TECHNICAL NOTE N ${ }^{\circ}$ IDB-TN-2811

## Changes in Uruguay's Gender Earning Gap:

An Analysis from 1990 to 2021

Manuel Urquidi
Miguel Chalup
Solange Sardán

# Changes in Uruguay's Gender Earning Gap: 

An Analysis from 1990 to 2021

Manuel Urquidi
Miguel Chalup
Solange Sardán

Cataloging-in-Publication data provided by the Inter-American Development Bank
Felipe Herrera Library
Urquidi, Manuel.
Changes in Uruguay's gender earning gap: an analysis from 1990 to 2021 / Manuel Urquidi, Miguel Chalup, Serrate, Liliana.
p. cm. - (IDB Technical Note ; 2811) Includes bibliographical references.

1. Wages-Women-Uruguay. 2. Sex discrimination in employment-Uruguay. 3. Wage differentials-Uruguay. 4. Equal pay for equal work-Uruguay. I. Chalup, Miguel. II. Serrate, Liliana. III. Inter-American Development Bank. Labor Markets Division. IV. Title. V. Series.
IDB-TN-2817
JEL CODES: J16, J31, J71.
Keywords: gender economics, earnings gaps, discrimination.
http://www.iadb.org

Copyright © 2023 Inter-American Development Bank ("IDB"). This work is subject to a Creative Commons license CC BY 3.0 IGO (https://creativecommons.org/licenses/by/3.0/igo/legalcode). The terms and conditions indicated in the URL link must be met and the respective recognition must be granted to the IDB.

Further to section 8 of the above license, any mediation relating to disputes arising under such license shall be conducted in accordance with the WIPO Mediation Rules. Any dispute related to the use of the works of the IDB that cannot be settled amicably shall be submitted to arbitration pursuant to the United Nations Commission on International Trade Law (UNCITRAL) rules. The use of the IDB's name for any purpose other than for attribution, and the use of IDB's logo shall be subject to a separate written license agreement between the IDB and the user and is not authorized as part of this license.

Note that the URL link includes terms and conditions that are an integral part of this license.
The opinions expressed in this work are those of the authors and do not necessarily reflect the views of the Inter-American Development Bank, its Board of Directors, or the countries they represent.

# Changes in Uruguay's Gender Earning Gap: An Analysis from 1990 to 2021 

Manuel Urquidi, Miguel Chalup, and Solange Sardán**


#### Abstract

The gender earnings gap between men and women in Latin America is an obstacle to achieving gender equality and sustainable development. In Uruguay, this gap persists despite women often having a better labor profile than men, suggesting the presence of gender biases. Furthermore, the gap is more pronounced among informal sector workers, and there also is a heterogeneous earnings difference in favor of men in most occupations.

To analyze the gender earnings gap in labor income in Uruguay between 1990 and 2021, this study uses the Continuous Household Surveys of the National Institute of Statistics harmonized by the Inter-American Development Bank (IDB) and presents two methodologies for estimation: the Blinder-Oaxaca decomposition and the Ñopo decomposition.

This analysis spanning over two decades has revealed the existence of earnings disparities by gender and a trend towards reducing the gender earnings gap over the considered period. However, it remains over time, indicating the need for additional efforts to understand the recorded disparity.

The analysis shows that while the total gap has decreased, as it has in many other countries in the region, this reduction is generally related to the explained gap (derived from individuals' endowments in education, work experience, and age) and not to a reduction in the gap that cannot be explained by these variables. This unexplained gap could be associated with gender-differentiated regulations, biases, prejudices, or discrimination that persists over time, making it an urgent task to determine the factors causing it and address them.


JEL Classification: J16, J31, J71.
Keywords: gender economics, earnings gap, discrimination.

[^0]
## Introduction

In recent years, Latin America and the Caribbean (LAC) have experienced significant changes in the traditionally assigned roles of men and women. An increase in the political representation of women, as well as their levels of education and participation in the labor force, has been observed. However, despite these advancements, challenges persist regarding women's labor inclusion and their opportunities for professional development (Frisancho and Queijo, 2022). ${ }^{\dagger}$

Previous studies have documented the presence of a labor earnings gap affecting women in the region (Ñopo, 2012). These studies have shown that women tend to earn lower incomes compared to their male counterparts, even when working in similar positions and having comparable levels of education. This highlights the need to analyze the causal factors behind this situation.

When examining the challenges related to women's labor inclusion and their possibilities for professional development, Ñopo (2012) points out that a latent problem in LAC is occupational and hierarchical segregation. Women are more likely to work in the informal sector and are underrepresented in executive positions. Additionally, there are significant differences in women's labor earnings compared to men. While LAC has made improvements in its gender equality indicators since the late 20th century (Chioda, 2011), as well as increased political and labor participation of women (Ñopo, 2012), gender earnings gaps still exist for similar jobs in most countries, constituting an unjustifiable form of inequality (ILO, 2019c).

The COVID-19 crisis has had a significant impact on women's labor force participation in Latin America. It is estimated that 13 million women in the region lost their jobs, and the female labor force participation rate decreased by 16 percentage points, compared to a 10 -point decrease for men. This crisis has highlighted that women often occupy jobs in more vulnerable sectors, exacerbating gender gaps, and, in some cases, partially reversing the progress that had been made (Bustelo, Suaya, and Vezza, 2021). The concentration of women in part-time jobs also deepened.

Regarding the situation in Uruguay, the country currently ranks 72 out of 146 countries in the Global Gender Gap Index of the World Economic Forum (WEF, 2022). Additionally, it ranks fifth among the 15 countries measured in Latin America and the Caribbean, with a score of 0.711 out of 1 . In comparison to 2006, the year of the index's implementation when it scored 0.655, Uruguay has improved by 0.056 points. However, it has dropped six positions (from 66), although it's worth noting that only 115 countries were measured in the index's first year. Specifically, in the areas of participation and economic opportunities, Uruguay ranks 58th. This is primarily due to low female labor force participation (ranked 65th) and income

[^1]inequality between men and women in similar jobs (ranked 79th). In terms of political representation, the country is in 98 th place, with women occupying $25.3 \%$ of parliamentary seats. In the field of educational achievements, Uruguay shares the top spot in the index with 28 other countries that have a 0\% illiteracy rate and high enrollment rates in secondary and tertiary education.

## Graph 1. Hourly Labor Earnings of Women versus Men in Uruguay in 2019*



Source: Own elaboration based on the continuous household surveys of Uruguay harmonized by the IDB.
*Only individuals with occupation and income were used.
The analyzed data from the continuous household surveys of Uruguay, harmonized by the IDB, support these facts. As shown in Figure 1, in 2019, the average hourly earnings for women were on average $94 \%$ of that for men. However, it is important to note that there are more pronounced gaps in certain groups. For example, the gap is higher among people aged 56 to 65 , where it reaches $87 \%$. Likewise, women with tertiary education experience a gap of $76 \%$, and in sectors such as manufacturing (78\%) and trade, restaurants, and hotels (78\%), financial establishments, insurance, and real estate (78\%). In the categories of nonagricultural workers (74\%), merchants and sellers (74\%), and the informal sector (91\%), gender earnings differences are notable. $\ddagger$

Some results that may seem counterintuitive, such as the fact that in the sector covering mining and quarrying, women earn on average 190\% of men's hourly earnings, could be explained by selection bias. As will be analyzed in more detail in

[^2]the methodology section, when there are few women in a sector of the economy or in certain regions, it is not uncommon to observe that the few who enter do so in higher hierarchical ranks and with better incomes. This can be seen when studying women's participation in the sector (annex tables A1 and A2) and can have direct effects on their overall labor force participation. However, the analysis requires a specific methodology different from that used in this study.

While data availability is still limited, the number of studies on this topic in Latin America and the world has increased considerably in recent years. For the case of Uruguay, the quantity of existing research documents is not as abundant, and most of them use the continuous household surveys of the country as their source of information. However, given that there are different ways to approach this issue, it is acknowledged that comparing the results of different studies and tracking the evolution of the gender earnings gap is challenging.

In this paper, we seek to enrich current knowledge about gender earnings disparity in Uruguay through a rigorous analysis of the evolution of the earnings gap from 1990 to 2021. To do this, three previous studies are used as references: the first on Bolivia (Urquidi, Valencia \& Durand, 2021), the second on Paraguay (Urquidi, Chalup \& Durand, 2022), and the third on eighteen countries in the region (Urquidi \& Chalup, 2023). Two analysis methodologies are also used: the Blinder-Oaxaca decomposition and the Ñopo decomposition, which means that results will be obtained from both a parametric and a non-parametric model. This allows for year-by-year comparisons as well as comparisons between the methodologies themselves to better identify the main variables affecting the earnings gap.

The previous regional study provides comparable information between countries (see Figure 1). The present analysis extends the age range of this data, explores the evolution over time, and provides information with greater geographical disaggregation for the country.

Figure 1. Total hourly earnings gap estimated through the Blinder-Oaxaca decomposition model*


The results of the analysis show that this earnings gap persists even when women in many cases have a better labor profile than men, suggesting the existence of gender biases. It is also observed that this gap is larger among informal sector workers. There is also a heterogeneous income difference, mostly in favor of men in most occupations. The gap is not explained by different control variables used, such as experience, personal and family characteristics, sector and economic activity, and region of the country. Therefore, it is likely related to normative factors, biases, and/or discrimination (Becker, 1957). On the contrary, it is evident that if only the labor profile were taken into consideration, women's wages should be higher. Possible factors contributing to this gap include normative aspects, cognitive biases, and relative childcare ${ }^{5}$ labor costs that are not visible in society. This analysis over time, spanning more than two decades, has shown the possible existence of gender discrimination, and a trend of reducing the earnings gap between men and women in the period under consideration was observed. However, it still persists, indicating that additional efforts are needed to understand the recorded disparity.

[^3]The present study is organized as follows. The first section provides a literature review related to the gender earnings gap in Uruguay and Latin America and the Caribbean. The second section describes the data used and presents descriptive statistics of the evolution of the earnings gap in Uruguay over the analyzed years. The third section briefly describes the methodologies used to estimate the gender earnings gap, while the fourth section presents the results of the analysis. Finally, the fifth section discusses the study's conclusions and implications.

## 1. Literature Review

Regarding the gender earnings gap, the literature has aimed to distinguish between that generated by differences in individual characteristics and human capital, and that unexplained portion, traditionally interpreted as related to gender biases, prejudices, and discrimination (Atal, Ñopo, \& Winder, 2009). The two most commonly used econometric techniques in recent years for analyzing this topic based on household surveys in different countries are: (i) the Blinder-Oaxaca decomposition, introduced by Oaxaca (1973), and (ii) the Ñopo decomposition, presented more recently in Ñopo (2008)*".

Additionally, new studies have identified previously unanalyzed components that also contribute to the gender earnings gap. Such is the case with the work of Kleven, Landais, and Søgaard (2019) on the penalty of motherhood and its impact on the income gap, in which the authors address this issue using administrative data from Denmark. Ajayi et al. (2022) analyze differences in socioemotional skills in income gaps, providing evidence for 17 African countries. Meanwhile, Ammerman and Groysberg (2021) examine widespread organizational obstacles and managerial actions leading to the existence of the glass ceiling for women's professional development in the United States. Bustelo et al. (2021) focus on the effect of occupational and career selection on incomes, addressing the case of Brazil, while Bordón, Canals, and Mizala (2020) do the same for Chile.

In the Latin American context, Frisancho and Queijo (2022) compile a series of studies documenting persistent gender inequalities in the Southern Cone countries of Latin America ${ }^{++}$and explore how reducing these gaps would significantly boost economic growth and development in the region. These authors show that gender gaps in access to public services, human capital accumulation, and the labor market limit overall productivity and economic growth, suggesting that policies aimed at mitigating such inequalities have the potential to promote economic development and well-being.

In a previous study (Chioda, 2011), it was observed that in Latin America and the Caribbean (LAC), women's labor force participation had increased since 1980, facilitated by economic growth, trade liberalization, urbanization, a reduction in fertility rates, and increased education levels. This phenomenon intensified starting in 2000 when the region's high growth rates generated increased labor demand, enabling more women to enter the labor market and promoting female employment directly through public policies (Gasparini \& Marchionni, 2015). However, Ñopo (2012) points out that women are still overrepresented in informal and low-paying jobs, and the earnings gap remains significant.

A classic analysis on this topic is by Psacharopoulos and Tzannatos (1992), who studied the earnings gap in 15 countries in Latin America and the Caribbean in the late 1980s. Among their findings, it stands out that, for similar jobs, women earned incomes that on average represented 65\% of those earned by men. Additionally, they observed that two-thirds of this difference was not explained by educational

[^4]level or human capital but likely by normative factors, prejudices, or discrimination. It is important to note that, according to the literature, while it is true that the total earnings gap has decreased, and a significant part of this reduction is explained by the increase in women's educational levels, the unexplained gap persists (Chioda, 2011; Gasparini \& Marchionni, 2015). ${ }^{\not \#}$

One of the most recent analyses on this topic in Latin America and the Caribbean was conducted by the International Labor Organization (ILO, 2019b). They studied 17 countries and used Ñopo's decomposition technique (2008) to compare wages among individuals with the same observable characteristics. Firstly, they found that the gender wage gap unexplained by gender decreased by a couple of percentage points between 2012 and 2017. Secondly, they detected that this gap is generally higher for self-employed workers than for employees and increases when there are children under six years old in the household and when it comes to part-time and/or informal work.

This document analyzes various aspects of the gender gap in the Latin American labor market. It shows that $40 \%$ of the Latin American workforce consists of selfemployed individuals, and in most countries in the region, gender gaps are higher in this group. Furthermore, it finds that the gap is greater for people living in rural areas or working in the informal sector. Finally, it shows that the gap is influenced by individuals' life cycles. The gap is smaller among young people, presumably without children, and increases as individuals get older, with a significant jump between 25-29 years for self-employed workers and between 30-34 years for employees, reaching its peak between 50 and 54 years.

Lastly, in the case of Uruguay, the gender earnings gap has been favorable for men since the 1980s, reaching 57\% during that period. In light of the previous findings, the International Labor Organization (ILO, 2019a) conducted a study in the same direction, but this time using the methodology of Firpo, Fortin, and Lemieux (2009) based on the classic Oaxaca-Blinder decomposition. Results obtained from an analysis of explained and unexplained components vary among countries. The explained part is related to the existence of differences in endowments, such as educational achievements, work experience, and age, among other factors, coupled with a polarization and professional segregation that tends to assign women to lower-paying occupations and industries. On the other hand, the unexplained part has a greater weight in determining the earnings gap, suggesting the existence of income discrimination against women.

Hoyos \& Ñopo (2010) estimated gender wage gaps for 18 Latin American countries between 1992 and 2007 using Ñopo's methodology. For this study period, there was an average decrease of 7 and 4 percentage points in the explained and unexplained gaps, respectively. The gap decreased mainly among workers sharing one or more of the following characteristics: they are at the lower end of the income distribution, have children in the household, are self-employed, work part-time, and/or live in rural areas. These are the labor market segments that previously exhibited the most significant gender disparities. Most of the reduction in the

[^5]unexplained component of the gap occurred within different labor market segments, rather than due to their recomposition or structural change. Lastly, significant heterogeneity was found among countries: the unexplained gap did not change in 12 of them, decreased in four, and increased in two.

The analysis of the gender earnings gap in Uruguay covers different time periods and emphasizes the combination of various databases and methodologies. One of the highlighted methodologies is the Blinder-Oaxaca decomposition (BO), which is used in this document.

Authors like Amarante and Espino (2004) followed this methodology and analyzed private sector wage earners in Uruguay between 1990 and 2000. They found that the gender income gap is positive for men throughout the period, primarily attributed to differential remuneration of characteristics (typically understood as discrimination), as the percentage of the unexplained gap reaches $36 \%$ on average over the ten years of study. Yahmed (2010) also used the Blinder-Oaxaca decomposition and the Continuous Household Survey (ECH) from 1983 to 2003 to study the gap and discrimination in the country's international trade. The authors found that there is a gender income gap in international trade favoring men, mostly attributable to discrimination. They also found that both the overall gap and the percentage attributed to discrimination are higher in the manufacturing industry. They showed that in the early years of the study, men's incomes were double those of women, of which $40 \%$ was attributed to discrimination. These findings are supported by Barafani et al. (2022), as their study shows that, of all workers in exporting companies, only $33 \%$ are women, and between $6 \%$ and $24 \%$ of them perceive the level of difficulty in advancing within the company as "very high" and "high," respectively.

Katzkowicz \& Querejeta (2013) analyzed the income gap between 2007 and 2011 and found that, during this period, the gap decreased by $2.3 \%$. However, the gap remains favorable for men and reached its peak in 2009 and 2010, becoming 19\% in favor of men despite women having a better labor profile. The authors also found that higher education and experience reduce the gap by approximately $53 \%$, but the percentage attributed to discrimination is higher.

Piras (2004) and Bucheli \& Sanromán (2004) used the Blinder-Oaxaca decomposition with Heckman correction to identify the challenges faced by women in Latin America and to analyze if glass ceilings exist in Uruguay, respectively. Their studies showed that female labor force participation rates in the Uruguayan labor market increased by 34\% in the early 1980s and reached 50\% by the late 1990s (Piras, 2004). At the same time, they highlighted that education is one of the most important variables in closing the wage gap, but the gap remains favorable to men despite women having higher endowments of human capital (Bucheli \& Sanromán, 2004).

