)		-23.249***		11.426***		-23.542***		11.965***
		(1.611)		(1.009)		(1.868)		(1.098)
Presence of children <3	19.432***	20.645***	6.086***	6.510***	11.256***	11.541***	3.249***	3.235***
	(1.465)	(1.485)	(0.925)	(0.930)	(1.746)	(1.761)	(1.040)	(1.035)
Presence of children 3-5	7.658***	8.014***	2.528***	2.648***	7.892***	8.798***	1.359	1.471
	(1.321)	(1.344)	(0.834)	(0.842)	(1.544)	(1.550)	(0.920)	(0.911)
Presence of children 6-12	8.526***	8.685***	3.021***	3.077***	8.445***	9.404***	0.022	0.134
	(1.006)	(1.023)	(0.635)	(0.641)	(1.219)	(1.219)	(0.726)	(0.716)
Presence of children 13-18 (female)	1.212	1.466	-0.803	-0.721	0.996	0.816	-1.807**	-1.697**
(iemaie)	(1.188)	(1.208)	(0.749)	(0.757)	(1.427)	(1.439)	(0.850)	(0.845)
Presence of children 13-18 (male)	2.036*	(1.208)	-0.913	-0.644	0.356	0.727	-0.140	-0.048
Tresence of emilien 13-16 (male)	(1.149)	(1.169)	(0.725)	(0.732)	(1.420)	(1.430)	(0.846)	(0.840)
Presence of other adults in hh	1.245	0.952	-0.788	-0.760	3.405***	3.350***	-1.137	-1.152
Tresence of other adults in ini	(0.936)	(0.953)	(0.590)	(0.597)	(1.277)	(1.288)	(0.761)	(0.757)
Domestic service	-3.831**	- 6.417 ***	(0.550) 2.346 **	(0.3 <i>)</i> //) 1.119	-8.581***	-10.257***	-3.013***	-3.612***
Domestic service	(1.570)	(1.569)	(0.990)	(0.982)	(1.690)	(1.660)	(1.007)	(0.976)
Constant	36.372***	43.961***	20.552***	(0.932)	30.833***	42.750***	11.812*	6.390
Constant	(9.764)	(9.938)	(6.161)	(6.223)	(11.921)	(12.062)	(7.101)	(7.089)
Observations	2,185	2,185	2,185	2,185	1,653	1,653	1,653	1,653
R-squared	0.267	0.240	0.128	0.110	0.213	0.199	0.074	0.082

Table 6. Dependent variable: Hours of unpaid work by sex. OLS estimates. Couples

Source: Authors' estimates based on Time use surveys (INE, 2015) and (INE, 2008). Notes: *** stands for statistical significance at 1%, ** stands for statistical significance at 5%, and * stands for statistical significance at 10%. The negative association between the presence of domestic workers and the gender gap in paid work in Chile is mainly attributable to an increase in female hours of paid work. In contrast, in Uruguay, the hours of paid work of both women and men increase with domestic workers in the household (Table 7). This explains why the gender gap in unpaid work in Uruguay remains unchanged (reflected in Table 5). Once more, results suggest a more traditional behavior of Chilean couples when compared to Uruguayan ones.

Concerning the role of income, our results also show that female income is associated with a reduction in the gender gap in unpaid work in both Chile and Uruguay (Table 5). The same occurs with the female share of earnings. This is in line with previous studies from the developed world, which indicate that wives' income is more strongly associated with spending on home tasks traditionally associated with their gender, implying a replacement of at least part of the unpaid work they do at home (Treas & de Ruijter, 2008). In turn, we note that the sign of this coefficient is explained by the fact that female income is associated with a lower number of hours of domestic work. This income translates into a greater amount of time spent by men in unpaid tasks (see Table 6). The opposite occurs with male income: the higher the income of men, the greater the gap in unpaid and paid work hours within the household.

