

Sources of Gender Wage Gaps for Skilled Workers in Latin American Countries

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Web Appendix - Not For Publication

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A Data Description

In this paper we use data from both household and employment surveys conducted in the nine Latin American countries (see Table A.1 for a description of the data and their sources). Not all the surveys have the same periodicity. For example in Chile, they are conducted every two years; Bolivia and Uruguay have annual surveys; Colombia has a monthly survey, while Ecuador, Mexico, Paraguay and Peru have quarterly surveys. In all surveys, questions regarding the main occupation refer to the previous month. In any case, the data on labor status, wages and hours of work are similar, since all the surveys followed a similar questionnaire and ask about hours of work and wages in the previous month. In order to avoid the potential influence of seasonality in our data, we use surveys for the last quarter, except for Bolivia and Colombia. In the case of Bolivia, we pool two years in order to have more observations on the unemployed. For Colombia, we use the December survey since wages and hours information in this survey correspond to November, the middle data point for the last quarter.

We gather information about gender, labor market status (employed, unemployed, out-of the labor force), unemployment duration, hourly wages and job type (salaried or independent worker). We restrict our sample to prime-age workers (5 to 55 years old) and with a technical (3-year programs) or professional degree (+ 4-years programs).

All the household surveys considered in this paper have a similar structure and set of questions. The definition of the different variables are as follows.

- Gender: people are asked about their birth gender.
- Labor status: people are asked whether they worked last week and whether they searched for a job. Based on this information all the population over 15 years old is categorized as: employed, unemployed, non-active.
- Unemployment duration: all workers are asked about ongoing unemployment duration (in months). In all the countries, except Argentina, people are asked to report on the number of weeks they have been looking for a job. Since in Argentina duration is recorded as a categorical variable, we adapt the estimation model to accommodate this issue.
- Worker type: workers report whether they hold a salaried job or whether they work as independent workers (all the surveys ask about the same categories).
- Hourly wage: data on wages is obtained from the individuals' primary occupation only, and hourly wages are estimated using reported working hours for this occupation. Some

surveys specifically ask about the amount earned last month. Others ask about the type (periodicity) and amount of payment. Then using weekly hours of work, we convert monthly wage into hourly wage. Wages are expressed in constant PPP US dollars of December 2013.

- Education: people are asked about the the highest school grade or level they completed or the highest degree they received. We restrict our sample to those workers who report having any kind of tertiary degree (technical or bachelor degree). Latin American countries have educational systems with similar structures. Technical degrees are usually awarded by 2-year or 3-year college programs. A Bachelor's degree involves 4 to 5 years of full-time equivalent college-level work.

Table A.1: Data Sources

Country	Code	Survey Name	Survey Code	Years	Wave
Argentina	ARG	Encuesta Anual de Hogares Urbanos	EAHU	2014	-
Bolivia	BOL	Encuesta de Hogares	EH	2013/2014	-
Chile	CHL	Encuesta de Caracterización Socioeconómica Nacional	CASEN	2103	-
Colombia	COL	Gran Encuesta Integrada de Hogares	GEIH	2015	December
Ecuador	ECU	Encuesta de Empleo, Desempleo y Subempleo	ENEMBU	2014	4th Quarter
Mexico	MEX	Encuesta Nacional de Ocupación y Empleo	ENOE	2014	4th Quarter
Paraguay	PAR	Encuesta Permanente de Hogares	EPH	2013/2014	4th Quarter
Peru	PER	Encuesta Nacional de Hogares sobre Condiciones de Vida y Pobreza	ENAHO	2013	4th Quarter
Uruguay	URU	Encuesta Continua de Hogares	ECH	2014	-

Table A.2: Formal Workers and Wage Earners

	ARG	BOL	CHL	COL	ECU	MEX	PAR	PER	URU
	Formal Employees/(Formal Employees + Informal Employees)(*)								
Men	90.3%	91.0%	95.1%	93.5%	94.0%	88.1%	84.9%	88.1%	97.0%
Women	89.9%	90.1%	94.0%	92.8%	94.0%	88.9%	86.1%	89.5%	97.2%
	Employees/(Employees + Self Employed Workers)								
Men	82.2%	80.2%	87.5%	67.0%	82.4%	86.2%	84.7%	80.2%	77.1%
Women	88.2%	81.0%	91.0%	70.4%	89.2%	88.5%	88.5%	80.6%	82.6%

(*) In all countries, except Ecuador and Uruguay, a formal employee is defined as a worker with an explicit job contract. In Ecuador and Uruguay, contributions to the social security system are used to define formal employees.