Authors such as Terra et al. (2009) proposed analyzing the gender earnings gap in international trade using the General Equilibrium Model and the Social Accounting

Matrix ${ }^{55}$. They found that the income gap is larger for unskilled women, but for their skilled counterparts, the gap tends to decrease when household tasks are redistributed among family members, allowing women to allocate more time to market labor activities.

On the other hand, Boraz \& Romano (2010) employed an extension of the Machado \& Mata (2005) decomposition method proposed by Albrecht, van Vuuren \& Vroman (2009) and used household survey data to analyze the wage gap in 2007. The authors found that the overall wage gap is negative for women by approximately $20 \%$, of which the percentage explained by endowments reaches $13.7 \%$. When analyzing the wage gap by sectors, they discovered that, up to the 85th percentile, the gap favors men in the public sector. However, beyond this percentile and across the income distribution of the private sector, women face a positive wage gap of approximately $10 \%$.

In summary, the literature on the gender earnings gap in Uruguay, using various methodologies, highlights the importance of education in narrowing the gap and increasing women's educational attainment. However, it also demonstrates that the gap, both in this country and in others in the region, is mostly attributed to the unexplained part, likely including discrimination in the labor market as a significant factor. Additionally, the existence of glass ceilings is evident, supporting the need for the development, management, and implementation of public policies to improve the well-being of the population.

[^6]
## 2. Data and Descriptive Statistics

The figures used in this study come from the harmonized household surveys database by the Inter-American Development Bank (BID). Information from 31 surveys from contiguous years between 1990 and 2021 was used, except for 2003 when the survey was not conducted. The year 1990 was chosen as the starting point since that's when continuous household surveys began to be collected in Uruguay.

It is important to highlight the challenges associated with the data because for data to be comparable, both across different years and among different countries in Latin America and the Caribbean, harmonization is required. This harmonization is carried out by the BID's data harmonization system.

It is relevant to note that, unlike most countries, in Uruguay, the survey was only representative of urban areas until 2005. Additionally, the analysis was not conducted in 2006 because that year, the Continuous Household Survey (ECH) was replaced by the Expanded National Household Survey (ENHA). Furthermore, caution should be exercised when interpreting the results of the 2021 survey because in that year, the survey was not conducted continuously and annually, so only observations obtained in the month of July were used.

The design and level of representativeness of these surveys are similar for different years and are based on data from the country's main regions ${ }^{* * *}$. In Table 1, the sample taken for individuals aged between 15 and 65 years, which is the age range used in the analysis for each of the years, is presented, along with its representativeness in the total Uruguayan population ${ }^{+t+}$. The analysis is disaggregated by gender and age group.

The proportions of the sample closely match the proportions of the population they represent. Additionally, the sample is evenly distributed between genders and different age groups. There is also a gradual increase in the number of samples over time. However, it is noted that in 2021, there is only a small sample available.

As a first approach to calculating the gender earnings gap, Table 2 presents the estimation of hourly labor earnings for women versus men ${ }^{\ddagger \# 1 .}$ The analysis is disaggregated by age group, educational level, economic activity, occupation, formality, self-employed status, and regions. Additionally, in Annex Table A1, the distribution by year and gender of the characteristics of the employed population receiving income is presented, providing an overview of the general characteristics of both men and women.

[^7]Table 1. Number of observations in the surveys and their representativeness by gender and age group

|  | 1990 |  | 1991 |  | 1992 |  | 1993 |  | 1994 |  | 1995 |  | 1996 |  | 1997 |  | 1998 |  | 1999 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | $N$ | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 18,501 | 46\% | 18,543 | 47\% | 8,803 | 46\% | 18,401 | 47\% | 18,666 | 47\% | 19,435 | 47\% | 18,428 | 47\% | 19,170 | 47\% | 17,011 | 47\% | 17,161 | 47\% |
| Representativity | 18,501 | 46\% | 18,543 | 47\% | 824,549 | 47\% | 18,401 | 47\% | 18,666 | 47\% | 859,359 | 47\% | 859,408 | 47\% | 901,210 | 47\% | 787,132 | 48\% | 744,024 | 47\% |
| Women | 21,416 | 54\% | 20,904 | 53\% | 10,136 | 54\% | 21,134 | 53\% | 21,104 | 53\% | 21,904 | 53\% | 20,983 | 53\% | 21,226 | 53\% | 18,859 | 53\% | 19,275 | 53\% |
| Representativity | 21,416 | 54\% | 20,904 | 53\% | 946,442 | 53\% | 21,134 | 53\% | 21,104 | 53\% | 969,082 | 53\% | 977,659 | 53\% | 996,617 | 53\% | 862,307 | 52\% | 825,831 | 53\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 10,082 | 25\% | 10,300 | 26\% | 5,060 | 27\% | 10,649 | 27\% | 10,721 | 27\% | 11,239 | 27\% | 10,915 | 28\% | 11,141 | 28\% | 9,702 | 27\% | 9,831 | 27\% |
| Representativity | 10,082 | 25\% | 10,300 | 26\% | 473,666 | 27\% | 10,649 | 27\% | 10,721 | 27\% | 497,076 | 27\% | 508,822 | 28\% | 523,848 | 28\% | 445,290 | 27\% | 426,334 | 27\% |
| 26-35 | 8,108 | 20\% | 7,953 | 20\% | 3,692 | 19\% | 7,519 | 19\% | 7,612 | 19\% | 7,819 | 19\% | 7,353 | 19\% | 7,559 | 19\% | 7,240 | 20\% | 7,167 | 20\% |
| Representativity | 8,108 | 20\% | 7,953 | 20\% | 344,472 | 19\% | 7,519 | 19\% | 7,612 | 19\% | 346,048 | 19\% | 342,301 | 19\% | 354,323 | 19\% | 333,763 | 20\% | 308,665 | 20\% |
| 36-45 | 7,717 | 19\% | 7,505 | 19\% | 3,620 | 19\% | 7,618 | 19\% | 7,819 | 20\% | 8,115 | 20\% | 7,641 | 19\% | 7,870 | 19\% | 7,348 | 20\% | 7,461 | 20\% |
| Representativity | 7,717 | 19\% | 7,505 | 19\% | 339,566 | 19\% | 7,618 | 19\% | 7,819 | 20\% | 358,898 | 20\% | 356,203 | 19\% | 369,593 | 19\% | 337,396 | 20\% | 320,817 | 20\% |
| 46-55 | 6,968 | 17\% | 6,820 | 17\% | 3,174 | 17\% | 6,769 | 17\% | 6,875 | 17\% | 7,106 | 17\% | 6,923 | 18\% | 7,046 | 17\% | 6,185 | 17\% | 6,402 | 18\% |
| Representativity | 6,968 | 17\% | 6,820 | 17\% | 296,942 | 17\% | 6,769 | 17\% | 6,875 | 17\% | 314,230 | 17\% | 322,973 | 18\% | 331,508 | 17\% | 283,488 | 17\% | 276,756 | 18\% |
| 56-65 | 7,042 | 18\% | 6,869 | 17\% | 3,393 | 18\% | 6,980 | 18\% | 6,743 | 17\% | 7,060 | 17\% | 6,579 | 17\% | 6,780 | 17\% | 5,395 | 15\% | 5,575 | 15\% |
| Representativity | 7,042 | 18\% | 6,869 | 17\% | 316,345 | 18\% | 6,980 | 18\% | 6,743 | 17\% | 312,189 | 17\% | 306,768 | 17\% | 318,555 | 17\% | 249,502 | 15\% | 237,283 | 15\% |
| Total | 39,917 | 100\% | 39,447 | 100\% | 18,939 | 100\% | 39,535 | 100\% | 39,770 | 100\% | 41,339 | 100\% | 39,411 | 100\% | 40,396 | 100\% | 35,870 | 100\% | 36,436 | 100\% |
| Representativity | 39,917 | 100\% | 39,447 | 100\% | 1,770,991 | 100\% | 39,535 | 100\% | 39,770 | 100\% | 1,828,441 | 100\% | 1,837,067 | 100\% | 1,897,827 | 100\% | 1,649,439 | 100\% | 1,569,855 | 100\% |

Table 1 (Continuation)

|  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 17,356 | 47\% | 16,956 | 47\% | 16,778 | 47\% | 16,322 | 47\% | 16,596 | 47\% | 16,023 | 47\% | 42,587 | 47\% | 43,175 | 47\% | 40,366 | 48\% | 40,359 | 48\% |
| Representativity | 750,768 | 47\% | 719,765 | 47\% | 712,615 | 47\% | 696,946 | 47\% | 705,100 | 47\% | 679,746 | 47\% | 892,140 | 47\% | 896,602 | 47\% | 920,434 | 48\% | 1,028,967 | 48\% |
| Women | 19,350 | 53\% | 19,393 | 53\% | 18,934 | 53\% | 18,544 | 53\% | 18,577 | 53\% | 18,134 | 53\% | 47,494 | 53\% | 48,117 | 53\% | 44,352 | 52\% | 44,253 | 52\% |
| Representativity | 830,485 | 53\% | 817,106 | 53\% | 800,263 | 53\% | 784,685 | 53\% | 783,503 | 53\% | 766,585 | 53\% | 997,356 | 53\% | 1,003,705 | 53\% | 1,008,404 | 52\% | 1,121,947 | 52\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 10,137 | 28\% | 9,838 | 27\% | 9,482 | 27\% | 9,101 | 26\% | 9,236 | 26\% | 8,826 | 26\% | 22,917 | 25\% | 23,101 | 25\% | 27,472 | 25\% | 21,583 | 26\% |
| Representativity | 439,086 | 28\% | 419,301 | 27\% | 403,550 | 27\% | 390,985 | 26\% | 393,655 | 26\% | 376,121 | 26\% | 481,008 | 25\% | 484,365 | 25\% | 488,747 | 25\% | 553,095 | 26\% |
| 26-35 | 7,092 | 19\% | 7,060 | 19\% | 6,817 | 19\% | 6,900 | 20\% | 6,864 | 20\% | 6,812 | 20\% | 18,801 | 21\% | 17,934 | 20\% | 17,316 | 20\% | 16,993 | 20\% |
| Representativity | 304,124 | 19\% | 296,411 | 19\% | 286,739 | 19\% | 293,026 | 20\% | 288,035 | 19\% | 286,419 | 20\% | 393,596 | 21\% | 372,621 | 20\% | 390,284 | 20\% | 429,184 | 20\% |
| 36-45 | 7,490 | 20\% | 7,282 | 20\% | 7,167 | 20\% | 6,924 | 20\% | 6,900 | 20\% | 6,729 | 20\% | 17,714 | 20\% | 18,079 | 20\% | 16,532 | 20\% | 16,476 | 19\% |
| Representativity | 323,553 | 20\% | 308,211 | 20\% | 305,246 | 20\% | 294,179 | 20\% | 293,054 | 20\% | 287,017 | 20\% | 372,108 | 20\% | 379,407 | 20\% | 379,056 | 20\% | 418,164 | 19\% |
| 46-55 | 6,306 | 17\% | 6,454 | 18\% | 6,501 | 18\% | 6,401 | 18\% | 6,645 | 19\% | 6,379 | 19\% | 16,933 | 19\% | 17,635 | 19\% | 16,305 | 19\% | 16,413 | 19\% |
| Representativity | 272,831 | 17\% | 273,748 | 18\% | 273,794 | 18\% | 271,503 | 18\% | 281,478 | 19\% | 269,133 | 19\% | 355,264 | 19\% | 367,521 | 19\% | 372,722 | 19\% | 417,714 | 19\% |
| 56-65 | 5,681 | 15\% | 5,715 | 16\% | 5,751 | 16\% | 5,540 | 16\% | 5,528 | 16\% | 5,411 | 16\% | 13,716 | 15\% | 14,543 | 16\% | 13,093 | 15\% | 13,147 | 16\% |
| Representativity | 241,659 | 15\% | 239,200 | 16\% | 243,549 | 16\% | 231,938 | 16\% | 232,381 | 16\% | 227,641 | 16\% | 287,520 | 15\% | 296,393 | 16\% | 298,029 | 15\% | 332,757 | 15\% |
| Total | 36,706 | 100\% | 36,349 | 100\% | 35,712 | 100\% | 34,866 | 100\% | 35,173 | 100\% | 34,157 | 100\% | 90,081 | 100\% | 91,292 | 100\% | 84,718 | 100\% | 84,612 | 100\% |
| Representativity | 1,581,253 | 100\% | 1,536,871 | 100\% | 1,512,878 | 100\% | 1,481,631 | 100\% | 1,488,603 | 100\% | 1,446,331 | 100\% | 1,889,496 | 100\% | 1,900,307 | 100\% | 1,928,838 | 100\% | 2,150,914 | 100\% |

# Table 1 (Continuation) 

|  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  | 2019 |  | 2020 |  | 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Men | 40,238 | 48\% | 36,984 | 47\% | 39,361 | 47\% | 40,551 | 47\% | 37,596 | 48\% | 36,062 | 47\% | 36,532 | 48\% | 33,403 | 48\% | 33,198 | 47\% | 44,170 | 47\% | 8,559 | 47\% |
| Representativity | 1,075,740 | 49\% | 1,023,215 | 48\% | 1,079,914 | 49\% | 1,101,682 | 49\% | 1,127,362 | 49\% | 1,135,623 | 49\% | 1,143,746 | 49\% | 1,150,703 | 49\% | 1,157,181 | 49\% | 1,163,886 | 49\% | 194,531 | 49\% |
| Women | 43,898 | 52\% | 41,008 | 53\% | 43,865 | 53\% | 44,900 | 53\% | 41,386 | 52\% | 40,607 | 53\% | 40,231 | 52\% | 36,830 | 52\% | 36,765 | 53\% | 50,361 | 53\% | 9,723 | 53\% |
| Representativity | 1,139,530 | 51\% | 1,106,309 | 52\% | 1,139,534 | 51\% | 1,149,564 | 51\% | 1,165,143 | 51\% | 1,171,243 | 51\% | 1,178,762 | 51\% | 1,183,724 | 51\% | 1,189,977 | 51\% | 1,194,786 | 51\% | 199,355 | 51\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 20,907 | 25\% | 19,849 | 25\% | 20,891 | 25\% | 21,249 | 25\% | 19,418 | 25\% | 18,660 | 24\% | 18,209 | 24\% | 16,545 | 24\% | 16,429 | 23\% | 27,079 | 22\% | 4,223 | 23\% |
| Representativity | 562,506 | 25\% | 551,431 | 26\% | 572,963 | 26\% | 571,941 | 25\% | 595,575 | 26\% | 598,683 | 26\% | 600,587 | 26\% | 605,572 | 26\% | 602,569 | 26\% | 602,137 | 26\% | 602,137 | 26\% |
| 26-35 | 16,798 | 20\% | 15,267 | 20\% | 16,124 | 19\% | 16,273 | 19\% | 15,114 | 19\% | 14,723 | 19\% | 14,212 | 19\% | 12,819 | 18\% | 12,585 | 18\% | 16,231 | 17\% | 3,274 | 18\% |
| Representativity | 471,431 | 21\% | 450,148 | 21\% | 467,760 | 21\% | 469,307 | 21\% | 456,445 | 20\% | 457,725 | 20\% | 449,039 | 19\% | 445,991 | 19\% | 447,754 | 19\% | 445,267 | 19\% | 445,267 | 19\% |
| 36-45 | 16,471 | 20\% | 15,292 | 20\% | 16,447 | 20\% | 17,295 | 20\% | 16,224 | 21\% | 15,418 | 20\% | 15,887 | 21\% | 14,071 | 20\% | 14,041 | 20\% | 18,826 | 20\% | 3,624 | 20\% |
| Representativity | 428,532 | 19\% | 422,673 | 20\% | 445,344 | 20\% | 461,293 | 20\% | 475,828 | 21\% | 475,860 | 21\% | 489,534 | 21\% | 486,585 | 21\% | 489,681 | 21\% | 493,439 | 21\% | 493,439 | 21\% |
| 46-55 | 16,444 | 20\% | 14,897 | 19\% | 15,932 | 19\% | 16,201 | 19\% | 15,052 | 19\% | 14,424 | 19\% | 14,715 | 19\% | 13,512 | 19\% | 13,489 | 19\% | 18,687 | 20\% | 3,530 | 19\% |
| Representativity | 415,945 | 19\% | 385,094 | 18\% | 399,468 | 18\% | 405,935 | 18\% | 421,600 | 18\% | 420,675 | 18\% | 426,818 | 18\% | 429,312 | 18\% | 433,753 | 18\% | 439,047 | 19\% | 439,047 | 19\% |
| 56-65 | 13,516 | 16\% | 12,687 | 16\% | 13,832 | 17\% | 14,433 | 17\% | 13,174 | 17\% | 13,444 | 18\% | 13,740 | 18\% | 13,286 | 19\% | 13,419 | 19\% | 19,648 | 21\% | 3,631 | 20\% |
| Representativity | 336,856 | 15\% | 320,178 | 15\% | 333,913 | 15\% | 342,770 | 15\% | 343,057 | 15\% | 353,923 | 15\% | 356,530 | 15\% | 366,967 | 16\% | 373,401 | 16\% | 378,782 | 16\% | 378,782 | 16\% |
| Total | 84,136 | 100\% | 77,992 | 100\% | 83,226 | 100\% | 85,451 | 100\% | 78,982 | 100\% | 76,669 | 100\% | 76,763 | 100\% | 70,233 | 100\% | 69,963 | 100\% | 94,471 | 100\% | 18,282 | 100\% |
| Representativity | 2,215,270 | 100\% | 2,129,524 | 100\% | 2,219,448 | 100\% | 2,251,246 | 100\% | 2,292,505 | 100\% | 2,306,866 | 100\% | 2,322,508 | 100\% | 2,334,427 | 100\% | 2,347,158 | 100\% | 2,358,672 | 100\% | 2,358,672 | 100\% |