The presence of children under 12 years old and the presence of other adults in the household is associated with a more significant gap in unpaid work hours in both countries, as is the presence of males between 13 and 18 years old in the case of Chile (Table 5). In particular, children under six years old are associated with more hours devoted to unpaid work for both women and men in Chile since the coefficients for both are significant. However, the coefficients for women are higher than for men. In the case of Uruguay, the presence of children 6-12 is

35

associated with more hours of unpaid work for women but not for men, except in the presence of children under three years old, where the coefficient is significantly smaller than for women (Table 6).

		Cł	nile		Uruguay			
	Wor	nen	Ν	Ien	Woi	men	М	en
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age (female)	0.781	0.141	-0.206	0.156	1.454**	1.019**	-0.286	0.074
	(0.606)	(0.444)	(0.486)	(0.448)	(0.601)	(0.483)	(0.567)	(0.525)
Age^2 (female)	-0.014**	-0.005	0.003	-0.003	-0.020***	-0.016***	0.002	-0.003
	(0.007)	(0.005)	(0.005)	(0.005)	(0.007)	(0.006)	(0.006)	(0.006)
Age (male)	0.739	1.625***	1.790***	1.433***	-0.046	1.024**	2.81***	2.27***
	(0.604)	(0.444)	(0.484)	(0.447)	(0.603)	(0.486)	(0.569)	(0.527)
Age^2 (male)	-0.009	-0.02***	-0.02***	-0.018***	0.000	-0.012**	-0.04***	-0.03**
	(0.006)	(0.005)	(0.005)	(0.005)	(0.007)	(0.005)	(0.006)	(0.006)
Share of female earnings		59.8***		-26.39***		45.61***		-25.9**
		(1.342)		(1.353)		(1.442)		(1.566)
Educ <7 years (female)	-		-		-		-	
Educ 7-12 years (female)	4.144**		1.890		7.24***		1.941	
	(1.879)		(1.508)		(1.276)		(1.204)	
Educ >12 years (female)	13.363***		2.270		13.570***		1.252	
	(2.171)		(1.742)		(1.768)		(1.669)	
Educ <7 years (male)	-		-		-		-	
Educ 7-12 years (male)	0.472		3.078*		-0.858		0.502	
	(1.958)		(1.571)		(1.240)		(1.170)	
Educ >12 years (male)	-0.461		2.441		-0.928		2.000	
	(2.195)		(1.761)		(1.934)		(1.825)	
Presence of children <3	-12.04***	-6.74***	-0.572	-2.796**	-5.810***	-4.02***	-0.986	-2.256
	(1.676)	(1.237)	(1.345)	(1.247)	(1.688)	(1.360)	(1.593)	(1.476)
Presence of children 3-5	-5.723***	-2.556**	2.027*	0.599	-3.751**	-1.803	0.251	-1.903
	(1.522)	(1.119)	(1.221)	(1.129)	(1.491)	(1.197)	(1.407)	(1.300)
Presence of children 6-12	-3.664***	-0.973	1.437	0.163	-6.547***	-4.631***	-0.675	-2.419*
	(1.158)	(0.852)	(0.929)	(0.859)	(1.171)	(0.942)	(1.105)	(1.022)
Presence of children 13-18 (female)	-3.432**	-0.737	2.968***	1.260	2.458*	1.299	0.589	0.528
	(1.372)	(1.006)	(1.101)	(1.015)	(1.384)	(1.111)	(1.306)	(1.206)
Presence of children 13-18 (male)	-4.360***	-1.919**	0.811	-0.391	-1.061	-1.624	-1.049	-1.280
	(1.324)	(0.973)	(1.062)	(0.981)	(1.375)	(1.104)	(1.298)	(1.199)
Presence of other adults in hh	-1.215	0.604	2.276***	1.287	-0.005	1.093	1.893	1.115
	(1.081)	(0.794)	(0.867)	(0.800)	(1.238)	(0.995)	(1.168)	(1.080)
Domestic service	8.402***	6.412***	-0.552	2.625**	6.657***	8.268***	5.694***	8.192**
	(1.871)	(1.306)	(1.501)	(1.317)	(1.708)	(1.282)	(1.612)	(1.392)
Constant	0.203	-18.93**	10.431	25.529***	-2.122	-22.25**	-1.736	13.239
	(11.444)	(8.276)	(9.182)	(8.345)	(11.566)	(9.316)	(10.916)	(10.116
Observations	2,185	2,185	2,185	2,185	1,653	1,653	1,653	1,653
R-squared	0.111	0.519	0.049	0.188	0.118	0.427	0.087	0.214