B Pro-women Labor Legislation in Latin American Countries

In Latin America, there is a widespread legislation that protects women's rights in the labor market. In general, this legislation responds to ILO guidelines concerning maternity protection and women's rights¹. ILO has also documented in several publications how the different countries in the world include maternity provisions and women's right at work in their legislation.² Based on this information we construct a protection index for the nine countries. This pro-women index is based on effective coverage of maternity legislation³, maternity leave durations, breastfeeding permits, the existence of restrictions in work arrangements for women, in general, and for pregnant women, in particular, and whether the legislation offers protection from dismissal during pregnancy and after childbirth.

Table B.1 presents a national law and practice on both maternity and women's right at work across the nine Latin American countries. All countries offer paid maternity leaves covering both public and private employees, provide for breastfeeding time-breaks (at least two thirty-minute breaks), restrict hazardous jobs for pregnant women and offer some kind of protection from dismissal to pregnant women. This table is informative regarding the various protection offered to women in these countries and the way in which some of these protections could disrupt productivity. In most countries, employers do not pay for maternity leave or for other permits, but they do incur in costs from maternity and sickness leaves, breastfeeding breaks and other working restrictions when they must reorganize, redistribute tasks or even hire new workers to replace these women. Only in three countries, Bolivia, Mexico and Ecuador, employers have to co-finance maternity leave or pay monetary or in-kind subsidies to employees. Some countries even have laws that prohibit pregnancy testing at hiring.

With so many different provisions and permits, it is not easy to compare these nine countries in terms of these provisions. In order to construct a pro-women protection index, we concentrate on five broad dimensions: maternity leave duration, nursing rights (breastfeeding breaks), whether there are monetary subsidies paid by employers, restrictions of working arrangements and protection from dismissal. Table B.2 summarizes the information used to construct this protection index. Some dimensions are categorical (the country provides for this right or not), while others are continuous (number of days of leave). In order to construct

¹Please consult ILO web page regarding their guidelines at <https://www.ilo.org/global/standards/subjects-covered-by-international-labour-standards/maternity-protection/lang-en/index.htm>.

²This information is register in the ILO Working Conditions Laws Database (ILO, 2019)

³This effective coverage is estimated by ILO and reported in Addati et al. (2014) (Appendix III in page 144).

a ranking for each category, we define a measure of how much each country fares relative to the rest of the countries in the sample. In each category, the country with more protection has an index of 1, while the rest of the countries have indexes between 0-1, depending on the amount of protection they offer. The overall index value will be equal to the average index across the five dimensions. This relative protection index is presented in Table B.3. In the tables, we also add a measure of effective coverage estimated by ILO.

The specific definitions concerning the valuations given to each dimension are as follows.

1. **Maternity duration.** The longest maternity leave is offered in Chile (18 weeks + 12 more weeks of parental care), followed by Mexico, with 12 weeks and an extra 60 days (voluntary, paid by employers). Chile is therefore the country with the highest index in this category (1), the rest of the countries have indices in the 0.4-0.7 range.
2. **Duration of nursing breaks (number of minutes each day and duration of the benefit).** The standard is to provide for two thirty-minute breaks until the baby is 6-12 months old. The exceptions are Chile and Ecuador. In Chile the right to nursing breaks is up to when the child is two-years old and in Ecuador, mothers are given 2-hour nursing breaks for 12 months in the public sector and up to the child is 9 months old in the private sector. In Argentina, mothers are also allowed a 2-hour break at mid-day if they work mornings and afternoons. Based on this information we calculate for each country how many hours women are allowed to nurse per pregnancy. The country with the highest index value is Chile, while the countries with the smallest values are Paraguay and Colombia.⁴
3. **Monetary subsidies paid by employers.** In most of the countries, social security covers all maternity and breastfeeding subsidies. In three countries, Bolivia, Ecuador and Mexico, employers have to pay either part of the maternity benefit (25% in Ecuador) or as asked to pay other subsidies in money or in kind to employees. For example, in Bolivia, employers must pay in kind a prenatal subsidy and a breastfeeding subsidy equal to one minimum wage. The prenatal subsidy is paid at the beginning of the fifth month of pregnancy, while the breastfeeding subsidy must be paid for twelve months. Employers must also pay a monetary subsidy (equal to one minimum wage) when the child is born. In Mexico, women are allowed to take 60 extra days of leave (at a 50% wage rate) if there are health issues related to pregnancy or delivery. It