[^8]Table 2. Hourly labor earnings of women vs. men*

|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General | 76.1\% | 76.5\% | 82.8\% | 78.5\% | 80.1\% | 84.1\% | 85.3\% | 86.7\% | 85.1\% | 88.7\% |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 90.4\% | 81.0\% | 93.6\% | 94.1\% | 95.1\% | 96.8\% | 93.9\% | 94.9\% | 97.9\% | 92.5\% |
| 26-35 | 85.2\% | 86.0\% | 88.8\% | 89.3\% | 89.8\% | 96.1\% | 98.2\% | 96.0\% | 90.2\% | 101.3\% |
| 36-45 | 77.7\% | 76.3\% | 88.1\% | 74.3\% | 81.5\% | 84.4\% | 80.2\% | 84.5\% | 84.0\% | 83.4\% |
| 46-55 | 66.7\% | 70.7\% | 72.6\% | 70.1\% | 69.2\% | 73.9\% | 79.3\% | 78.1\% | 78.2\% | 85.2\% |
| 56-65 | 60.9\% | 62.1\% | 67.4\% | 66.9\% | 64.4\% | 67.3\% | 75.4\% | 77.5\% | 78.6\% | 74.4\% |
| Level of Education |  |  |  |  |  |  |  |  |  |  |
| None | 80.0\% | 66.9\% | 76.9\% | 71.6\% | 67.9\% | 72.3\% | 72.0\% | 77.5\% | 78.3\% | 77.5\% |
| Primary | 68.2\% | 68.9\% | 77.4\% | 73.9\% | 72.9\% | 76.2\% | 78.4\% | 80.8\% | 77.7\% | 79.5\% |
| Secondary | 77.2\% | 78.8\% | 84.9\% | 75.9\% | 78.5\% | 83.1\% | 80.6\% | 79.0\% | 79.6\% | 84.2\% |
| Tertiary | 68.4\% | 67.4\% | 53.5\% | 65.2\% | 66.5\% | 68.7\% | 68.6\% | 69.9\% | 67.9\% | 72.6\% |
| Economic Sector |  |  |  |  |  |  |  |  |  |  |
| Agriculture, hunting, forestry, and fishing | 171.9\% | 111.7\% | 398.5\% | 136.8\% | 167.0\% | 165.4\% | 118.4\% | 129.1\% | 191.0\% | 165.3\% |
| Mining and quarrying | 221.9\% | 87.7\% | 90.5\% | 153.0\% | 95.6\% | 75.2\% | 46.1\% | 57.1\% | 98.9\% |  |
| Manufacturing industry | 60.5\% | 61.0\% | 71.5\% | 61.9\% | 63.9\% | 65.7\% | 65.4\% | 70.3\% | 70.9\% | 68.9\% |
| Electricity, gas, and water | 100.4\% | 103.5\% | 84.1\% | 102.3\% | 106.6\% | 117.2\% | 108.8\% | 94.2\% | 90.5\% | 93.6\% |
| Construction | 133.0\% | 159.4\% | 110.7\% | 141.7\% | 138.0\% | 124.2\% | 153.0\% | 164.0\% | 228.9\% | 150.2\% |
| Trade, restaurants, and hotels | 69.8\% | 67.2\% | 81.1\% | 79.5\% | 71.0\% | 72.8\% | 81.4\% | 76.2\% | 73.4\% | 75.2\% |
| Transport and storage | 85.5\% | 94.0\% | 126.8\% | 94.1\% | 141.1\% | 99.1\% | 120.8\% | 100.0\% | 87.2\% | 97.3\% |
| Financial establishments, insurance, and real estate | 65.6\% | 65.9\% | 65.9\% | 59.7\% | 65.2\% | 78.9\% | 66.0\% | 69.2\% | 76.6\% | 86.4\% |
| Social and community services | 82.1\% | 83.8\% | 78.2\% | 78.9\% | 78.2\% | 83.2\% | 81.2\% | 86.9\% | 82.1\% | 83.9\% |
| Ocupación |  |  |  |  |  |  |  |  |  |  |
| Professional and technician | 69.3\% | 68.4\% | 57.6\% | 66.0\% | 66.8\% | 70.6\% | 66.6\% | 69.2\% | 74.0\% | 69.0\% |
| Director or senior official | 67.3\% | 74.2\% | 102.2\% | 71.3\% | 82.0\% | 74.7\% | 90.7\% | 85.8\% | 67.2\% | 83.7\% |
| Administrative and intermediate level | 84.6\% | 86.8\% | 83.4\% | 84.5\% | 82.7\% | 83.2\% | 83.0\% | 81.2\% | 84.2\% | 88.3\% |
| Merchants and salespersons | 64.2\% | 55.6\% | 73.6\% | 66.9\% | 63.1\% | 69.5\% | 66.6\% | 64.7\% | 62.8\% | 68.1\% |
| In services | 65.7\% | 71.0\% | 73.5\% | 70.8\% | 77.2\% | 74.8\% | 75.9\% | 80.8\% | 76.1\% | 81.5\% |
| Agricultural workers | 106.6\% | 142.8\% | 410.5\% | 129.9\% | 191.3\% | 194.8\% | 139.0\% | 137.6\% | 247.3\% | 206.5\% |
| Non-agricultural laborers, machinery operators, and transport services | 59.9\% | 59.8\% | 69.9\% | 64.8\% | 62.4\% | 65.8\% | 70.3\% | 69.8\% | 74.3\% | 66.6\% |
| Armed Forces | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Others | 89.5\% | 94.8\% | 83.7\% | 88.8\% | 89.0\% | 85.7\% | 89.1\% | 89.6\% | 86.6\% | 87.0\% |
| Formality |  |  |  |  |  |  |  |  |  |  |
| Informal | 67.3\% | 65.8\% | 77.2\% | 67.0\% | 67.2\% | 75.8\% | 80.2\% | 80.7\% | 80.1\% | 83.0\% |
| Formal | 105.3\% | 84.3\% | 86.6\% | 87.3\% | 90.0\% | 90.6\% | 89.3\% | 91.3\% | 88.9\% | 92.9\% |
| Area |  |  |  |  |  |  |  |  |  |  |
| Rural | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Urban | 76.1\% | 76.5\% | 82.8\% | 78.5\% | 80.1\% | 84.1\% | 85.3\% | 86.7\% | 85.1\% | 88.7\% |
| Self-Employed |  |  |  |  |  |  |  |  |  |  |
| Not self-employed | 75.4\% | 74.4\% | 81.7\% | 77.5\% | 78.8\% | 82.3\% | 82.2\% | 84.6\% | 80.5\% | 86.3\% |
| Self-employed | 79.8\% | 86.2\% | 87.4\% | 82.7\% | 85.0\% | 91.3\% | 97.5\% | 95.9\% | 105.8\% | 97.0\% |
| Regions |  |  |  |  |  |  |  |  |  |  |
| Montevideo | 74.9\% | 73.9\% | 78.9\% | 74.2\% | 78.2\% | 81.4\% | 81.1\% | 84.3\% | 81.4\% | 85.3\% |
| Artigas | 78.7\% | 65.2\% | 102.7\% | 76.0\% | 89.6\% | 75.9\% | 75.2\% | 106.0\% | 92.2\% | 94.7\% |
| Canelones | 71.2\% | 77.3\% | 78.3\% | 80.5\% | 74.7\% | 79.6\% | 79.7\% | 86.9\% | 86.9\% | 98.5\% |
| Cerro Largo | 85.4\% | 70.7\% | 73.7\% | 83.7\% | 100.2\% | 101.5\% | 87.0\% | 81.5\% | 95.7\% | 79.8\% |
| Colonia | 77.5\% | 85.4\% | 90.7\% | 89.4\% | 80.0\% | 83.3\% | 92.1\% | 84.1\% | 82.0\% | 83.0\% |
| Durazno | 68.5\% | 93.5\% | 101.6\% | 76.6\% | 69.3\% | 78.1\% | 103.3\% | 76.0\% | 102.7\% | 82.0\% |
| Flores | 77.5\% | 62.9\% | 71.4\% | 71.8\% | 70.3\% | 65.2\% | 79.2\% | 68.0\% | 77.6\% | 118.0\% |
| Florida | 68.7\% | 81.8\% | 79.9\% | 72.9\% | 73.3\% | 69.7\% | 71.3\% | 89.1\% | 80.0\% | 76.0\% |
| Lavalleja | 80.2\% | 64.0\% | 87.2\% | 90.5\% | 85.8\% | 85.1\% | 115.6\% | 77.2\% | 76.7\% | 81.3\% |
| Maldonado | 75.4\% | 85.0\% | 84.7\% | 84.9\% | 81.3\% | 77.7\% | 85.5\% | 83.4\% | 96.4\% | 90.1\% |
| Paysandú | 77.8\% | 81.2\% | 79.6\% | 65.8\% | 71.5\% | 78.9\% | 78.0\% | 79.8\% | 100.7\% | 63.6\% |
| Río Negro | 72.1\% | 96.2\% | 94.6\% | 85.0\% | 69.5\% | 90.3\% | 99.3\% | 90.0\% | 77.4\% | 79.9\% |
| Rivera | 103.6\% | 82.1\% | 92.0\% | 83.9\% | 94.8\% | 92.4\% | 86.5\% | 75.3\% | 87.8\% | 93.8\% |
| Rocha | 83.2\% | 69.1\% | 96.7\% | 89.0\% | 84.2\% | 88.2\% | 75.2\% | 70.6\% | 72.3\% | 97.2\% |
| Salto | 61.9\% | 71.7\% | 94.3\% | 88.4\% | 85.3\% | 85.9\% | 66.1\% | 79.9\% | 107.0\% | 96.6\% |
| San José | 84.5\% | 69.7\% | 43.0\% | 69.6\% | 72.4\% | 76.6\% | 101.8\% | 77.9\% | 88.5\% | 85.2\% |
| Soriano | 70.5\% | 47.3\% | 84.7\% | 85.6\% | 74.6\% | 82.6\% | 84.3\% | 87.2\% | 79.1\% | 73.4\% |
| Tacuarembó | 91.9\% | 79.3\% | 76.2\% | 76.0\% | 86.1\% | 87.1\% | 103.7\% | 88.1\% | 72.2\% | 79.4\% |
| Treinta y Tres | 70.9\% | 81.6\% | 96.4\% | 75.7\% | 76.1\% | 87.6\% | 88.8\% | 99.0\% | 88.1\% | 94.7\% |

Table 2 (Continuation).

|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General | 89.2\% | 89.7\% | 94.0\% | 86.9\% | 90.5\% | 91.6\% | 91.3\% | 90.8\% | 88.2\% | 89.6\% |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 99.4\% | 105.3\% | 102.2\% | 109.0\% | 112.5\% | 107.6\% | 103.8\% | 96.0\% | 94.2\% | 94.5\% |
| 26-35 | 100.7\% | 98.9\% | 98.4\% | 96.5\% | 98.9\% | 101.4\% | 96.7\% | 101.0\% | 96.3\% | 96.2\% |
| 36-45 | 84.8\% | 83.3\% | 93.5\% | 80.0\% | 85.1\% | 92.2\% | 88.5\% | 93.4\% | 88.6\% | 88.6\% |
| 46-55 | 82.8\% | 84.8\% | 92.5\% | 82.0\% | 89.4\% | 84.5\% | 87.3\% | 81.3\% | 83.5\% | 87.4\% |
| 56-65 | 79.2\% | 78.0\% | 78.6\% | 76.4\% | 70.3\% | 71.6\% | 83.3\% | 79.3\% | 75.1\% | 76.3\% |
| Level of Education |  |  |  |  |  |  |  |  |  |  |
| None | 80.1\% | 87.3\% | 92.3\% | 91.2\% | 92.1\% | 90.6\% | 93.1\% | 81.9\% | 83.5\% | 77.5\% |
| Primary | 83.2\% | 81.2\% | 81.3\% | 78.4\% | 80.7\% | 80.8\% | 79.5\% | 78.0\% | 74.9\% | 76.7\% |
| Secondary | 85.0\% | 73.5\% | 78.7\% | 68.2\% | 76.9\% | 86.2\% | 83.5\% | 73.9\% | 72.7\% | 79.3\% |
| Tertiary | 66.2\% | 63.4\% | 66.0\% | 64.8\% | 61.8\% | 76.2\% | 77.0\% | 69.1\% | 68.1\% | 71.0\% |


| Economic Sector |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Agriculture, hunting, forestry, and fishing | $160.5 \%$ | $124.8 \%$ | $344.1 \%$ | $115.0 \%$ | $266.1 \%$ | $116.0 \%$ | $158.8 \%$ | $117.2 \%$ |



| Self-Employed |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Not self-employed | 86.1\% | 86.2\% | 89.4\% | 84.8\% | 87.1\% | 90.3\% | 90.6\% | 90.3\% | 88.1\% | 88.9\% |
| Self-employed | 101.9\% | 101.2\% | 108.3\% | 90.4\% | 101.4\% | 94.0\% | 91.9\% | 92.3\% | 86.8\% | 92.1\% |
| Regions |  |  |  |  |  |  |  |  |  |  |
| Montevideo | 87.5\% | 84.0\% | 89.9\% | 81.8\% | 89.1\% | 88.2\% | 86.1\% | 87.7\% | 84.4\% | 85.3\% |
| Artigas | 113.5\% | 90.4\% | 102.8\% | 85.6\% | 91.9\% | 90.0\% | 124.5\% | 96.5\% | 88.1\% | 81.3\% |
| Canelones | 85.5\% | 90.4\% | 87.6\% | 85.3\% | 82.7\% | 90.3\% | 92.1\% | 89.7\% | 83.7\% | 95.0\% |
| Cerro Largo | 83.9\% | 88.3\% | 81.2\% | 100.9\% | 101.3\% | 83.2\% | 84.1\% | 76.5\% | 79.5\% | 85.6\% |
| Colonia | 95.9\% | 108.1\% | 107.9\% | 78.8\% | 87.6\% | 111.5\% | 78.7\% | 83.0\% | 76.6\% | 95.4\% |
| Durazno | 77.8\% | 88.0\% | 95.2\% | 85.1\% | 66.0\% | 115.5\% | 91.2\% | 100.0\% | 97.4\% | 84.4\% |
| Flores | 69.3\% | 83.6\% | 88.7\% | 71.7\% | 69.2\% | 119.2\% | 69.8\% | 64.6\% | 77.7\% | 79.3\% |
| Florida | 66.4\% | 82.3\% | 69.7\% | 88.7\% | 60.5\% | 113.1\% | 147.6\% | 89.2\% | 93.2\% | 84.5\% |
| Lavalleja | 83.7\% | 88.6\% | 135.3\% | 82.5\% | 75.9\% | 89.8\% | 128.8\% | 83.8\% | 85.4\% | 66.4\% |
| Maldonado | 77.8\% | 105.0\% | 94.8\% | 96.4\% | 93.5\% | 88.3\% | 99.9\% | 85.7\% | 99.2\% | 92.1\% |
| Paysandú | 92.7\% | 94.7\% | 103.3\% | 90.6\% | 84.6\% | 110.5\% | 85.1\% | 92.4\% | 90.3\% | 92.5\% |
| Río Negro | 89.8\% | 97.1\% | 78.0\% | 95.1\% | 78.5\% | 87.3\% | 81.5\% | 70.1\% | 78.6\% | 79.4\% |
| Rivera | 76.0\% | 90.5\% | 84.6\% | 83.9\% | 84.2\% | 94.0\% | 93.3\% | 102.2\% | 96.3\% | 88.1\% |
| Rocha | 76.9\% | 102.5\% | 116.4\% | 91.0\% | 104.1\% | 72.1\% | 93.9\% | 135.5\% | 100.0\% | 99.7\% |
| Salto | 90.9\% | 79.3\% | 77.0\% | 96.5\% | 85.6\% | 74.8\% | 77.2\% | 88.1\% | 85.9\% | 83.5\% |
| San José | 84.3\% | 90.9\% | 96.6\% | 96.0\% | 89.1\% | 95.5\% | 80.1\% | 92.4\% | 85.1\% | 83.8\% |
| Soriano | 88.7\% | 99.7\% | 106.1\% | 103.3\% | 88.7\% | 91.9\% | 81.6\% | 85.8\% | 87.9\% | 84.9\% |
| Tacuarembó | 90.3\% | 93.6\% | 100.1\% | 82.5\% | 89.3\% | 79.0\% | 93.4\% | 75.9\% | 100.6\% | 89.2\% |