Table 7. Dependent variable: hours of paid work by sex. OLS estimates. Couples.

Source: Authors' estimates based on Time use surveys (INE, 2015) and (INE, 2008).

Notes: *** stands for statistical significance at 1%, ** stands for statistical significance at 5%, and * stands for statistical significance at 10%.

6. Concluding remarks

The outsourcing of domestic paid work is of paramount importance for the understanding of gendered economic relationships. In developed countries, many studies show that the outsourcing of domestic work is related to the availability of resources and time at the household level but also shaped by contextual factors, such as public policies, societal trust and gender norms. However, the relative importance of paid domestic workers is low compared to figures from other developing regions.

In Latin America, by contrast, paid domestic workers are a much more significant category in the labor force. This suggests that, unlike in developed countries, outsourcing domestic work has played a crucial role in enabling Latin American women to enter the labor force. This process has taken place in a region that is known for its high levels of income inequality but also for gender inequality. Hence, it is crucial to gain an understanding of the factors associated with households' decisions regarding hiring domestic workers and, more importantly, how the outsourcing of domestic work relates to the distribution of unpaid work within households.

Prior work has documented the individual-level and macro-level factors that relate to the outsourcing of domestic work. At the individual level, the literature points to the role of time availability, especially women's, as a crucial variable that relates to whether and how much households outsource domestic work. However, the relationship between the outsourcing of domestic work and intra-household gaps in the allocation of unpaid work have remained less

explored. Although the literature points to contextual issues—such as gender norms—at the macro-level as relevant factors, cross-country comparisons are rare. Finally, the literature on the outsourcing of domestic work focuses almost exclusively on developed countries where, compared to other regions such as Latin America, reliance on domestic work is very low, and inequality is less pronounced.

Our study helps to fill these gaps in our knowledge. First, our analysis attempts to empirically describe the demand for domestic workers in Latin America, where paid domestic workers compose a large proportion of the working population and play an essential role in meeting care needs in the region. In the two countries we analyzed, the outsourcing process is mainly associated with income resources—male and female absolute income or the female share of earnings—and the presence of children, especially those under the age of three. This concentration of the demand for domestic workers in higher-income households indicates that women with relatively high wages delegate household chores and childcare to other women with lower wages.

Second, our study helps us shed light on the relationship between the outsourcing of domestic work and intra-household gaps in the allocation of unpaid work. Our results reveal that the presence of domestic work in households is associated with a reduction in the gender gap in unpaid work hours.

Third, our analysis provides empirical evidence to address whether country contexts can influence these relationships. Following the literature, it was reasonable to expect the outsourcing of domestic work to be more related to women's unpaid work and less related to men's unpaid work in Chile than in Uruguay due to contextual factors such as the relatively low

39

female labor participation rate and more traditional gender-role values in the former. In line with the expectations, the concentration of outsourcing of domestic work in high-income households is more pronounced in Chile than in Uruguay. Also, although the relationship between the outsourcing of domestic work and the gender gap in unpaid work hours is similar in the two countries, there are some important differences. In Uruguay, the outsourcing of domestic work is related to a reduction in the amount of unpaid work for both couple members, which is consistent with the large gender gap in time spent on unpaid work in that country. Nevertheless, the decrease is greater for women. In Chile, the presence of domestic work in households is related to a reduction in the amount of unpaid work only among women.