⁴Information about employer obligation to provide workers with a nursing facility is more vague, regarding eligibility requirements and duration of the benefit. Seven of the nine countries include some kind of provision that mandate employers to provide nursing facilities to their employees (the exception is Peru). For this reason we present the value of the index with and without this information, but the rank remains the same if we were to include it.

is not clear how to evaluate these subsidies to include them in our protection index, in order to rank these three countries. We, therefore, proceed to estimate the extra monthly wages per delivery. In Bolivia, we estimate this cost in terms of the average wage around 2013. In this country employers have to pay 18 minimum wages per pregnancy; in terms of the average wage, the extra cost is 7.9 monthly wages. In Ecuador, employers have to pay 25% of the total maternity subsidy, which is equivalent to paying 3 full weeks, or 0.75 monthly wages. In Mexico, employers pay 50% of wages up to two months, which is equivalent to paying a full-month wage. Again, as the monetary valuation in Bolivia is difficult to assess, we also present our index with and without this dimension.

4. **Restriction in work arrangements.** Following ILO Working Conditions Laws Database ([ILO, 2019](#)), we identify eight provisions that labor codes might allow that could disrupt production because of pregnancies:

- Leaves in case of sickness of small children (not necessarily related to maternity) (1)
- Prohibition of night work, dangerous or unhealthy work, overtime, work on rest days (4)
- Firms must adapt workplace risks for pregnant women or should transfer them to another post (or send them on leave) (2)
- Women should have the right to return to the same employment (post and wage) after returning from maternity leave. (1)

We check whether the countries in our sample fail or not to introduce these provisions and then we compute the proportion of provisions that are mandatory in each country. The countries with the highest fraction of mandatory provisions are Bolivia and Chile, while the ones with the lowest provisions are Colombia and Peru. Note in Table B.2 that some countries have 0.5, instead of 0 (no provision) or 1. This occurs when, for example, something is not prohibited (i.e. night work), but women when pregnant have the right to choose whether they accept or not this provision or limitation.

5. **Protection from dismissal** This dimension determines whether the legislation provides employment protection during maternity that in general involves a period (that includes pregnancy, maternity leave and an additional period after returning to work) in which employers are not allowed to dismiss women. In all the countries in our sample such a policy exists, but there is a lot of heterogeneity concerning the duration of

such period. For this reason, we define this indicator to be equal to the total number of days (after the birth of the child) that a woman is protected from dismissal. The absolute value of this index goes from 42 days in Paraguay to 540 days in Chile (18 months). The relative index is, therefore, 1 for Chile and 0.08 for Paraguay.

Following a [Addati et al. \(2014\)](#) we estimate the legal and effective coverage of maternity protections. This figure is included in the tables as we think that, regardless of the strictness of maternity protection, coverage may affect beliefs regarding how generous the legislation is toward women. As the scope of this kind of legislation is restricted to employees (some countries include domestic workers, but not all of them), countries with a significant share of informal employment will have less coverage. Our figures are higher than Addati's as our sample is restricted to high-skilled prime-age women. In any case, this figure does not show a lot of variation in our sample. The country with the highest coverage is Uruguay, followed by Ecuador and Chile.