Table 2 (Continuation).

|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General | 92.5\% | 94.1\% | 91.1\% | 92.6\% | 92.4\% | 93.0\% | 93.9\% | 95.7\% | 94.5\% | 95.1\% | 98.1\% |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-25 | 103.2\% | 99.6\% | 96.4\% | 97.2\% | 96.3\% | 97.8\% | 99.4\% | 104.9\% | 99.5\% | 101.8\% | 101.7\% |
| 26-35 | 96.0\% | 96.6\% | 93.3\% | 97.0\% | 98.0\% | 95.4\% | 100.2\% | 98.7\% | 97.8\% | 102.9\% | 96.0\% |
| 36-45 | 89.4\% | 89.5\% | 89.4\% | 91.2\% | 92.7\% | 89.0\% | 92.4\% | 95.2\% | 97.3\% | 92.0\% | 99.4\% |
| 46-55 | 86.0\% | 88.9\% | 86.3\% | 88.1\% | 88.0\% | 91.2\% | 89.4\% | 89.7\% | 88.7\% | 93.0\% | 92.3\% |
| 56-65 | 89.3\% | 94.6\% | 87.9\% | 86.8\% | 81.9\% | 90.6\% | 84.9\% | 91.9\% | 87.3\% | 85.3\% | 100.5\% |
| Level of Education |  |  |  |  |  |  |  |  |  |  |  |
| None | 83.2\% | 84.3\% | 81.4\% | 80.0\% | 75.0\% | 89.1\% | 85.1\% | 85.1\% | 90.1\% | 80.7\% | 80.3\% |
| Primary | 78.7\% | 79.1\% | 77.5\% | 78.3\% | 79.6\% | 79.4\% | 80.1\% | 82.8\% | 82.5\% | 82.6\% | 83.5\% |
| Secondary | 79.7\% | 83.9\% | 83.0\% | 83.5\% | 83.7\% | 83.3\% | 82.9\% | 85.5\% | 87.1\% | 89.8\% | 89.0\% |
| Tertiary | 74.1\% | 81.8\% | 73.7\% | 78.7\% | 77.6\% | 77.7\% | 79.6\% | 78.9\% | 76.4\% | 76.9\% | 81.6\% |
| Economic Sector |  |  |  |  |  |  |  |  |  |  |  |
| Agriculture, hunting, forestry, and fishing | 118.4\% | 133.1\% | 107.6\% | 122.3\% | 104.5\% | 130.7\% | 135.7\% | 100.2\% | 127.5\% | 94.8\% | 119.5\% |
| Mining and quarrying | 102.8\% | 130.7\% | 83.2\% | 112.5\% | 158.2\% | 118.6\% | 114.6\% | 118.8\% | 189.9\% | 151.6\% | 127.9\% |
| Manufacturing industry | 76.5\% | 79.2\% | 78.9\% | 75.7\% | 82.8\% | 78.0\% | 81.0\% | 85.6\% | 78.4\% | 80.7\% | 75.3\% |
| Electricity, gas, and water | 85.4\% | 96.4\% | 92.1\% | 99.4\% | 101.1\% | 97.5\% | 92.1\% | 101.8\% | 92.1\% | 98.9\% | 103.5\% |
| Construction | 99.2\% | 115.3\% | 103.4\% | 110.1\% | 123.0\% | 131.4\% | 127.8\% | 157.7\% | 113.2\% | 137.2\% | 138.5\% |
| Trade, restaurants, and hotels | 75.8\% | 79.7\% | 78.3\% | 75.4\% | 78.0\% | 73.7\% | 79.1\% | 76.4\% | 77.7\% | 78.3\% | 82.0\% |
| Transport and storage | 105.0\% | 107.7\% | 106.7\% | 105.8\% | 107.3\% | 108.8\% | 109.5\% | 114.9\% | 109.2\% | 116.8\% | 116.5\% |
| Financial establishments, insurance, and real estate | 85.0\% | 88.1\% | 81.8\% | 82.8\% | 83.8\% | 85.8\% | 81.6\% | 83.3\% | 78.2\% | 85.7\% | 84.0\% |
| Social and community services | 77.5\% | 79.9\% | 76.7\% | 80.9\% | 80.8\% | 80.8\% | 80.2\% | 82.8\% | 82.9\% | 81.5\% | 85.4\% |
| Ocupación |  |  |  |  |  |  |  |  |  |  |  |
| Professional and technician | 89.5\% | 91.5\% | 87.4\% | 90.8\% | 89.2\% | 91.4\% | 90.2\% | 91.1\% | 86.8\% | 87.9\% | 93.9\% |
| Director or senior official | 58.1\% | 79.5\% | 85.3\% | 85.7\% | 95.5\% | 80.8\% | 89.8\% | 82.0\% | 79.5\% | 92.5\% | 75.0\% |
| Administrative and intermediate level | 81.6\% | 88.1\% | 85.3\% | 87.6\% | 88.7\% | 90.2\% | 87.9\% | 93.1\% | 90.7\% | 88.6\% | 91.7\% |
| Merchants and salespersons | 85.3\% | 78.3\% | 78.0\% | 80.0\% | 81.0\% | 74.9\% | 83.4\% | 80.1\% | 74.2\% | 79.7\% | 83.6\% |
| In services | 82.5\% | 86.2\% | 83.3\% | 85.6\% | 88.5\% | 86.8\% | 86.5\% | 90.3\% | 92.9\% | 92.7\% | 89.8\% |
| Agricultural workers | 128.4\% | 133.3\% | 114.7\% | 116.4\% | 102.3\% | 139.8\% | 124.1\% | 100.4\% | 136.6\% | 91.7\% | 128.7\% |
| Non-agricultural laborers, machinery operators, and transport services | 70.7\% | 67.1\% | 67.0\% | 70.1\% | 71.7\% | 72.7\% | 69.8\% | 74.7\% | 73.8\% | 68.0\% | 75.4\% |
| Armed Forces | 74.9\% | 71.4\% | 74.3\% | 69.6\% | 87.8\% | 110.7\% | 106.5\% | 89.9\% | 105.2\% | 107.6\% | 109.7\% |
| Others | n.d. | 82.3\% | 84.1\% | 114.1\% | 99.2\% | 96.3\% | 109.9\% | 86.4\% | 97.9\% | 94.5\% | 246.2\% |
| Formality |  |  |  |  |  |  |  |  |  |  |  |
| Informal | 88.8\% | 85.1\% | 87.7\% | 92.2\% | 88.7\% | 86.0\% | 84.6\% | 91.7\% | 91.3\% | 93.5\% | 100.2\% |
| Formal | 93.3\% | 95.6\% | 91.0\% | 91.9\% | 91.9\% | 92.8\% | 93.7\% | 94.3\% | 93.4\% | 92.9\% | 97.1\% |
| Area |  |  |  |  |  |  |  |  |  |  |  |
| Rural | 94.8\% | 99.0\% | 92.5\% | 93.6\% | 91.8\% | 91.8\% | 97.5\% | 97.4\% | 96.4\% | 92.1\% | 93.1\% |
| Urban | 90.5\% | 92.8\% | 89.7\% | 91.3\% | 91.5\% | 92.1\% | 92.2\% | 94.2\% | 93.2\% | 94.4\% | 97.7\% |
| Self-Employed |  |  |  |  |  |  |  |  |  |  |  |
| Not self-employed | 92.3\% | 93.6\% | 90.7\% | 91.9\% | 92.1\% | 93.2\% | 93.0\% | 96.1\% | 95.2\% | 95.9\% | 98.1\% |
| Self-employed | 92.5\% | 95.4\% | 91.1\% | 94.1\% | 91.5\% | 89.7\% | 95.4\% | 91.0\% | 88.4\% | 87.1\% | 82.6\% |
| Regions |  |  |  |  |  |  |  |  |  |  |  |
| Montevideo | 89.6\% | 92.5\% | 88.8\% | 89.6\% | 90.5\% | 90.4\% | 89.2\% | 91.6\% | 88.9\% | 94.0\% | 97.3\% |
| Artigas | 91.2\% | 88.5\% | 89.9\% | 105.8\% | 91.7\% | 101.4\% | 92.8\% | 95.8\% | 95.9\% | 108.7\% | 113.1\% |
| Canelones | 93.8\% | 90.5\% | 89.8\% | 92.1\% | 89.7\% | 89.2\% | 94.2\% | 98.1\% | 95.9\% | 87.5\% | 93.4\% |
| Cerro Largo | 88.1\% | 96.4\% | 93.4\% | 98.0\% | 92.8\% | 89.5\% | 104.9\% | 93.0\% | 95.3\% | 97.3\% | 101.7\% |
| Colonia | 90.8\% | 90.0\% | 89.6\% | 96.0\% | 88.3\% | 96.4\% | 97.2\% | 96.6\% | 94.0\% | 104.2\% | 87.4\% |
| Durazno | 100.5\% | 85.8\% | 95.4\% | 84.2\% | 100.4\% | 90.9\% | 100.2\% | 98.1\% | 88.6\% | 101.5\% | 74.6\% |
| Flores | 93.4\% | 84.7\% | 86.8\% | 82.0\% | 89.9\% | 91.7\% | 95.3\% | 86.8\% | 94.1\% | 89.8\% | 115.4\% |
| Florida | 81.2\% | 114.4\% | 99.4\% | 106.8\% | 88.7\% | 107.9\% | 98.9\% | 91.6\% | 99.5\% | 105.3\% | 96.7\% |
| Lavalleja | 95.8\% | 98.0\% | 84.1\% | 101.4\% | 92.2\% | 85.4\% | 109.4\% | 91.8\% | 94.9\% | 121.8\% | 113.2\% |
| Maldonado | 84.0\% | 95.2\% | 86.1\% | 88.1\% | 89.2\% | 91.9\% | 95.3\% | 95.1\% | 91.8\% | 95.7\% | 93.2\% |
| Paysandú | 94.9\% | 93.8\% | 88.9\% | 94.7\% | 94.4\% | 94.2\% | 95.8\% | 89.4\% | 98.5\% | 83.4\% | 100.0\% |
| Río Negro | 68.9\% | 86.9\% | 90.1\% | 94.3\% | 99.5\% | 81.2\% | 83.3\% | 93.0\% | 111.8\% | 91.0\% | 106.5\% |
| Rivera | 99.1\% | 93.1\% | 90.2\% | 92.7\% | 94.8\% | 97.8\% | 97.5\% | 105.1\% | 112.8\% | 94.3\% | 109.9\% |
| Rocha | 84.0\% | 84.9\% | 99.3\% | 91.8\% | 97.3\% | 97.6\% | 96.1\% | 88.6\% | 99.7\% | 94.7\% | 108.8\% |
| Salto | 109.4\% | 93.8\% | 94.6\% | 88.4\% | 100.4\% | 102.1\% | 89.1\% | 91.5\% | 110.6\% | 90.9\% | 96.8\% |
| San José | 83.1\% | 93.8\% | 80.2\% | 90.1\% | 89.3\% | 91.0\% | 99.0\% | 93.4\% | 100.6\% | 102.6\% | 95.4\% |
| Soriano | 86.0\% | 87.7\% | 95.2\% | 93.9\% | 94.4\% | 86.7\% | 100.2\% | 97.9\% | 91.6\% | 97.9\% | 82.7\% |
| Tacuarembó | 104.7\% | 94.8\% | 93.4\% | 90.1\% | 83.5\% | 97.4\% | 89.7\% | 99.3\% | 96.8\% | 86.2\% | 94.8\% |
| Treinta y Tres | 87.8\% | 115.7\% | 98.3\% | 92.3\% | 92.9\% | 104.8\% | 94.5\% | 110.3\% | 101.5\% | 114.6\% | 113.0\% |

[^9]n.d. Not Available. When the available data is not sufficient to calculate the percentage.

Only individuals with occupation and income, and frequency-weighted weights were used.

In Graph 2, the evolution of hourly earnings for women is compared to that of men over the analyzed periods. It can be observed that there is an earnings gap in all the years studied, although there is a decreasing trend over time. In the year 2019, which preceded the onset of the COVID-19 crisis, the average hourly earnings for women represented $94 \%$ of men's earnings. In the year 2021, which corresponds to the last year of the study, women's average earnings were $98 \%$ of men's earnings. However, as mentioned earlier, it is important to analyze the results of this last year with caution.

Graph 2. Hourly Labor Earnings of Women vs. Men*


Source: Own elaboration based on the harmonized continuous household surveys of Uruguay by the IDB.
*Only individuals with occupation and income were included.
The analysis focuses on occupations and compares the situation before and during the year 2020, when the Uruguayan and global economy was affected by the outbreak of COVID-19. In Figure 3, it can be observed that in the year 2019, there was a difference in favor of men in almost all occupations, except for agricultural workers and the Armed Forces. However, in the year 2021, this pattern deepens, and it is observed that only in occupations related to the Armed Forces, women do not have a salary disadvantage. It is important to note that in this type of activity, the sample size is quite small, as can be seen in Table A2.

This could create a selection bias, meaning that the few women in these occupations have a very high labor profile and, therefore, higher salaries.

Graph 3. Hourly labor earnings of women versus that of men by occupation*


Source: Own elaboration based on Uruguay's continuous household surveys harmonized by the IDB.
*Only individuals with occupation and income were considered.

As previously mentioned, two methodologies will be used to address the gender earnings gap: the Blinder-Oaxaca decomposition and the Ñopo methodology.

## Blinder-Oaxaca Decomposition

This first strategy for quantifying the evolution of the gender earnings gap allows us to decompose it into two parts. The first part is explained by the different control variables used to capture human capital, such as education, work experience, and occupation. The second part cannot be explained by these variables and could be associated with gender-differentiated regulations, prejudices, biases, or discrimination, as outlined by Becker (1957). This unexplained gap may originate from personal or statistical preferences, meaning that employers use group characteristics to evaluate individual characteristics. An example of this is the assumption that women of childbearing age are more likely to have children than older women, and therefore may interrupt their careers. Under this assumption, employers might pay lower wages to women of childbearing age to compensate for the higher probability of career interruptions, as explained by Hoyos, Ñopo, and Peña (2010).

The Blinder-Oaxaca method uses Mincer-type wage equations (Mincer, 1974), which, as described in Jann (2008), allow for the division of the difference in labor earnings into:
(i) a part explained by group differences and individual characteristics, such as education and work experience,
(ii) a second residual component that is unexplained.

Since there are two groups composed of men (H) and women (M), an explained variable (the logarithm of hourly labor earnings from the main activity), and a set of explanatory variables $X$, such as education and experience, among others, we seek to explain the average earning difference between the two groups using the explanatory variables $X$.

$$
\begin{equation*}
E G a p=E\left(Y_{H}\right)-E\left(Y_{M}\right) \tag{7}
\end{equation*}
$$

Where $E\left(Y_{g}\right)$ denotes the expectation of the logarithm of labor earnings, which is the variable of interest, and $g$ takes the value of $H$ if the equation is performed for men, or $M$ if it is done for women. A Mincer-type equation is used to explain earnings in the form $Y_{g}=\alpha_{g}+\sum_{i=1}^{k} X_{i k} \beta_{g i k}+\varepsilon_{g i}$. This expression can be substituted into equation [7]:

$$
\text { EGap }=E\left(\alpha_{H}+\sum_{i=1}^{k} X_{i k} \beta_{H i k}+\varepsilon_{H i}\right)-E\left(\alpha_{M}+\sum_{i=1}^{k} X_{i k} \beta_{M i k}+\varepsilon_{M i}\right)
$$

(2)

$$
\text { EGap }=\widehat{\alpha_{H}}+\sum_{i=1}^{k} \overline{X_{l k}} \widehat{\beta_{H l k}}-\widehat{\alpha_{M}}-\sum_{i=1}^{k} \overline{X_{l k}} \widehat{\beta_{M \iota k}}
$$

(3)

Rearranging, it is possible to identify the contribution of the explanatory variables to the differences between the groups:

$$
\text { EGap }=\left(\widehat{\alpha_{H}}-\widehat{\alpha_{M}}\right)+\sum_{\mathrm{i}=1}^{\mathrm{k}} \overline{\mathrm{X}_{\mathrm{lk}}}\left(\widetilde{\beta_{H l k}}-\widehat{\beta_{M l k}}\right)+\sum_{\mathrm{i}=1}^{\mathrm{k}}\left(\overline{\mathrm{X}_{H l k}}-\overline{\mathrm{X}_{M l k}}\right) \widehat{\beta_{H l k}}
$$

(4)
where the last component of this equation corresponds to the earnings gap accounted for by the explanatory variables, while the first two components correspond to unexplained differences.