While the scope of our analysis is limited and cannot be extrapolated, it confirms the need for more in-depth comparative research. First, in a region as heterogeneous as Latin America, it is crucial to deepen the analysis by including less-developed countries where gender inequality tends to be higher. Second, there remains very limited knowledge of the cultural factors that influence families' attitudes toward domestic work and decisions about whether to hire domestic service. Finally, given the high levels of income and gender inequality in the region, and considering that labor market regulations remain limited, further research should address the supply side of the outsourcing of domestic work.

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Annex

2015	
Country	% of domestic workers
Brazil	9.22%
Uruguay	8.96%
Chile	6.97%
Mexico	6.94%
Colombia	6.75%
Peru	5.01%
Ecuador	4.79%
Italy	4.54%
Bolivia	4.42%
Spain	4.25%
Portugal	3.09%
France	1.27%
Switzerland	1.11%
United States	0.57%
Germany	0.56%
Finland	0.45%
Denmark	0.10%
United Kingdom	0.10%
Belgium	0.10%
Norway	0.05%
Netherlands	0.04%
Sweden i/	0.03%

Table A.1. Percentage of domestic service workers out of total workers in selected countries,

Note: i/ Data from 2013; ii/ Domestic workers are those included in categories the following activities according to the International Standard Industrial Classification (ISIC): "Activities of private households as employers of domestic staff" (cat. 95. ISIC Rev. 3) or "Activities of households as employers of domestic personnel" (cat. 97. ISIC Rev. 4). Source: International Labour Organization. (2022). ILOSTAT database [database]. Available from https://ilostat.ilo.org/data/ - Employees by sex and economic activity - ISIC level 2

Country and year	Implementation	Coverage	Time use information for	Respondent	Reference period	Household work definition
Chile (2015)	Independent survey	National – Urban	All members of the household aged 12 years or older in physical and mental conditions to respond and that are in the household during the fortnight the survey was conducted	Direct response from each All members of the household aged 12 years or older in physical and mental conditions to respond and that are in the household during the fortnight the survey was conducted	Day	Meal preparation and cleaning. general household cleaning. laundry. tailoring and dressmaking. minor maintenance and reparations within the household. household administration and supply. care of plants and pets and care of members of the household.
Uruguay (2007)	Special module in Household Survey	National	All members of the household aged 14 years or older	Member of the household identified as the main caretaker of household chores. aged 14 years or older. 74% of respondents are women	Day	Cooking. cleaning. shopping. household maintenance and repairs. water and firewood collection. crop care and animal husbandry. pet care. childcare and care of others (not including children).

Table A.2. Main charac	cteristics of time	use surveys
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Source: Authors' elaboration based on time use surveys from Chile (INE. 2015) and Uruguay (INE. 2008).

	Total	Q1	Q2	Q3	Q4	Q5
Chile 2006-2007	9.0%	11.4%	7.1%	13.7%	9.4%	8.5%
Chile 2011-2012	6.4%	6.0%	5.4%	6.6%	6.7%	6.4%
Chile 2016-2017	6.8%	5.5%	8.3%	5.9%	7.5%	6.7%
Uruguay 2005-2006	5.0%	9.4%	4.8%	5.1%	4.7%	5.0%
Uruguay 2016-2017	5.5%	4.2%	5.1%	4.8%	5.7%	5.9%

Table A.3. Spending on domestic service over the total spending of households with domestic service. All households.

Source: Authors' elaboration based on expenditure surveys for Chile (INE. 2021) and Uruguay (INE. 2018).

	Chile						
	Q1	Q2	Q3	Q4	Q5	Total	
One person	4.8%	1.6%	4.2%	7.1%	31.8%	16.0%	
Only parent household	2.3%	3.1%	8.2%	13.6%	58.2%	13.8%	
Childless couples household	1.5%	3.6%	4.5%	9.1%	37.8%	15.6%	
Two-parent household	1.5%	4.3%	7.7%	17.5%	66.3%	19.0%	
Composite household	0.0%	3.5%	2.6%	3.9%	43.0%	8.6%	
Extended household	1.4%	3.0%	6.4%	21.1%	44.3%	9.0%	
Total	1.7%	3.4%	6.4%	14.1%	48.1%	14.7%	

 Table A.4. Percentage of households that demand domestic service. by type of household and by income quintile. All households.