Table B.1: Pro-female labor legislation in nine latin american countries

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Maternity leave									
Scope	All public and private employees	All public and private employees, excepting agricultural sector workers	Public and Private employees; independent workers (contributing to the social security system)	Private and public employees	Public and Private employees	Public and Private employees	Public and Private employees	Public and Private employees	Public and Private employees and unemployed
Duration	90 days; 30 before. One could reduce pre-natal leave, but it shall not be less than 30 days	60 days; 90 days (equal duration periods)	18 weeks (6 before and 12 after)	14 weeks (pre-natal leave is mandatory, 2 weeks)	12 weeks (2 weeks before)	12 weeks (6 weeks before, but flexible)	12 weeks (6 weeks before)	90 days (45 days before)	12 weeks (one week of prenatal leave is mandatory)
Extension of postnatal leave	If child is born after expected date, prenatal leave is extended. Total leave must be 90 days	No	If child is born after expected date, prenatal leave is extended. Total leave must be 18 weeks	If child is born after expected date, prenatal leave is extended. Total leave must be 14 weeks	If child is born after expected date, prenatal leave is extended. Total leave must be 12 weeks	Yes, mothers could ask to shorten prenatal leave and add this time to their postnatal leave	No	No	If child is born after expected date, prenatal leave is extended. Total leave must be 12 weeks
Multiple births	Not provided	Not provided	7 more days for each child	2 weeks	10 days	15 days	Not provide	30 days	Not provide
Qualification for extension	1 working year	No	No	No	No	No	No	No	
Leave for illness or complications (mother or child)	3-6 months	Indefinite; sickness rules apply	Indefinite; sickness rules apply	Indefinite; sickness rules apply	One year, without pay	Yes, if it is necessary. Sickness rules may apply.	Yes, if it is necessary. Sickness rules may apply.	Yes, if it is necessary. Sickness rules may apply.	Yes, up to 6 months

Pro-female labor legislation (2)

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Maternity leave									
Qualification for cash benefits	3 months employed or in UB	4 months contributing to SS within the previous 12 months	3 months contributing to SS within the previous 6 months (salaried workers); other conditions apply to independent workers	Payment of contribution	12 months contributing to SS	30 weeks of contribution	6 weeks during 4 months before pregnancy	3 consecutive months or 4 non-consecutive during the 6 months before confinement	None
Duration cash benefits	90 days	60 days; 90 days	18 weeks	14 weeks	12 weeks	12 weeks	3 weeks before and 6 weeks after	90 days	84 days
Amount	100	100 per cent of the minimum wage plus 70 per cent of the difference between the minimum wage and regular earnings	100 up to a ceiling	100	100	100	50% of wage	100	100% first 12 weeks; extension, 75%
Financing	Family allowance Fund	Social Insurance system	Social Insurance System	social security	75% SS; 25% employer	Social security	Social Security	Social security	Social Security
Parental leave	Not provided	Not provided	12 weeks if full time; 18 weeks if part-time	Not provided	25 days for sick children	60 days, for extended leave (paid by employer, 50% salary)		Not provided	Not provided
Paternity leave									
Scope	working men, except public employees, domestic workers	Not provided	Working men	Working men	Working men	Not provided	Working men	Not provided	

Pro-female labor legislation (3)

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Paternity leave									
Duration	2 days		5 days	8 days	10 days		3 days		10 days (public); 5 days (private)
Amount	100		100	100	100		100		100
Financing	Employer		Social Security	Social Security	Social Security		Employer		Employer
Adoption leave									
Scope	Only professors						Not provided	All workers	All workers
Duration	90 days	Not provided	Yes, 12 weeks	Yes, 14 weeks	15 days	30 days		30 days	6 weeks
Right to part-time work	Not expressly provided	Not expressly provided	Yes, expressly provided	Not expressly provided	Not expressly provided	Not provided		Not provided	Not identified
Medical benefits									
Right to pre, birth and after care	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No inf.	Yes
Financing	Public	Public	Public	Public	Public	Public	Public		Public
Breastfeeding									
Nurse breaks	2 x 30 min	60 minutes	60 minutes	60 minutes	2 hours	2 x 30 min	2 x 30 min	60 minutes	2 x 30 min
Duration nurse breaks	Up to the child is 1 year old	Up to the child is 1 year old	Up to the child is 2 years old	Up to the child is 6 months old	For 12 months (public); Up to the child is 9 months old (private)	For 6 months	Up to the child is 6 months old	1 year of the child	For 6 months
Remuneration	100	100+National Min wage in dairy products for 12 months	100	100	100	100	100	100	100

Pro-female labor legislation (4)