The model was estimated using the following specification:

```
yhora \(_{i}=\beta_{0}+\sum_{i=1}^{3} \beta_{i}\) gaedu \(_{i}+\beta_{4}\) exp \(_{i}+\beta_{5}\) exp \(_{i}^{2}+\sum_{i=6}^{9} \beta_{i}\) gedad \(_{i}+\beta_{10}\) casado \(_{i}+\beta_{11}\) men6 \(_{i}+\)
\(\beta_{12}\) cnt_prop \(_{i}+\sum_{i=13}^{20} \beta_{i}\) rama \(_{i}+\sum_{i=21}^{28} \beta_{i}\) ocupa \(_{i}+\beta_{29}\) formal \(_{i}+\beta_{30}\) zona \(_{i}+\sum_{i=31}^{n} \beta_{i}\) region \(_{i}+\epsilon_{i}\)
```

(5)

Where:

- $\quad y h o r a_{i}$ are the logarithm of nominal hourly labor earnings;
- gaedu $u_{i}$ are dummy variables indicating the three highest levels of education attained as shown in table 2, relative to the base category, which is no educational level.
- $\quad e x p_{i}$ are the estimated years of experience, which are calculated as age minus years of education.
- gedad $_{i}$ are four binary variables indicating age groups from table 2, using the 25-35 years segment as the base category.
- $\operatorname{casado}_{i}$ is a binary variable that takes the value of 1 if the person is married.
- $\operatorname{men木}_{i}$ is a binary variable that takes the value of 1 if there are children under six years of age living in the household.
- $\quad c n t_{\text {prop }_{i}}$ is a binary variable that takes the value of 1 if the person is selfemployed or an independent worker.
- $\quad r_{a m a}^{i}$ are binary variables related to the different economic activities in which people are engaged, with agriculture, hunting, forestry, and fishing as the base category.
- ocupa $a_{i}$ are six binary variables related to the different occupations of the surveyed individuals.
- formal $_{i}$ is a binary variable that takes the value of 1 if the person works in the formal sector.
- $\quad z_{n} a_{i}$ is a binary variable that takes the value of 1 if the person works in the urban area.
- and region ${ }_{i}$ are binary variables that refer to the different regions of the country.

This decomposition is performed separately for women and men. While this method is widely popularized in the literature, it has some limitations. On the one hand, it assumes a relationship between explanatory characteristics and earnings that may not be true. On the other hand, the model is only informative in the sense that it addresses how the gap is decomposed, which does not imply a causal relationship. Lastly, the method does not restrict its comparison to individuals with comparable characteristics. Ñopo's (2008) model was developed precisely when trying to address the first and last limitations mentioned.

## Ñopo Decomposition

The method proposed by Ñopo (2008) is a non-parametric decomposition technique that, like the Blinder-Oaxaca model, aims to analyze earnings differences between men and women across the income distribution, not just the mean.

This Ñopo approach restricts the comparison solely to differences between men and women with comparable characteristics, known as the "common support." This allows for the generation of a synthetic counterfactual of individuals by matching men and women who have identical observable characteristics, without the need to assume any functional form in the relationship between explanatory variables and earnings. This is done through discrete characteristics, and thus, it does not require matching by propensity score or any other notion of distance between men's and women's characteristics (Ñopo 2008).

This procedure generates three groups:
(i) Women and men matched in the "common support."
(ii) Women with observable characteristics for which there are no comparable men, referred to as the "maid effect."
(iii) Men for whom there are no comparable women, referred to as the "CEO effect."

The method allows men and women with identical characteristics to be part of a "common support," facilitating the breakdown of the income difference by observed and unobserved characteristics. On the other hand, the calculation of the maid and CEO effects is performed among those individuals who fall outside this "common support."

The "maid effect" refers to those women who, given their characteristics, do not have male counterparts with comparable characteristics. This is traditionally associated with women who have lower-ranking jobs that complement their household duties. On the other hand, the "CEO effect" refers to those men who, given their characteristics, hold top-level positions and do not have female counterparts with comparable characteristics.

In summary, this model decomposes the gender earnings gap into four elements:

- The portion explained by observable characteristics.
- The portion explained by unobservable characteristics.
- The "maid effect," representing women with characteristics for which there are no comparable men.
- The "CEO effect," representing men with characteristics for which there are no comparable women.

$$
\begin{equation*}
\delta=\delta_{X}+\delta_{F}+\delta_{M}+\delta_{0} \tag{6}
\end{equation*}
$$

Where $\delta$ represents the total gender earnings difference; $\delta_{X}$ represents the earnings difference related to observable characteristics; $\delta_{F}$ is the measurement of the maid effect; $\delta_{M}$ is the measurement of the CEO effect; and $\delta_{0}$ represents the unexplained earnings difference. As mentioned earlier, this last component could be related to issues of bias and discrimination. It is worth noting that the unexplained component of this model follows the same logic as the Blinder-Oaxaca model, allowing for a comparison between both estimates.

The Ñopo model is not without limitations. Like the Blinder-Oaxaca model, it is solely informative about how the gap is decomposed but does not imply a causal relationship. Additionally, because matching is constructed with discrete variables, the probability of finding a person with the same characteristics and endowments, both for men and women, decreases as the number of explanatory variables increases, i.e., it reduces the common support, as noted by Enamorado, Izaguirre, and Ñopo (2009). This problem is
known as the "curse of dimensionality," and it's the reason why the Ñopo model should carefully consider the inclusion of new variables.

Another limitation shared by both methodologies is that they can only control for observable characteristics, and in the specific case of this study, only for the characteristics included in the harmonized household surveys by the IDB. In this sense, the gender earnings gap could also be affected by characteristics that are not observed in the survey, such as attitudinal factors, effort, and preferences for tasks in the labor market or at home, among others, which could be omitted in the analysis and thus introduce bias in the estimators due to the omission of relevant variables. Chioda (2011) provides a relevant example showing that preferences and attitudes between men and women towards work in the labor market may not be identical.

To achieve greater comparability and consistency, this study decided to perform both estimations. This approach will allow both to be compared with other studies using either of the two methodologies, as well as compared with each other since they share a common logic. Both models used hourly earnings as the dependent variable, allowing the calculation of the gender earnings gap. The explanatory variables used in the Ñopo model are:

$$
\text { gaedu }_{i}, \text { gedad }_{i}, \text { casado }_{i}, \text { men6 }_{i}, \text { cnt }_{\text {prop }_{i}}, \text { rama }_{i}, \text { ocupa }_{i}, \text { formal }_{i}, \text { zona }_{i}, \text { region }_{i} .
$$

Note that here, the experience variables are not added to keep the common support high, i.e., to avoid falling into the "curse of dimensionality." This is considering that the experience variable is constructed with information related to age and education, which are already part of the explanatory variables in the regression. ${ }^{12}$

In the case of Blinder-Oaxaca estimations, robust standard errors and probabilistic weights were used to be consistent with the survey structure, while in the Ñopo decomposition model, frequency weights were used, as allowed by the methodology.

It is worth noting that by considering only the observed wages of employed individuals, both models may suffer from selection bias. Since labor force participation is higher among men, it can often be the case that women destined to receive lower wages do not enter the labor market, unlike men, for whom potential wages may have a smaller impact on labor force participation. If this is the case, the models presented in this study would underestimate the gap. However, the increase in female participation could be mitigating this bias, making it more challenging to compare over time.

Please note that this research uses similar control variables as those presented in past studies on the income gap in Latin America and the Caribbean, such as those by Hoyos and Ñopo (2010) and Ñopo (2012).

[^10]
## 4. Results

Table 3 presents the results of the Blinder-Oaxaca decomposition estimation. It can be observed that over the 31 years covered by the calculation, the average hourly earnings gap between genders ${ }^{13}$ shows a reduction over time, as seen in Figure 4.

In all periods, the explained variables would be helping to close the gap since their coefficients are negative and statistically significant, while the unexplained part would account for the entirety of the gap.

Table 4 shows the decomposition of the earnings gap according to different aggregated explanatory variables. In this table, it can be observed that the gap explained by education is negative and statistically significant, meaning that the educational level of female workers, which is on average higher than that of men (as shown in Table AT), would be contributing to reducing the total earnings gap. Additionally, experience, the percentage of formality (which is higher among women), as well as the occupations in which most women work, would also be contributing to reducing the total earnings gap.

Finally, the region of the country in which the workers reside (both men and women) would have a negative and statistically significant effect on the gap, suggesting that the fact that female workers are more prevalent in urban areas could be reducing the earnings gap ${ }^{14}$ (Table Al) would also be reducing gender earnings inequalities.

[^11]Table 3. Blinder-Oaxaca Decomposition*
(Hourly Earnings)

|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Differential |  |  |  |  |  |  |  |  |  |  |
| Estimation for Men | 1.536*** | 3.400*** | 6.635*** | 9.296*** | 14.56*** | 19.35*** | 25.22*** | 29.37*** | 36.22*** | 38.30*** |
|  | (0.0155) | (0.0675) | (0.134) | (0.109) | (0.192) | (0.221) | (0.299) | (0.324) | (0.452) | (0.446) |
| Estimation for Women | 1.123*** | 2.499*** | 5.292*** | 7.035*** | 11.25*** | 15.80*** | 20.88*** | 24.75*** | 30.00*** | 33.53*** |
| Difference | $\begin{aligned} & (0.0134) \\ & 0.413^{* * *} \\ & (0.0205) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.0345) \\ & 0.907^{* * *} \\ & (0.0758) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.160) \\ & 1.343^{* * *} \\ & (0.209) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.0808) \\ & 2.267^{* * *} \\ & (0.136) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.197) \\ & 3.312^{* * *} \\ & (0.275) \end{aligned}$ | $\begin{aligned} & (0.228) \\ & 3.555^{* * *} \\ & (0.317) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.364) \\ & 4.339 * * * \\ & (0.471) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.341) \\ & 4.627^{* * *} \\ & (0.470) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.453) \\ & 6.220^{* * *} \\ & (0.639) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.471) \\ & 4.772^{* * *} \\ & (0.648) \\ & \hline \end{aligned}$ |
| Decomposition |  |  |  |  |  |  |  |  |  |  |
| Explained | $\begin{aligned} & \hline-0.0939^{* * *} \\ & (0.0169) \end{aligned}$ | $\begin{aligned} & \hline-0.228^{* * *} \\ & (0.0388) \end{aligned}$ | $\begin{aligned} & \hline-0.485^{* * *} \\ & (0.142) \end{aligned}$ | $\begin{aligned} & \hline-0.732^{* * *} \\ & (0.104) \end{aligned}$ | $\begin{aligned} & \hline-0.805^{* * *} \\ & (0.224) \end{aligned}$ | $\begin{aligned} & \hline-1.855^{* * *} \\ & (0.217) \end{aligned}$ | $\begin{aligned} & \hline-2.993^{* * *} \\ & (0.327) \end{aligned}$ | $\begin{aligned} & \hline-3.702^{* * *} \\ & (0.359) \end{aligned}$ | $\begin{aligned} & \hline-3.815^{* * *} \\ & (0.496) \end{aligned}$ | $\begin{aligned} & \hline-4.745^{* * *} \\ & (0.522) \end{aligned}$ |
| Unexplained | $\begin{aligned} & 0.507^{* * *} \\ & (0.0232) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.128^{* * *} \\ & (0.0891) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1.828^{* * *} \\ & (0.268) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.993^{* * *} \\ & (0.148) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.117^{* * *} \\ & (0.356) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.410^{* * *} \\ & (0.352) \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.332^{* * *} \\ & (0.585) \\ & \hline \end{aligned}$ | $\begin{aligned} & 8.329^{* * *} \\ & (0.525) \\ & \hline \end{aligned}$ | $\begin{aligned} & 10.04^{* * *} \\ & (0.800) \\ & \hline \end{aligned}$ | $\begin{aligned} & 9.517^{* * *} \\ & (0.797) \\ & \hline \end{aligned}$ |
| Decomposition (as a percentage of hourly labor earnings for women) |  |  |  |  |  |  |  |  |  |  |
| Total | 37\% | 36\% | 25\% | 32\% | 29\% | 23\% | 21\% | 19\% | 21\% | 14\% |
| Explained | -8\% | -9\% | -9\% | -10\% | -7\% | -12\% | -14\% | -15\% | -13\% | -14\% |
| Unexplained | 45\% | 45\% | 35\% | 43\% | 37\% | 34\% | 35\% | 34\% | 33\% | 28\% |
| Observations | 22450 | 22642 | 11312 | 23209 | 23840 | 24430 | 22752 | 23419 | 21704 | 21090 |


|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Differential |  |  |  |  |  |  |  |  |  |  |
| Estimation for Men | 39.26*** | 40.13*** | 39.54*** | 40.75*** | 44.56*** | 46.38*** | 60.27*** | 70.14*** | 80.36*** | 89.58*** |
|  | (0.616) | (0.575) | (0.584) | (0.603) | (0.662) | (0.748) | (0.652) | (0.761) | (0.875) | (0.936) |
| Estimation for Women | $\begin{aligned} & 34.30^{* * *} \\ & (0.726) \end{aligned}$ | $\begin{aligned} & 35.36^{* * *} \\ & (0.468) \end{aligned}$ | $\begin{aligned} & 36.72^{* * *} \\ & (0.783) \end{aligned}$ | $\begin{aligned} & 34.94^{* * *} \\ & (0.471) \end{aligned}$ | $\begin{aligned} & 39.23^{* * *} \\ & (0.806) \end{aligned}$ | $\begin{aligned} & 41.69^{* * *} \\ & (0.596) \end{aligned}$ | $\begin{aligned} & 53.13^{* * *} \\ & (0.710) \end{aligned}$ | $\begin{aligned} & 61.89^{* * *} \\ & (0.955) \end{aligned}$ | $\begin{aligned} & 68.58^{* * *} \\ & (0.798) \end{aligned}$ | $\begin{aligned} & 80.30^{* * *} \\ & (0.823) \end{aligned}$ |
| Difference | $\begin{aligned} & 4.968^{* * *} \\ & (0.952) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.767^{* * *} \\ & (0.742) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2.821^{* *} \\ & (0.977) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.810 * * * \\ & (0.765) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5.330^{* * *} \\ & (7.043) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4.694^{* * *} \\ & (0.956) \\ & \hline \end{aligned}$ | $\begin{aligned} & 7.138^{* * *} \\ & (0.964) \\ & \hline \end{aligned}$ | $\begin{aligned} & 8.257^{* * *} \\ & (7.221) \\ & \hline \end{aligned}$ | $\begin{aligned} & 11.78^{* * *} \\ & (1.184) \\ & \hline \end{aligned}$ | $\begin{aligned} & 9.282^{* * *} \\ & (7.247) \\ & \hline \end{aligned}$ |
| Decomposition |  |  |  |  |  |  |  |  |  |  |
| Explained | $\begin{aligned} & \hline-5.175^{* * *} \\ & (0.821) \end{aligned}$ | $\begin{aligned} & \hline-8.397^{* * *} \\ & (0.587) \end{aligned}$ | $\begin{aligned} & \hline-8.340^{* * *} \\ & (0.707) \end{aligned}$ | $\begin{aligned} & \hline-6.874^{* * *} \\ & (0.563) \end{aligned}$ | $\begin{aligned} & \hline-7.866^{* *} \\ & (0.779) \end{aligned}$ | $\begin{aligned} & \hline-6.730 * * * \\ & (0.687) \end{aligned}$ | $\begin{aligned} & \hline-8.523^{* * *} \\ & (0.719) \end{aligned}$ | $\begin{aligned} & \hline-12.33^{* * *} \\ & (0.891) \end{aligned}$ | $\begin{aligned} & \hline-13.95^{* * *} \\ & (0.797) \end{aligned}$ | $\begin{aligned} & \hline-13.40^{* * *} \\ & (1.033) \end{aligned}$ |
| Unexplained | $\begin{aligned} & 10.14^{* * *} \\ & (7.528) \\ & \hline \end{aligned}$ | $\begin{aligned} & 13.11^{* * *} \\ & (0.966) \\ & \hline \end{aligned}$ | $\begin{aligned} & 11.16^{* * *} \\ & (7.376) \\ & \hline \end{aligned}$ | $\begin{aligned} & 12.68^{* *} \\ & (0.903) \\ & \hline \end{aligned}$ | $\begin{aligned} & 13.20^{* * *} \\ & (1.441) \\ & \hline \end{aligned}$ | $\begin{aligned} & 11.42^{* * *} \\ & (1.102) \\ & \hline \end{aligned}$ | $\begin{aligned} & 15.66^{* * *} \\ & (7.299) \\ & \hline \end{aligned}$ | $\begin{aligned} & 20.58^{* * *} \\ & (1.686) \\ & \hline \end{aligned}$ | $\begin{aligned} & 25.73^{* * *} \\ & (7.474) \\ & \hline \end{aligned}$ | $\begin{aligned} & 22.68^{* * *} \\ & (1.425) \\ & \hline \end{aligned}$ |
| Decomposition (as a percentage of hourly labor earnings for women) |  |  |  |  |  |  |  |  |  |  |
| Total | 14\% | 13\% | 8\% | 17\% | 14\% | 11\% | 13\% | 13\% | 17\% | 12\% |
| Explained | -15\% | -24\% | -23\% | -20\% | -20\% | -16\% | -16\% | -20\% | -20\% | -17\% |
| Unexplained | 30\% | 37\% | 30\% | 36\% | 34\% | 27\% | 29\% | 33\% | 38\% | 28\% |
| Observations | 21234 | 22677 | 21539 | 20882 | 21957 | 19333 | 60594 | 55450 | 58859 | 56241 |