	Uruguay						
	Q1	Q2	Q3	Q4	Q5	Total	
One person	2.2%	8.8%	10.8%	10.7%	19.6%	13.9%	
Only parent household	6.4%	12.2%	13.2%	15.3%	33.6%	14.3%	
Childless couples household	1.2%	4.7%	6.1%	10.6%	21.5%	10.9%	
Two-parent household	4.4%	10.6%	14.0%	20.2%	57.1%	15.5%	
Composite household	7.9%	7.5%	0.0%	6.4%	28.1%	7.5%	
Extended household	3.7%	9.9%	9.6%	16.1%	42.7%	12.3%	
Total	4.3%	9.5%	10.9%	14.5%	29.1%	13.7%	

Source: Authors' elaboration based on expenditure surveys for Chile (INE. 2021) and Uruguay (INE. 2018).

couples.								
		Chile		Uru	guay			
	(1)	(2)	(3)	(1)	(2)			
Age (female)	0.484***	0.439***	0.468***	0.632***	0.589***			
	(0.153)	(0.149)	(0.152)	(0.136)	(0.135)			
Age^2 (female)	-0.005***	-0.004**	-0.004***	-0.007***	-0.006***			
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)			
Age (male)	0.247*	0.120	0.172	-0.066	-0.099			
	(0.128)	(0.130)	(0.130)	(0.149)	(0.149)			
Age^2 (male)	-0.003**	-0.001	-0.002	0.001	0.001			
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)			
Female income (ln)		0.209***			0.203***			
		(0.025)			(0.031)			
Male income (ln)		0.138***			0.261***			
		(0.037)			(0.053)			
Share of female earnings	2.938***			0.846**				
-	(0.537)			(0.385)				
Hours of paid work (women)			0.031***					
-			(0.006)					
Hours of paid work (men)			0.003					
- · · ·			(0.007)					
Hours of unpaid work (women)			-0.033***					
			(0.008)					
Hours of unpaid work (men)			0.012					
			(0.014)					
Presence of children <3	2.020***	2.316***	2.800***	3.105***	2.964***			
	(0.704)	(0.700)	(0.768)	(0.611)	(0.597)			
Presence of children 3-5	2.281***	2.313***	2.548***	1.731***	1.703***			
	(0.626)	(0.613)	(0.630)	(0.510)	(0.505)			
Presence of children 6-12	1.118***	1.146***	1.381***	0.732**	0.783**			
	(0.427)	(0.420)	(0.437)	(0.330)	(0.328)			
resence of children 13-18 (female)	-0.074	0.007	-0.002	-0.425	-0.378			
	(0.434)	(0.425)	(0.431)	(0.340)	(0.338)			
Presence of children 13-18 (male)	-0.453	-0.309	-0.302	-1.336***	-1.219***			
	(0.388)	(0.381)	(0.385)	(0.271)	(0.267)			
Presence of other adults in hh	-0.956***	-0.972***	-0.922***	-0.063	0.039			
	(0.285)	(0.283)	(0.285)	(0.263)	(0.263)			
Constant	-16.415***	-15.945***	-14.237***	-11.748***	-14.219***			
	(3.315)	(3.230)	(3.170)	(3.290)	(3.298)			

Table A.5. Household demand for domestic service (hours per week). OLS estimation. All couples.

Observations	2.185	2.185	2.185	2.797	2.797
R-squared	0.047	0.074	0.063	0.040	0.059

Notes: *** stands for statistical significance at 1%. ** stands for statistical significance at 5%. and * stands for statistical significance at 10%.

Source: Authors' estimates based on Time use survey for Chile (INE. 2015) and Expenditure Survey for Uruguay (INE. 20018).