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Breastfeeding									
Nursing facilities	Only if minimum workers	Yes, if more than 50 workers	Yes, if more than 20 women in payroll	Yes	Yes, if more than 50 workers	No information	Yes, if more than 50 women in payroll	No	No information
Night work	Allowed	Not allowed	Not allowed	Not allowed	Allowed	Not allowed	Not allowed after 10 pm	Not expressly prohibited	Not expressly prohibited
Overtime	Allowed	Working hours not more than 40 per week	Not allowed	Not more than 5 hours	Not expressly prohibited	Not allowed (pregnancy or nursing times)	Allowed if there is no risk	Not expressly prohibited	Not expressly prohibited
Work in rest days	Allowed	Working hours not more than 40 per week	Not expressly prohibited	Not expressly prohibited	Not expressly prohibited	Not expressly prohibited	Not expressly prohibited	Not expressly prohibited	Not expressly prohibited
Time-off for medical examinations	Not expressly provided	Not expressly provided	Not expressly provided	Not provided	Not provided	Not provided	Not provided	Not provided	Not provided
Leave in case of sickness of small children	End contract with severance payment; non-paid leave of 3-6 months, but with SS benefits	Not expressly provided	Up to one year of child	Yes, unpaid	Yes, 25 days, paid		Not provided	Not provided	No information
Other work permits	if working full-time, rest at midday for 2 hours								
Dangerous or unhealthy work	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden	Forbidden

Pro-female labor legislation (5)

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Adaptation of workplace risks	Not expressly provided	Provided	Provided	Not expressly provided	Not expressly provided	Not expressly provided	Yes	Yes	Yes
Transfer to another post	Not expressly provided	Provided	Provided	Not provided	Not expressly provided	Not expressly provided	Yes	Yes	Yes, if not leave with pay
Right to return to work	Right to return to a job to equal category	Yes, same job and wage	Yes, same job and wage	Not expressly provided, but it is against the law for employers to vary unilaterally the terms of contract	Yes	Yes, if they return within a year following their confinement		No expressly provided	
Protection from dismissal (months after the child birth)	Yes, 7 and a half months	Yes, up to one year (mother and father)	Yes, up to 18 months	Yes, 12 weeks. If dismissed, severance payment (2-months salary) and as many weeks as to complete a 12-week leave after childbirth	Yes, up to 10 weeks	7 and a half months	Yes, while on maternity leave (6 weeks)	Yes, during pregnancy and 90 days after delivery	Yes, pregnancy. Dismissal afterward allowed but with a compensation of 6 months salary. Courts usually rule out for wrongful dismissal within a 180-day window
Prohibition discrimination	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Prohibition of pregnancy testing	Yes	No	Yes	Yes	Not identified	Yes	Not identified	Not identified	Yes

Pro-female labor legislation (6)

	AR	BO	CH	CO	ECU	MX	PY	PE	UY
Monetary subsidies paid by employers	No	Yes, 18 minimum wages [5 minimum wages (prenatal subsidy); one minimum wage (birth subsidy); 12 minimum wages (breast feeding subsidy)]	No	No	25% of monthly wages during maternity leave	Yes, up to 60 extra days of leave at 50% wage rate if there are health issues related to pregnancy or delivery	No	No	No
If Equal pay policies are established by law	Yes		Yes (firms with more than 50 employees are subject to reporting requirements)	Yes (subject to reporting requirements)		yes		Yes (subject to reporting requirements)	

Table B.2: Pro-women index (absolute)

	AR	BO	CH	CO	EC	MX	PY	PE	UY
Effective coverage (est. by ILO, %)	32.0	32.0	89.0	65.0	9.0	32.0	32.0	65.0	89.0
Maternity leave									
Duration (days)	90.0	90.0	210.0	98.0	109.0	144.0	84.0	90.0	84.0
Certain flexibility in pre and post natal duration (si=1; no=0)	1.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0
Multiple births (days per child)	0.0	0.0	7.0	14.0	10.0	15.0	0.0	30.0	0.0
Employers contribution (% wage)	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Breastfeeding and other permits									
Nurse breaks (hours per pregnancy)	180.0	210.0	390.0	60.0	260.0	120.0	90.0	195.0	120.0
Nursing facilities (si=1; no=0)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0
Monetary subsidies payed by employer (# of montly wages)	0.0	7.9	0.0	0.0	0.8	1.0	0.0	0.0	0.0
Restriction in work arrangements (si=1; no=0)									
Leave in case of sickness of small children (not necessarily related to maternity)	1.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0	0.0
Night work	0.0	1.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0
Dangerous or unhealthy work	1.0	1.0	1.0	0.0	1.0	1.0	1.0	0.5	0.5
Overtime	0.0	1.0	1.0	0.5	0.0	1.0	0.0	0.0	0.0
Work in rest days	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adaptation of workplace risks	0.0	1.0	1.0	0.0	1.0	0.0	1.0	1.0	1.0
Transfer to another post	0.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0
Right to return to the same work	1.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0
Protection from dismissal (days after the child birth)	225.0	360.0	540.0	84.0	70.0	225.0	42.0	90.0	180.0