|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Differential |  |  |  |  |  |  |  |  |  |  |  |
| Estimation for Men | 96.62*** | 104.4*** | 119.*** | 135.2*** | 150.1*** | 166.0*** | 183.3*** | 192.5*** | 209.4*** | 221.3*** | 220.2*** |
|  | (0.870) | (0.789) | (0.888) | (1.046) | (1.142) | (1.626) | (1.357) | (1.639) | (1.966) | (3.163) | (3.238) |
| Estimation for Women | 86.60*** | 95.52*** | 105.5*** | 122.2*** | 135.8*** | 151.3*** | 169.4*** | 181.2*** | 194.7*** | 205.5*** | 212.7*** |
| Difference | $\begin{aligned} & (0.768) \\ & 10.02^{* * *} \\ & (1.160) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { (0.792) } \\ & 8.852^{* *} \\ & (7.118) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.768) \\ & 13.66^{* * *} \\ & (7.175) \\ & \hline \end{aligned}$ | $\begin{aligned} & (0.961) \\ & 13.07 * * \\ & (1.420) \\ & \hline \end{aligned}$ | $\begin{aligned} & (7.213) \\ & 14.34^{* * *} \\ & (1.666) \end{aligned}$ | $\begin{aligned} & (7.220) \\ & 14.65^{* * *} \\ & (2.033) \\ & \hline \end{aligned}$ | $\begin{aligned} & (1.408) \\ & 13.89^{* * *} \\ & (1.955) \\ & \hline \end{aligned}$ | $\begin{aligned} & (2.090) \\ & 11.37^{* * *} \\ & (2.656) \\ & \hline \end{aligned}$ | $\begin{aligned} & (1.829) \\ & 14.77^{* * *} \\ & (2.686) \\ & \hline \end{aligned}$ | $\begin{aligned} & (1.873) \\ & 15.83^{* * *} \\ & (3.676) \\ & \hline \end{aligned}$ | $\begin{aligned} & (3.636) \\ & 8.066 \\ & (4.869) \\ & \hline \end{aligned}$ |
| Decomposition |  |  |  |  |  |  |  |  |  |  |  |
| Explained ${ }^{\text {Unexplained }}$ | $-16.20^{* * *}$ <br> $(0.831)$ <br> $26.22^{* * *}$ <br> $(7.393)$ | $-13.45 * * *$ $(0.835)$ $22.30 * * *$ $(1.361)$ | $-16.19^{* * *}$ $(0.926)$ $29.80^{* * *}$ $(7.469)$ | $-15.83^{* * *}$ <br> $(1.046)$ <br> $28.90 * * *$ <br> $(1.662)$ | $-16.19^{* * *}$ <br> $(7.136)$ <br> $30.52^{* * *}$ <br> $(1.835)$ | $\begin{aligned} & \hline-19.27^{* * *} \\ & (1.332) \\ & 33.99^{* * *} \\ & (2.476) \\ & \hline \end{aligned}$ | $-22.34^{* * *}$ <br> $(1.414)$ <br> $36.23^{* * *}$ <br> $(2.329)$ | $-26.58^{* * *}$ <br> $(1.726)$ <br> $37.95^{* * *}$ <br> $(3.277)$ | $\begin{aligned} & \hline-28.06^{* * *} \\ & (2.151) \\ & 42.77^{* * *} \\ & (3.900) \\ & \hline \end{aligned}$ | $-33.67^{* * *}$ <br> $(3.353)$ <br> $49.50^{* * *}$ <br> $(6.041)$ | $-30.12^{* * *}$ <br> $(3.372)$ <br> $38.18^{* * *}$ <br> $(5.717)$ |
| Decomposition (as a percentage of hourly labor earnings for women) |  |  |  |  |  |  |  |  |  |  |  |
| Total | 12\% | 9\% | 13\% | 11\% | 11\% | 10\% | 8\% | 6\% | 8\% | 8\% | 4\% |
| Explained | -19\% | -14\% | -15\% | -13\% | -12\% | -13\% | -13\% | -15\% | -14\% | -16\% | -74\% |
| Unexplained | 30\% | 23\% | 28\% | 24\% | 22\% | 22\% | 21\% | 21\% | 22\% | 24\% | 18\% |
| Observations | 59154 | 54555 | 57851 | 59583 | 54531 | 52601 | 52401 | 47454 | 46780 | 60014 | 12172 |

t-Statistic in parentheses

* $p<0.05,{ }^{*} p<0.01,{ }^{\prime \prime} p<0.001$

Source: Own elaboration based on household surveys from Uruguay harmonized by the IDB.
Only individuals with occupation and income and probabilistic weightings were used.

Table 4, Components of the explained difference in Blinder-Oaxaca*

## (Hourly earnings)

|  | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Explained Difference | -0.094*** | -0.228*** | -0.485*** | -0.732*** | -0.805*** | $-1.855^{* * *}$ | -2.993*** | -3.702*** | $-3.815^{* * *}$ | -4.745*** |
| Education | -0.046*** | -0.177*** | -0.432*** | -0.366*** | -0.663*** | -0.961*** | -1.322*** | -1.617*** | $-2.285^{* * *}$ | -2.069*** |
| Experience | -0.0157** | -0.069*** | -0.00274 | -0.213*** | -0.201*** | -0.328*** | -0.313*** | -0.426*** | -0.191 | -0.429*** |
| Personal and Family Characteristics | $0.0548^{* *}$ | 0.112*** | $0.182^{* *}$ | $0.322^{* * *}$ | $0.478 * * *$ | $0.493 * * *$ | 0.639*** | 0.707*** | 0.825*** | 0.705*** |
| Self-Employment | 0.000067 | -0.00141 | 0.000182 | -0.00971 | -0.00522 | 0.0225 | -0.00938 | $0.113^{* *}$ | -0.120 | -0.170 |
| Economic Activity | 0.0142 | $0.112^{* *}$ | 0.252** | 0.150** | 0.226 | $0.423^{* *}$ | 0.215 | 0.392* | 0.780** | 0.753** |
| Occupation | -0.086*** | -0.219*** | -0.315** | -0.443*** | -0.448** | -7.195*** | -1.699*** | $-2.412^{* * *}$ | -2.473*** | -3.004*** |
| Region | -0.0088*** | -0.046*** | -0.129*** | -0.162*** | -0.159*** | $-0.311^{* * *}$ | -0.497*** | -0.498*** | -0.313*** | -0.533*** |
| Formality | -0.0062*** | -0.00560 | -0.0398 | -0.0109 | -0.0322 | 0.00152 | -0.00631 | 0.0373 | -0.0382 | -0.0590* |
| Area | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |


|  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2007 | 2008 | 2009 | 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Explained Difference | -5.175*** | -8.391*** | -8.340*** | $-6.874 * * *$ | -7.866*** | -6.730*** | -8.523*** | -12.33*** | -13.95*** | -13.40*** |
| Education | $-2.345^{* * *}$ | -4.318*** | -4.570*** | -4.473*** | $-5.408^{* * *}$ | -2.769*** | $-3.805^{* * *}$ | -8.539*** | -8.617*** | -8.679*** |
| Experience | -0.423** | -0.567*** | -0.706*** | -0.324* | -0.176 | -0.532** | -0.459*** | -7.132*** | $-1.326^{* * *}$ | $-1.623^{* * *}$ |
| Personal and Family Characteristics | 0.931*** | 0.835*** | 0.951*** | 0.612*** | 0.269 | 0.116 | -0.0444 | 0.221 | 0.827** | 0.769* |
| Self-Employment | -0.178 | -0.0800 | -0.0869 | -0.109 | -0.0118 | 0.00832 | $-0.267^{* * *}$ | -0.0907 | -0.152* | -0.0692 |
| Economic Activity | -0.327 | -1.087* | -0.126 | -0.0484 | 0.853 | 0.994 | 0.679 | -0.433 | -0.101 | 0.508 |
| Occupation | $-2.275^{* *}$ | -2.630*** | -3.049*** | $-1.872^{* * *}$ | -2.791*** | $-4.163^{* *}$ | -3.609*** | -7.193 | $-3.732^{* *}$ | $-3.278^{* *}$ |
| Region | -0.579*** | -0.613*** | -0.725*** | -0.612*** | -0.702*** | -0.418*** | -0.717*** | -0.847*** | -0.674*** | -0.836*** |
| Formality | 0.0203 | 0.0689 | -0.0285 | -0.0474 | 0.100 | 0.0343 | 0.125** | 0.140** | 0.218** | 0.120* |
| Area | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | -0.432*** | -0.457*** | -0.400*** | -0.314*** |


|  | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Explained Difference | -16.20*** | -13.45*** | -16.19*** | -15.83*** | -16.19*** | -19.27*** | -22.34*** | -26.58*** | -28.06*** | -33.67*** | -30.12*** |
| Education | -9.467*** | $-6.786^{* *}$ | -9.412*** | -9.495*** | -9.689*** | -17.49*** | -13.08*** | -13.80*** | -13.59*** | -14.95*** | -15.99*** |
| Experience | -1.721*** | -1.037*** | -7.291*** | -1.270*** | -2.562*** | -2.420*** | -2.296*** | -2.631*** | -3.385*** | $-2.918^{* * *}$ | -3.176** |
| Personal and Family Characteristics | 0.163 | -0.165 | -0.163 | -0.313 | -0.0823 | -0.806 | -0.0447 | 0.599 | 1.100 | -0.789 | 0.961 |
| Self-Employment | -0.0134 | $0.194^{* * *}$ | 0.157* | 0.210** | 0.237* | 0.365** | $0.713^{* * *}$ | 0.414 | 0.286 | 0.302 | -0.146 |
| Economic Activity | -2.500*** | -0.780 | -0.353 | 1.290 | 2.729** | -0.351 | 1.009 | -0.948 | -2.875* | -2.857 | -1.359 |
| Occupation | -1.670 | $-4.384^{* * *}$ | -4.388*** | -5.145*** | -5.533*** | -2.817* | -6.244*** | -7.702*** | -7.145*** | -10.05*** | -8.738*** |
| Region | -0.767*** | -0.485*** | -0.550*** | -0.656*** | -0.704*** | -0.810*** | -7.199*** | -1.454*** | -1.253*** | -0.537* | -1.231*** |
| Formality | 0.0953 | 0.0335 | -0.102 | -0.265** | -0.445*** | -0.692*** | -1.030*** | -0.993*** | -0.873*** | $-1.554^{* * *}$ | -0.408 |
| Area | $-0.316^{* * *}$ | -0.0347 | -0.0790 | -0.184* | -0.137* | -0.252** | -0.162 | -0.0560 | -0.324* | -0.312* | -0.0337 |

* $p<0.05,{ }^{*} p<0.01,{ }^{+*} p<0.001$

Source: Own elaboration based on household surveys from Uruguay harmonized by the IDB.
Only individuals with occupation and income and probabilistic weightings were used.
n.d. Not Available. When data is insufficient to calculate the percentage.

Figure 4. Total earnings gap estimated through Blinder-Oaxaca decomposition.


Source: Own elaboration based on continuous household surveys from Uruguay harmonized by the IDB.
*Only individuals with occupation and income were used.

Table 5 presents the results of the Ñopo decomposition, in which a gender earnings gap is observed in all analyzed years. The initial gap in the first analyzed year is $37 \%$, and from that point, the gap gradually decreases. Similar to the results of the Blinder-Oaxaca model, it is observed that the reduction in the gap would be due to explanatory variables, but most of the gap is attributed to factors not explained by the analyzed variables. Additionally, there is what Ñopo (2008) has called the "Maid Effect," which contributes to the gap, and the "CEO Effect," which helps close the gap. While there are small differences between the estimates obtained from Blinder-Oaxaca and those obtained from Ñopo, both methods are used following common practices in the international literature, and their differences are due to methodological aspects.

It is important to note that the common support for different years, both for men and women, is not less than $34 \%$ in any case. This value is similar to what is found in models for countries in Latin America and the Caribbean used in Hoyos \& Ñopo (2010) and Ñopo (2012), which use similar control variables to those presented in this study. Like in the Blinder-Oaxaca model, there is an earnings gap with a decreasing trend over time.

Table 5. Ñopo Decomposition

|  | $\mathbf{1 9 9 0}$ | $\mathbf{1 9 9 1}$ | $\mathbf{1 9 9 2}$ | $\mathbf{1 9 9 3}$ | $\mathbf{1 9 9 4}$ | $\mathbf{1 9 9 5}$ | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ | $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 1}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 3}$ | $\mathbf{2 0 0 4}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (Total) | $37 \%$ | $36 \%$ | $26 \%$ | $32 \%$ | $29 \%$ | $22 \%$ | $20 \%$ | $19 \%$ | $21 \%$ | $14 \%$ | $14 \%$ | $13 \%$ | $8 \%$ | $17 \%$ | $14 \%$ |  |
| (Unexplained) | $36 \%$ | $40 \%$ | $32 \%$ | $39 \%$ | $35 \%$ | $32 \%$ | $31 \%$ | $31 \%$ | $32 \%$ | $23 \%$ | $29 \%$ | $34 \%$ | $37 \%$ | $37 \%$ | $32 \%$ |  |
| (CEO Effect) | $-10 \%$ | $-12 \%$ | $-14 \%$ | $-14 \%$ | $-16 \%$ | $-16 \%$ | $-20 \%$ | $-20 \%$ | $-15 \%$ | $-16 \%$ | $-21 \%$ | $-34 \%$ | $-29 \%$ | $-25 \%$ | $-24 \%$ |  |
| (Maid Effect) | $5 \%$ | $9 \%$ | $11 \%$ | $8 \%$ | $9 \%$ | $9 \%$ | $13 \%$ | $12 \%$ | $9 \%$ | $8 \%$ | $15 \%$ | $14 \%$ | $14 \%$ | $13 \%$ | $16 \%$ |  |
| (Explained) | $6 \%$ | $-1 \%$ | $-3 \%$ | $-1 \%$ | $1 \%$ | $-3 \%$ | $-3 \%$ | $-4 \%$ | $-5 \%$ | $-1 \%$ | $-10 \%$ | $0 \%$ | $-14 \%$ | $-9 \%$ | $-10 \%$ |  |
| $\%$ Men | $44 \%$ | $40 \%$ | $34 \%$ | $40 \%$ | $40 \%$ | $40 \%$ | $39 \%$ | $38 \%$ | $40 \%$ | $39 \%$ | $38 \%$ | $40 \%$ | $39 \%$ | $40 \%$ | $41 \%$ |  |
| \% Women | $61 \%$ | $59 \%$ | $48 \%$ | $59 \%$ | $59 \%$ | $58 \%$ | $59 \%$ | $58 \%$ | $58 \%$ | $58 \%$ | $55 \%$ | $58 \%$ | $59 \%$ | $60 \%$ | $59 \%$ |  |
| Standard Error | $2 \%$ | $4 \%$ | $7 \%$ | $2 \%$ | $2 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $3 \%$ | $4 \%$ | $3 \%$ | $4 \%$ | $3 \%$ | $4 \%$ |  |


|  | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 9}$ | $\mathbf{2 0 2 0}$ | $\mathbf{2 0 2 1}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| (Total) | $13 \%$ | $13 \%$ | $16 \%$ | $17 \%$ | $12 \%$ | $12 \%$ | $9 \%$ | $13 \%$ | $11 \%$ | $11 \%$ | $10 \%$ | $8 \%$ | $6 \%$ | $8 \%$ | $7 \%$ | $4 \%$ |
| (Unexplained) | $35 \%$ | $28 \%$ | $31 \%$ | $30 \%$ | $25 \%$ | $32 \%$ | $25 \%$ | $29 \%$ | $25 \%$ | $24 \%$ | $27 \%$ | $24 \%$ | $21 \%$ | $24 \%$ | $27 \%$ | $20 \%$ |
| (CEO Effect) | $-30 \%$ | $-16 \%$ | $-16 \%$ | $-16 \%$ | $-15 \%$ | $-15 \%$ | $-12 \%$ | $-15 \%$ | $-14 \%$ | $-14 \%$ | $-15 \%$ | $-16 \%$ | $-19 \%$ | $-18 \%$ | $-17 \%$ | $-22 \%$ |
| (Maid Effect) | $14 \%$ | $9 \%$ | $9 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $9 \%$ | $10 \%$ | $10 \%$ | $10 \%$ | $9 \%$ | $9 \%$ | $12 \%$ | $11 \%$ | $10 \%$ | $15 \%$ |
| (Explained) | $-6 \%$ | $-8 \%$ | $-7 \%$ | $-6 \%$ | $-8 \%$ | $-16 \%$ | $-12 \%$ | $-12 \%$ | $-11 \%$ | $-9 \%$ | $-17 \%$ | $-8 \%$ | $-7 \%$ | $-9 \%$ | $-12 \%$ | $-9 \%$ |
| $\%$ Men | $42 \%$ | $50 \%$ | $51 \%$ | $48 \%$ | $45 \%$ | $50 \%$ | $47 \%$ | $48 \%$ | $49 \%$ | $48 \%$ | $48 \%$ | $48 \%$ | $47 \%$ | $47 \%$ | $51 \%$ | $35 \%$ |
| \% Women | $60 \%$ | $70 \%$ | $68 \%$ | $65 \%$ | $62 \%$ | $65 \%$ | $63 \%$ | $64 \%$ | $64 \%$ | $63 \%$ | $64 \%$ | $63 \%$ | $63 \%$ | $63 \%$ | $67 \%$ | $47 \%$ |
| Standard Error | $3 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $2 \%$ | $1 \%$ | $1 \%$ | $1 \%$ | $1 \%$ | $1 \%$ | $2 \%$ | $1 \%$ | $2 \%$ | $1 \%$ | $2 \%$ | $3 \%$ |

Source: Author's own elaboration based on Uruguay household surveys harmonized by the IDB.
Only individuals with occupation and income were used, with frequency-weighted weights.