Table B.3: Pro-Women Index - Relative Index

	AR	BO	CH	CO	EC	MX	PY	PE	UY
Maternity leave duration (incl. parental leave)	0.43	0.43	1.00	0.47	0.52	0.69	0.40	0.43	0.40
Breastfeeding	0.46	0.54	1.00	0.15	0.67	0.31	0.23	0.50	0.31
Monetary subsidies paid by employers	0.00	1.00	0.00	0.00	0.09	0.13	0.00	0.00	0.00
Restriction in work arrangements	0.43	1.00	1.00	0.29	0.57	0.57	0.57	0.36	0.50
Protection from dismissal	0.42	0.67	1.00	0.16	0.13	0.42	0.08	0.17	0.33
Total	0.35	0.73	0.80	0.21	0.40	0.42	0.26	0.29	0.31
Total excluding mon. subs. paid by empl.	0.43	0.66	1.00	0.27	0.47	0.50	0.32	0.36	0.39

C Robustness Exercise with Respect to the Bargaining Parameter

In the context of estimated search model, the bargaining parameter is not identified by using only a cross section of wages observed on one side of the market without imposing additional structure on the model (Eckstein and van den Berg, 2007). Examples of attempts of the estimation of the bargaining parameter with this type of models are Eckstein and Wolpin (1999), who use longitudinal data and Postel-Vinay and Robin (2002) and Bartolucci (2013), who use matching employer-employee data. Given that we do not have external estimates for the gender gaps in the bargaining power for the countries considered in this paper nor do we have longitudinal or matching employer-employee data, we are not able to separate the bargaining power by gender. However, given the importance of this issue, we can provide a robustness exercise to assess the impact of gender gaps in the bargaining power on our estimates. In particular, we estimated the model for any combination of (β_M, β_W) , such that $\beta_M \geq \beta_W$, in the interval $(0.425, 0.575)$. The interval was constructed with 15% above and below 0.5 and gives us a maximum gap in β of 35%. Then we computed the standard deviation of all the estimated parameters to assess whether differences in the bargaining parameter by gender generates very different sets of estimated parameters (therefore, introducing high dispersion). The table below presents the computed standard deviation relative to the point estimates of each parameter for all countries.

The results for the mobility parameters, that is the arrival rates of jobs and the termination rates, are shown in the top panel of the table. As can be observed, the gender gaps in the bargaining parameters have very little impact on the estimation of these parameters, with the exception of λ_W for Chile. The generated dispersion is at most 0.1% for all parameters, setting aside the case of λ_W for Chile (16%). The middle panel shows the results for the productivity distributions parameters. Even though we expected to have a bigger impact on these parameters, because β directly affects the mapping between productivity and wages, we actually find a relatively small impact (between 0.1% and 3.6% standard deviation relative to the estimates). Finally, the impact on the parameters that characterize the discrimination in the model are shown in the bottom panel. The impact on the estimation of the proportion of prejudiced employer is very small for all countries except Argentina (at most 0.3%, and 16% in the latter case). In turn, even though the impact on the estimation of the intensity of discrimination parameters is the highest among all parameters, it remains at reasonable margins (the dispersion is in the range of 12 to 28% of the estimated parameter) given that the maximum edge between β 's by gender is 35%. The only exception is Chile for which the generated dispersion is over 78%. This figure seems to be very big, however, it is

important to mention that the estimates for Chile are very sensitive not because we change β , but because we probably are in the wedge of a flat portion of the likelihood function. To sum up, the impact of generating an edge between the bargaining parameters by gender does not seem to generate estimates that would completely change the results of the paper.

Table C.1: test table

Param.	ARG	BOL	CHL	COL	ECU	MEX	PAR	PER	URU
Mobility Parameters									
λ_M	0.0008	0.0011	0.0029	0.0097	0.0024	0.0012	0.0022	0.0040	0.0015
λ_W	0.0108	0.0012	0.1605	0.0052	0.0009	0.0019	0.0019	0.0013	0.0000
η_M	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0024	0.0000
η_W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0013	0.0000
Productivity Distribution Parameters									
μ_M	0.0230	0.0302	0.0261	0.0350	0.0264	0.0301	0.0260	0.0301	0.0266
σ_M	0.0190	0.0153	0.0131	0.0125	0.0165	0.0154	0.0154	0.0140	0.0138
μ_W	0.0266	0.0331	0.0268	0.0366	0.0325	0.0330	0.0310	0.0357	0.0294
σ_W	0.0166	0.0072	0.0119	0.0121	0.0082	0.0069	0.0065	0.0052	0.0063
Discrimination Parameters									
d	0.2800	0.1235	0.7850	0.0000	0.2099	0.1165	0.1879	0.1671	0.1241
p	0.1610	0.0024	0.0036	0.0000	0.0006	0.0016	0.0018	0.0030	0.0026