In Figure 5, the evolution of the gender earnings gap estimated using the Ñopo decomposition is presented. It can be observed that the unexplained part (represented by the yellow bar) remained high in most years, although with a decreasing trend over time. In 2021, the component explained by the variables used in the model would also be helping to close the gap by 9\%, while the unexplained component would be contributing to a $20 \%$ gap. This latter component represents the difference in incomes earned by women and is due to unobservable factors, such as the biases and discrimination mentioned earlier. Together, without the higher level of education, the good labor profile, and the CEO effect, the gap would be 31\% larger in 2021. These results highlight the importance of explanatory variables and underscore that the gap largely persists due to unobservable factors and gender biases in the labor market. ${ }^{15}$

[^12]Figure 5. Total earnings gap estimated through Blinder-Oaxaca and Ñopo decompositions


Source: Author's own calculations based on continuous household surveys in Uruguay harmonized by the IDB.
*Only individuals with occupation and income were included.

Figure 6 compares the gender earnings gaps calculated with both methodologies for the years 1990, 2000, 2010, 2019, and 2020. These years were selected to maintain constant time intervals and analyze the evolution before and during 2020, the year when the COVID-19 crisis erupted. Both the explained and unexplained components are included in the comparison.

A noteworthy finding is that both methodologies are consistent in showing that there is an unexplained gender earnings gap in favor of men in all years. However, the explanatory variables help reduce this gap, except for the year 1990, where the effect is inconclusive in both methodologies.

These results indicate that throughout the analyzed decades, an unexplained gender earnings gap has persisted, not accounted for by observable characteristics, and the explanatory variables have played a role in reducing this gap, although their impact may vary at different times. The consistency in the results of both methodologies reinforces the evidence that gender discrimination and other unobservable factors may continue to influence the earnings gap in Uruguay.

Figure 6. Total earnings gap estimated through the Blinder-Oaxaca (BO) and Ñopo decompositions*


Source: Own elaboration based on the continuous household surveys of Uruguay harmonized by the IDB.

* Only individuals with occupation and income were used.

Note: For the Ñopo methodology, the data for the explained component is calculated as the sum of the explained component, the CEO effect, and the maid effect.

On the other hand, in Figure 7, the evolution of the unexplained pay gap for the same periods used in Figure 6 is presented. Confidence intervals for 1.96 standard deviations above and below the estimator are included, allowing us to appreciate that both methodologies show a statistically significant unexplained earnings gap for the different years analyzed, being statistically equal for both methodologies at the $5 \%$ level of statistical significance.

Figure 7. Unexplained earnings gap estimated through BlinderOaxaca and Ñopo decompositions


Source: Own elaboration based on the continuous household surveys of Uruguay harmonized by the IDB.
Note: The bars represent the unexplained component at the $95 \%$ confidence level.

Furthermore, the Ñopo decomposition allows for disaggregating the earnings gap for the categories of different explanatory variables. In Figure 8, the earnings gap - both total and unexplained - by formality status is presented. There is a clear distinction in the total earnings gap between people working in the formal sector and those in the informal sector. A higher gender earnings gap is observed among individuals linked to the informal sector.

On the other hand, the unexplained gap is statistically significant in both the formal and informal sectors in most of the analyzed years. Figure 8 includes confidence intervals using 1.96 standard deviations above and below the estimator, that is, at the $95 \%$ confidence level. It can be observed that this gap has slightly decreased over time.

Graph 8. Earnings Gap Estimated Through the Ñopo Decomposition by Formality


Source: Own elaboration based on the continuous household surveys of Uruguay harmonized by the IDB.
Note: The bars represent the unexplained component at the $95 \%$ confidence level.

The situation of the gender pay gap in the informal sector may be due to the lack of labor legislation that regulates employment relationships and prevailing business practices in that sector.

## 5. Conclusions

According to the findings of this study, the gender earnings gap has shown a decreasing trend in all analyzed periods. The remaining persistence of the gap could be fully explained by unobservable factors in household surveys. This implies that variables such as experience, personal and family characteristics, sector and economic activity, and the region of the country are not factors that explain the persisting gap. Therefore, it can be concluded that the gap may be more closely related to issues of regulations, biases, or discrimination, rather than individual characteristics or preferences.

The study also highlights that this gap is more pronounced among individuals working in the informal sector and exhibits heterogeneity across occupations, although it is statistically significant in most of them. These findings indicate that the gender earnings gap has persisted over the last two decades, potentially limiting income opportunities for women.

Regarding the variables contributing to closing the gender pay gap in Uruguay, the importance of education, work experience, formality, and occupations where women are more represented is emphasized. Additionally, the region of the country where workers reside also plays a role in reducing this gap.

These conclusions largely align with the literature on gender earnings gaps in Uruguay. Consistent with Amarante and Espino (2004), it was found that the unexplained gap remains highly significant in the country, and while women have greater characteristics or endowments than men, the gap remains in favor of men. In line with the work of Piras (2004), Yahmed (2010), and Katzkowicz and Querejeta (2013), education is a relevant factor in closing the gap due to the increase in the proportion of women who have completed their secondary education. Similar to ILO (2019a), this study concludes that the unexplained gap persists primarily among low-income workers and selfemployed or informal workers.

In line with the findings of Bucheli and Sanromán (2004) and Barafani et al. (2022), this document establishes that the unobservable factor (traditionally interpreted as discrimination) is the primary driver of the earnings gap unfavorable to women. Like Katzkowicz and Querejeta (2013), this study found that the greater endowment of human capital, i.e., the better labor profile of women, partially compensates for this disadvantage. Furthermore, as seen in the work of Boraz and Romano (2010), this study establishes that the gap is more pronounced in the informal sector.

This document contributes to diagnosing the evolution of the gender earnings gap in Uruguay year by year between 1990 and 2021. The conclusions presented here are relevant because evidence-based public policies rely on reliable data and estimations that can inform decision-making by policymakers.

The conclusions mentioned above are open to the possibility of being complemented by future analyses with a more detailed and in-depth examination of the earnings gap for groups of individuals with different specific characteristics. The same applies to the use of new resources that can
improve the quantification of the earnings gap and its determinants. It is important to analyze which unobserved factors affect the earnings gap and propose response policies. Finally, there is a need for a specific study on the consequences that the pandemic has had and continues to have on the earnings gap in Uruguay.

## References

Albrecht, J., A. Van Vuuren, \& S. Vroman. 2009. "Counterfactual Distributions with Sample Selection Adjustments: Econometric Theory and an Application to the Netherlands." *Labour Economics*, 16(4), 383-396.

Ajayi, K., Das, S., Delavallade, C., Ketema, T., \& Rouanet, L. 2022. "Gender Differences in Socio-Emotional Skills and Economic Outcomes." *World Bank Policy Research Working Paper*, No. 10197. World Bank, Washington, DC.

Amarante, V., \& Espino, A. 2004. "La segregación ocupacional de género y las diferencias en las remuneraciones de los asalariados privados. Uruguay, 19902000." *Desarrollo Económico*, 109-129.

Ammerman, C., \& Groysberg, B. 2021. *Glass Half-broken: Shattering the Barriers that Still Hold Women Back at Work.* Boston: Harvard Business Press.

Atal, J., Ñopo, H., \& Winder, N. 2009. "New Century, Old Disparities: Gender and Ethnic Wage Gaps in Latin America." *IDB Working Papers Series*, IDB-WB 109. Inter-American Development Bank, Washington, DC.

Barafani, M., Benitez, A., Garnero, P., Torrealday, J., \& Rodriguez Chatruc, M. 2022. "Gender Gap in Foreign Trade: Same Game, Different Rules." *Technical Note No. IDB-TN-2610.* Inter-American Development Bank, Washington, DC.

Becker, G. 1957. *The Economics of Discrimination.* Chicago: Univ. Chicago Press.

Boraz, F., \& Robano, C. 2010. "Wage Gap in Uruguay." *Revista de análisis económico*, 25(1), 49-77.

Bordón, P., Canals, C., \& Mizala, A. 2020. "The Gender Gap in College Major Choice in Chile." *Economics of Education Review*, 77, 102011.

Bucheli, M., \& Sanromán, G. 2004. "Female wages in Uruguay: Is there a glass ceiling?"

Chioda, L. 2011. *Work and Family, Latin American and Caribbean Women in Search of a New Balance.* World Bank, Washington, D.C. Conference Edition.

Enamorado, T., Izaguirre, C., \& Ñopo, H. 2009. "Gender Wage Gaps in Central American Countries: Evidence from a Non-Parametric Approach." *IDB Working Paper Series*, No. IDB-WP-1ור. Inter-American Development Bank, Washington, DC.

Firpo, S., Fortin, M., \& Lemieux, T. 2009. "Decomposition Methods in Economics." *Handbook of Labor Economics*, Vol.4, Part A, 1-102.

Frisancho, V., \& Queijo Von Heideken, V. 2022. *Closing Gender Gaps in the Southern Cone: An Untapped Potential for Growth.* Washington, DC: InterAmerican Development Bank, Washington, DC.

Gasparini, L., \& Marchionni, M. (Eds.). 2015. *Bridging Gender Gaps? The Rise and Deceleration of Female Labor Force Participation in Latin America.* Universidad Nacional de La Plata, Facultad de Ciencias Económicas, CEDLAS.

Hoyos, A., \& Ñopo, H. 2010. "Evolution of Gender Gaps in Latin America at the Turn of the Twentieth Century: An Addendum to 'New Century, Old Disparities.'" *IDB Working Paper Series*, No. 176, Inter-American Development Bank, Washington, DC.

Hoyos, A., Ñopo, H., \& Peña, X. 2010. "The Persistent Gender Earnings Gap in Colombia, 1994-2006." *IDB Working Paper Series*, No. IDB-WP-174. InterAmerican Development Bank, Washington, DC.

Jann, B. 2008. "The Blinder-Oaxaca Decomposition for Linear Regression Models." *The Stata Journal*, No. 4, 453-479.

Katzkowicz, S., \& Querejeta, M. 2013. "Evolución de la segregación ocupacional y su impacto en las brechas salariales de género." *Instituto de EconomiaIECON.*

Kleven, H., Landais, C., \& Søgaard, J. 2019. "Children and Gender Inequality: Evidence from Denmark." *American Economic Journal: Applied Economics*, Vol. 11(4), 181-209.

Machado, J. A., \& Mata, J. (2005). "Counterfactual decomposition of changes in wage distributions using quantile regression." *Journal of applied Econometrics*, 20(4), 445-465.

Mincer, J. 1974. "Schooling, Experience, and Earnings." *Human Behavior \& Social Institutions*, No. 2.

Ñopo, H. 2008. "Matching as a Tool to Decompose Wage Gaps." *The Review of Economics and Statistics*, Vol. 90, No. 2, 290-299.

Ñopo, H. 2012. *New Century, Old Disparities: Gender and Ethnic Earnings gaps in Latin America and the Caribbean.* Washington, DC: Inter-American Development Bank.

Oaxaca, R.L. 1973. "Male-Female Wage Differentials in Urban Labor Markets." *International Economic Review*, 14, No. 3, 693-709.

Organización Internacional del Trabajo (OIT). 2019a. *Informe Mundial sobre Salarios 2018/19: ¿Qué hay detrás de la brecha salarial de género?*

Organización Internacional del Trabajo (OIT). 2019b. *Panorama Laboral Temático 5: Mujeres en el mundo del trabajo. Retos pendientes hacia una efectiva equidad en América Latina y el Caribe.* Lima: OIT / Oficina Regional para América Latina y el Caribe.

Organización Internacional del Trabajo (OIT). 2019c. *La brecha salarial entre hombres y mujeres en América Latina: En el camino hacia la igualdad salarial.* Lima: OIT / Oficina regional.

Piras, C. 2004. *Women at work: challenges for Latin America / Claudia Piras, editor.* IDB Publications.

Psacharopoulos, G., \& Tzannatos, Z. 1992. "Latin American Women's Earnings and Participation in the Labor Force." *World Bank Policy Research Working Paper*, 856. World Bank, Washington, DC.

Terra, M. I., Bucheli, M., \& Estrades, C. 2009. "Trade openness and gender in Uruguay: a CGE analysis." *Poverty and Economic Policy Research Network Working Paper*, (2008-16).

Urquidi, M., \& Chalup, M. 2023. "Gender Wage Income Gap in Latin America and the Caribbean: An Analysis of lts Different Components and Determinants." *Technical Note IDB-TN-02650.* Inter-American Development Bank, Washington, DC.

Urquidi, M., Chalup, M., \& Durand, G. 2022. "Gender Wage Income Gap in Paraguay: An Analysis of Its Evolution in the Period 2002 to 2019." *Technical Note IDB-TN-02525.* Inter-American Development Bank, Washington, DC.

Urquidi, M., Valencia, H., \& Durand, G. 2021. "Gender Wage Income Gap in Bolivia: An Analysis of Its Evolution in the Period 1993 to 2018." *Revista de Análisis Económico-Economic Analysis Review*, 36(2), 95-124.

World Economic Forum (WEF). 2022. *The Global Gender Gap Report 2022.* Available at https://www.weforum.org/reports/global-gender-gap-report2022.

Yahmed, S. B. (2010). "Gender wage discrimination and trade openness." GREQAM and Université de la Méditerranée.

Table A1. Distribution of characteristics of the employed population receiving income by year and gender, males (M) and females (F)