D Welfare Function

We conclude this section presenting a welfare measure for this economy, which will be useful later on to evaluate the impact of the policy experiments. To accomplish this, we exploit the steady-state equilibrium of the model as in [Flinn \(2002\)](#). In particular, the welfare function of a worker type j with a value of non-market activities z , with innate productivity y , and working with a match-specific productivity x is:

$$W_j(x, y, z) = \left\{ \left[U_j \left(1 - I_{x \geq x_j^*} \right) + E_j(x) I_{x \geq x_j^*} \right] \left(1 - I_{y \geq y_j^*} \right) + S_J(y) I_{y \geq y_j^*} \right\} \left(1 - I_{z \geq z_j^*} \right) + NP_j(z) I_{z \geq z_j^*}$$

where $I_{x \geq x_j^*}$, $I_{y \geq y_j^*}$ and $I_{z \geq z_j^*}$ are indicator variables that take the value of 1 when its conditions are satisfied. To aggregate the welfare function, we use the equilibrium (ex-post)

distributions of types in the population to weight individual measures, that is:

$$E[W_j(x, y, z)] = U_j \frac{\eta_j}{\eta_j + h_j} R_j(y_j^*) Q_j(z_j^*) + \int_{x^*}^{\infty} E_j(x) \frac{h_j}{\eta_j + h_j} R_j(y_j^*) Q_j(z_j^*) \frac{g_j(x)}{1 - G_j(x_j^*)} dx \\ + \int_{y^*}^{\infty} S_j(y) [1 - R_j(y_j^*)] Q_j(z_j^*) \frac{r_j(y)}{1 - R_j(y_j^*)} dy + \int_{z^*}^{\infty} NP_j(z) [1 - Q_j(z_j^*)] \frac{q_j(z)}{1 - Q_j(z_j^*)} dz$$

where $S_j(y) = \frac{y}{\rho}$, $NP_j(z) = \frac{z}{\rho}$, and $E_j(x) = \frac{\beta(x - dI_{W,P}) + (1 - \beta)\rho U_j + \eta_j U_j}{\rho + \eta_j}$. For $j = M$, the aggregated welfare function is calculated using equation (D.1). For $j = W$, in turn, the welfare measure is a linear combination of the aggregated welfare of women working with prejudiced and unprejudiced employers, each calculated using equation (D.1) and the appropriate definition of $E_j(x)$. This can be done because the proportion of prejudiced and unprejudiced employers is fixed ([Flabbi, 2010](#)).

References

- Addati, Laura, Naomi Cassirer, and Katherine Gilchrist**, *Maternity and paternity at work: law and practice across the world*, International Labour Office - Geneva, 2014.
- Bartolucci, Cristian**, “Gender Wage Gaps Reconsidered A Structural Approach Using Matched Employer-Employee Data,” *Journal Of Human Resources*, FAL 2013, 48 (4), 998–1034.
- Eckstein, Zvi and Gerard J. van den Berg**, “Empirical labor search: A survey,” *Journal of Econometrics*, February 2007, 136 (2), 531–564.
- **and Kenneth Wolpin**, “Estimating the effect of racial discrimination on first job wage offers,” *Review of Economics and Statistics*, 1999, 81 (3), 384–392.
- Flabbi, Luca**, “Gender discrimination estimation in a search model with matching and bargaining,” *International Economic Review*, 08 2010, 51 (3), 745–783.
- Flinn, Christopher J**, “Labour market structure and inequality: A comparison of Italy and the US,” *Review of Economic Studies*, August 2002, 69 (3), 611–645.
- ILO**, “ILO Working Conditions Laws Database,” 2019.
- Postel-Vinay, Fabien and Jean-Marc Robin**, “Equilibrium Wage Dispersion with Worker and Employer Heterogeneity,” *Econometrica*, 2002, 70 (6), 2295–2350.