|  | 1990 |  | 1991 |  | 1992 |  | 1993 |  | 1994 |  | 1995 |  | 1996 |  | 1997 |  | 1998 |  | 1999 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| Years of Education | 8.8 | 9.4 | 8.8 | 9.5 | 8.9 | 9.8 | 9.1 | 9.8 | 9.1 | 9.8 | 9.2 | 10.1 | 9.4 | 10.3 | 9.3 | 10.2 | 9.6 | 10.5 | 9.6 | 10.4 |
| None | 15\% | 14\% | 16\% | 12\% | 14\% | 10\% | 13\% | 10\% | 13\% | 10\% | 12\% | 9\% | 11\% | 7\% | 10\% | 7\% | 9\% | 6\% | 9\% | 6\% |
| Primary | 58\% | 56\% | 57\% | 55\% | 59\% | 54\% | 58\% | 55\% | 57\% | 55\% | 58\% | 53\% | 57\% | 53\% | 57\% | 51\% | 57\% | 51\% | 56\% | 50\% |
| Secondary | 21\% | 19\% | 21\% | 22\% | 22\% | 24\% | 22\% | 23\% | 23\% | 23\% | 24\% | 26\% | 25\% | 27\% | 26\% | 29\% | 27\% | 29\% | 28\% | 30\% |
| Tertiary | 6\% | 11\% | 6\% | 11\% | 6\% | 12\% | 6\% | 12\% | 6\% | 12\% | 7\% | 13\% | 7\% | 14\% | 6\% | 12\% | 7\% | 14\% | 7\% | 13\% |
| Years of Experience | 24.0 | 22.3 | 23.9 | 22.6 | 24.0 | 22.3 | 23.5 | 22.2 | 23.3 | 22.4 | 23.3 | 22.0 | 23.2 | 21.9 | 23.1 | 22.1 | 22.7 | 21.7 | 22.8 | 22.3 |
| 15-25 | 19\% | 19\% | 20\% | 19\% | 20\% | 19\% | 20\% | 20\% | 21\% | 19\% | 21\% | 20\% | 21\% | 20\% | 21\% | 19\% | 20\% | 19\% | 20\% | 18\% |
| 26-35 | 25\% | 27\% | 24\% | 26\% | 24\% | 25\% | 23\% | 25\% | 24\% | 24\% | 23\% | 24\% | 23\% | 23\% | 23\% | 24\% | 24\% | 25\% | 23\% | 25\% |
| 36-45 | 23\% | 26\% | 23\% | 25\% | 23\% | 27\% | 23\% | 26\% | 23\% | 27\% | 23\% | 26\% | 23\% | 26\% | 24\% | 26\% | 25\% | 27\% | 25\% | 27\% |
| 46-55 | 20\% | 19\% | 20\% | 20\% | 19\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 21\% | 20\% | 21\% | 20\% | 20\% | 20\% | 21\% |
| 56-65 | 13\% | 9\% | 14\% | 10\% | 14\% | 9\% | 13\% | 9\% | 12\% | 10\% | 13\% | 10\% | 12\% | 10\% | 12\% | 10\% | 11\% | 10\% | 11\% | 10\% |
| Married | 77\% | 55\% | 70\% | 55\% | 70\% | 55\% | 69\% | 54\% | 68\% | 54\% | 67\% | 54\% | 68\% | 53\% | 66\% | 54\% | 68\% | 55\% | 68\% | 55\% |
| Children under 6 years old in the household | 29\% | 26\% | 30\% | 26\% | 28\% | 24\% | 30\% | 25\% | 28\% | 24\% | 28\% | 24\% | 29\% | 24\% | 28\% | 25\% | 28\% | 25\% | 25\% | 23\% |
| Agriculture, hunting, forestry, and fishing | 0\% | 0\% | 6\% | 1\% | 7\% | 1\% | 6\% | 1\% | 6\% | 1\% | 7\% | 1\% | 7\% | 1\% | 7\% | 1\% | 5\% | 1\% | 6\% | 1\% |
| Mining and quarrying | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Manufacturing industry | 23\% | 20\% | 22\% | 21\% | 22\% | 20\% | 22\% | 18\% | 21\% | 17\% | 20\% | 15\% | 19\% | 14\% | 19\% | 14\% | 19\% | 13\% | 18\% | 12\% |
| Electricity, gas, and water | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Construction | 11\% | 0\% | 11\% | 0\% | 11\% | 0\% | 11\% | 0\% | 12\% | 0\% | 11\% | 0\% | 11\% | 0\% | 11\% | 0\% | 12\% | 0\% | 13\% | 0\% |
| Trade, restaurants, and hotels | 19\% | 16\% | 18\% | 17\% | 18\% | 16\% | 19\% | 18\% | 19\% | 18\% | 19\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% |
| Transport and storage | 9\% | 2\% | 8\% | 2\% | 8\% | 2\% | 8\% | 2\% | 9\% | 2\% | 9\% | 2\% | 9\% | 2\% | 9\% | 2\% | 9\% | 2\% | 9\% | $3 \%$ |
| Financial establishments, insurance, and real estate | 5\% | 5\% | 5\% | 5\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 7\% | 6\% | 7\% | 6\% | 7\% | 6\% | 7\% | 6\% | 7\% |
| $\left.\begin{array}{l}\text { Social and community } \\ \text { services }\end{array}\right]$ | 29\% | 56\% | 27\% | 54\% | 26\% | 54\% | 26\% | 55\% | 25\% | 55\% | 26\% | 55\% | 26\% | 56\% | 27\% | 55\% | 26\% | 56\% | 26\% | 56\% |
| Montevideo | 51\% | 54\% | 50\% | 56\% | 49\% | 55\% | 50\% | 57\% | 51\% | 55\% | 49\% | 55\% | 49\% | 56\% | 47\% | 52\% | 54\% | 58\% | 50\% | 55\% |
| Artigas | 1\% | 2\% | 2\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Canelones | 12\% | 11\% | 10\% | 9\% | 7\% | 7\% | 10\% | 8\% | 10\% | 9\% | 12\% | 10\% | 12\% | 10\% | 11\% | 10\% | 11\% | 10\% | 12\% | 12\% |
| Cerro Largo | 2\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | $2 \%$ | 2\% | 2\% | 2\% | 3\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Colonia | 3\% | 3\% | 4\% | 3\% | 3\% | 2\% | 4\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% | 3\% | 3\% | 4\% | 3\% |
| Durazno | 1\% | 1\% | 2\% | 2\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Flores | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Florida | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 2\% |
| Lavalleja | 1\% | 2\% | 1\% | 1\% | 4\% | 3\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 2\% | 2\% |
| Maldonado | 6\% | 5\% | 6\% | 5\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% | 4\% | 4\% | 4\% | 3\% | 4\% | 4\% | 4\% | 4\% | 4\% | 4\% |
| Paysandú | 3\% | 3\% | 3\% | 3\% | 4\% | 4\% | 4\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% | 3\% | 2\% | 3\% | $3 \%$ |
| Rio Negro | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Rivera | 2\% | 2\% | 2\% | 2\% | 5\% | 4\% | 3\% | 2\% | 2\% | 2\% | 3\% | 3\% | 3\% | 3\% | 3\% | 2\% | 3\% | 3\% | 3\% | 2\% |
| Rocha | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Salto | 3\% | 2\% | 3\% | 3\% | 5\% | 4\% | 4\% | 3\% | 4\% | 3\% | 4\% | 3\% | 3\% | 3\% | 4\% | 3\% | 3\% | 3\% | 3\% | 3\% |
| San José | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 3\% | 3\% | 3\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% | 2\% | 2\% | 3\% | 2\% |
| Soriano | 2\% | 2\% | 2\% | 2\% | 4\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Tacuarembó | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Treintay Tres | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 2\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Urban | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Formal | 27\% | 25\% | 64\% | 58\% | 64\% | 57\% | 63\% | 57\% | 62\% | 57\% | 62\% | 56\% | 61\% | 57\% | 60\% | 57\% | 61\% | 58\% | 60\% | 57\% |
| Self employed | 18\% | 19\% | 20\% | 20\% | 21\% | 19\% | 22\% | 19\% | 22\% | 20\% | 22\% | 20\% | 24\% | 19\% | 23\% | 18\% | 23\% | 18\% | 24\% | 19\% |

Table Al (Continued)

|  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| Years of Education | 9.6 | 10.5 | 8.9 | 10.3 | 9.0 | 10.4 | 9.0 | 10.4 | 9.1 | 10.5 | 10.3 | 11.2 | 9.8 | 10.9 | 9.1 | 10.6 | 9.0 | 10.6 | 9.2 | 10.5 |
| None | 8\% | 6\% | 8\% | 5\% | 8\% | 5\% | 7\% | 5\% | 6\% | 4\% | 8\% | 5\% | 9\% | 5\% | 9\% | 6\% | 8\% | 4\% | 8\% | 5\% |
| Primary | 58\% | 51\% | 68\% | 55\% | 68\% | 54\% | 68\% | 55\% | 68\% | 54\% | 53\% | 45\% | 57\% | 49\% | 69\% | 55\% | 70\% | 56\% | 68\% | 57\% |
| Secondary | 27\% | 29\% | 16\% | 24\% | 16\% | 25\% | 16\% | 25\% | 18\% | 26\% | 26\% | 29\% | 24\% | 30\% | 14\% | 24\% | 14\% | 24\% | 16\% | 23\% |
| Tertiary | 7\% | 14\% | 8\% | 15\% | 8\% | 16\% | 8\% | 15\% | 8\% | 16\% | 14\% | 20\% | 10\% | 16\% | 8\% | 16\% | 8\% | 16\% | 8\% | 16\% |
| Years of Experience | 23.1 | 22.2 | 24.1 | 23.0 | 24.7 | 23.4 | 24.7 | 23.8 | 24.4 | 23.9 | 23.2 | 22.9 | 23.8 | 23.2 | 24.8 | 23.9 | 24.8 | 23.6 | 24.6 | 23.8 |
| 15-25 | 20\% | 18\% | 19\% | 16\% | 17\% | 14\% | 16\% | 13\% | 17\% | 14\% | 17\% | 14\% | 17\% | $14 \%$ | 17\% | 14\% | 17\% | 14\% | 17\% | 14\% |
| 26-35 | 23\% | 24\% | 23\% | 24\% | 23\% | 24\% | 24\% | 24\% | 24\% | 23\% | 24\% | 23\% | 24\% | 25\% | 23\% | 23\% | 23\% | 25\% | 23\% | 25\% |
| 36-45 | 25\% | 27\% | 25\% | 27\% | 25\% | 28\% | 25\% | 27\% | 24\% | 26\% | 24\% | 27\% | 23\% | 25\% | 24\% | 26\% | 23\% | 25\% | 23\% | 25\% |
| 46.55 | 20\% | 21\% | 20\% | 22\% | 21\% | 23\% | 22\% | 24\% | 22\% | 24\% | 22\% | 23\% | 22\% | 23\% | 23\% | 24\% | 22\% | 24\% | 23\% | 24\% |
| 56-65 | 12\% | 10\% | 13\% | 11\% | 14\% | 11\% | 13\% | 12\% | 13\% | 12\% | 13\% | 12\% | 13\% | 13\% | 14\% | 13\% | 14\% | 13\% | 14\% | 13\% |
| Married | 69\% | 55\% | 69\% | 56\% | 69\% | 56\% | 69\% | 56\% | 67\% | 56\% | 67\% | 54\% | 4\% | 6\% | 67\% | 56\% | 67\% | 57\% | 67\% | 58\% |
| Children under 6 years old in the household | 26\% | 21\% | 29\% | 24\% | 27\% | 23\% | 27\% | 23\% | 27\% | 24\% | 24\% | 21\% | 26\% | 23\% | 25\% | 23\% | 24\% | 22\% | 24\% | 22\% |
| Agriculture, hunting, forestry, and fishing | 6\% | 1\% | 6\% | 1\% | 6\% | 1\% | 6\% | 1\% | 7\% | 1\% | 7\% | 1\% | 14\% | 4\% | 14\% | 4\% | 15\% | 4\% | 16\% | 4\% |
| Mining and quarrying | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Manufacturing industry | 17\% | 12\% | 16\% | 12\% | 15\% | 10\% | 15\% | 11\% | 16\% | 11\% | 16\% | 11\% | 16\% | 11\% | 15\% | 11\% | 15\% | 10\% | 15\% | 10\% |
| Electricity, gas, and water | 2\% | 1\% | 1\% | 1\% | 2\% | 1\% | 1\% | 0\% | 1\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Construction | 13\% | 0\% | 13\% | 0\% | 12\% | 0\% | 11\% | 0\% | 11\% | 0\% | 12\% | 0\% | 12\% | 0\% | 13\% | 0\% | 12\% | 0\% | 13\% | 1\% |
| Trade, restaurants, and hotels | 24\% | 20\% | 23\% | 20\% | 23\% | 19\% | 24\% | 18\% | 24\% | 18\% | 24\% | 20\% | 21\% | 21\% | 21\% | 21\% | 21\% | 21\% | 21\% | 22\% |
| Transport and storage <br> Financial establishments, insurance, and real estate Social and community services | 9\% | 2\% | 9\% | 2\% | 9\% | 2\% | 9\% | 2\% | 8\% | 2\% | 8\% | 3\% | 8\% | 3\% | 8\% | 3\% | 8\% | 3\% | 8\% | 3\% |
|  | $8 \%$ | 9\% | 10\% | 8\% | 10\% | 9\% | 9\% | 8\% | 9\% | $8 \%$ | 10\% | 8\% | $8 \%$ | 8\% | 8\% | 8\% | 8\% | 9\% | 9\% | 8\% |
|  | 21\% | 55\% | 21\% | 56\% | 22\% | 57\% | 24\% | 58\% | 23\% | 58\% | 21\% | 56\% | 19\% | 53\% | 18\% | 53\% | 18\% | 52\% | 18\% | 52\% |
| Montevideo | 50\% | 55\% | 51\% | 56\% | 51\% | 56\% | 50\% | 56\% | 50\% | 56\% | 50\% | 55\% | 40\% | 46\% | 41\% | 46\% | 41\% | 47\% | 37\% | 42\% |
| Artigas | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% |
| Canelones | 14\% | 11\% | 13\% | 11\% | 12\% | 10\% | 12\% | 9\% | 12\% | 10\% | 11\% | 9\% | 15\% | 14\% | 15\% | 15\% | 15\% | 14\% | 15\% | 15\% |
| Cerro Largo | 3\% | 2\% | 3\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 3\% | 2\% | 3\% | 2\% |
| colonia | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% | 4\% | 4\% | 4\% | 3\% | 4\% | 4\% | 4\% | 4\% |
| Durazno | 1\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 2\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Flores | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Florida | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% | 2\% | 2\% | 2\% | 1\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% |
| Lavalleja | 2\% | 2\% | 1\% | 1\% | 2\% | 1\% | 1\% | 2\% | 2\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Maldonado | 4\% | 5\% | 4\% | 4\% | 4\% | 4\% | 5\% | 4\% | 5\% | 4\% | 5\% | 4\% | 5\% | 4\% | 5\% | 5\% | 5\% | 5\% | 5\% | 5\% |
| Paysandú | 3\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% |
| Rio Negro | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 2\% | 1\% | 1\% | 1\% | 2\% | 1\% |
| Rivera | 3\% | 2\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% |
| Rocha | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 3\% |
| Salto | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% | 3\% | 4\% | 3\% | 3\% | 3\% | 4\% | 3\% | 4\% | 3\% |
| San José | 2\% | 2\% | 3\% | 2\% | 3\% | 2\% | 3\% | 3\% | 3\% | 3\% | 2\% | 3\% | 4\% | 4\% | 4\% | 4\% | 3\% | 3\% | 3\% | 3\% |
| Soriano | 2\% | 2\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 3\% | 3\% | 2\% | 3\% | 2\% | 3\% | 3\% |
| Tacuarembó | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 3\% | 2\% | 3\% | 2\% | 3\% | 2\% |
| Treintay Tres | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Urban | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | 86\% | 91\% | 85\% | 90\% | 85\% | 91\% | 81\% | 87\% |
| Formal | 60\% | 58\% | 67\% | 67\% | 65\% | 66\% | 63\% | 64\% | 62\% | 62\% | 64\% | 64\% | 69\% | 68\% | 7\% | 70\% | 72\% | 71\% | 72\% | 71\% |
| Self employed | 24\% | 18\% | 26\% | 19\% | 28\% | 19\% | 28\% | 19\% | 27\% | 20\% | 26\% | 19\% | 24\% | 21\% | 23\% | 21\% | 23\% | 20\% | 22\% | 20\% |

Table Al (Continued)


Table A2. Women's Participation by Occupation (\%) and Average Hourly Earnings (URY)

|  | 1990 |  | 1991 |  | 1992 |  | 1993 |  | 1994 |  | 1995 |  | 1996 |  | 1997 |  | 1998 |  | 1999 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ |
| Professional and Technician | 65\% | 2.2 | 62\% | 4.7 | 65\% | 8.8 | 64\% | 12.7 | 63\% | 21.4 | 64\% | 30.3 | 65\% | 38.7 | 63\% | 48.2 | 65\% | 55.2 | 64\% | 60.9 |
| Director or Senior Official | 20\% | 2.4 | 25\% | 6.0 | 26\% | 19.7 | 26\% | 15.3 | 26\% | 31.2 | 29\% | 35.8 | 30\% | 52.7 | 30\% | 60.8 | 30\% | 63.6 | 33\% | 81.7 |
| Administrative and Intermediate Level | 51\% | 1.3 | 51\% | 3.0 | 52\% | 5.8 | 53\% | 8.1 | 53\% | 12.8 | 54\% | 17.1 | 56\% | 23.0 | 55\% | 27.1 | 55\% | 32.4 | 57\% | 37.3 |
| Merchants and Salespersons | 44\% | 0.8 | 44\% | 1.9 | 47\% | 4.3 | 47\% | 5.8 | 46\% | 8.6 | 47\% | 12.4 | 47\% | 14.7 | 48\% | 17.0 | 46\% | 21.8 | 48\% | 24.1 |
| In Services | 68\% | 0.7 | 68\% | 1.6 | 69\% | 3.0 | 69\% | 4.4 | 70\% | 6.5 | 69\% | 9.4 | 71\% | 12.5 | 69\% | 15.3 | 70\% | 17.9 | 72\% | 20.6 |
| Agricultural Workers | 10\% | 0.8 | 8\% | 2.5 | 9\% | 11.8 | 7\% | 5.5 | 12\% | 14.0 | 11\% | 15.7 | 10\% | 13.7 | 12\% | 18.3 | 13\% | 37.7 | 10\% | 43.9 |
| Non-Agricultural Laborers, Machinery Operators, and Transport Services | 22\% | 0.7 | 22\% | 1.6 | 22\% | 3.5 | 20\% | 4.7 | 19\% | 7.0 | 18\% | 9.7 | 17\% | 13.4 | 16\% | 15.5 | 15\% | 19.9 | 15\% | 19.7 |
| FFAA | n.d. 9\% | n.d. | $\begin{aligned} & \text { n.d. } \\ & \text { 12\% } \end{aligned}$ | n.d. | n.d. 10\% | $\begin{aligned} & \text { n.d. } \\ & 20 \end{aligned}$ | $\begin{aligned} & \text { n.d. } \\ & \text { 14\% } \end{aligned}$ | n.d. | n.d. 11\% | n.d. | n.d. 12\% | $\begin{aligned} & \text { n.d. } \\ & 0.3 \end{aligned}$ | $\begin{aligned} & \text { n.d. } \\ & \text { 12\% } \end{aligned}$ | n.d. $12.5$ | n.d. 11\% | n.d. $14.7$ | n.d. <br> 13\% | n.d. | $\begin{aligned} & \text { n.d. } \\ & \text { 13\% } \end{aligned}$ | n.d. $19.3$ |
| Total | 54\% | 1.1 | 54\% | 2.5 | 54\% | 5.3 | 54\% | 7.0 | 54\% | 11.3 | 54\% | 15.8 | 54\% | 20.9 | 54\% | 24.7 | 54\% | 30.0 | 54\% | 33.4 |


|  | 2000 |  | 2001 |  | 2002 |  | 2003 |  | 2004 |  | 2005 |  | 2007 |  | 2008 |  | 2009 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ |
| Professional and Technician | 55\% | 65.6 | 53\% | 73.0 | 56\% | 71.9 | 55\% | 67.4 | 54\% | 76.2 | 55\% | 81.0 | 55\% | 101.7 | 56\% | 119.8 | 55\% | 132.0 | 56\% | 154.8 |
| Director or Senior Official | 37\% | 47.8 | 38\% | 40.7 | 38\% | 44.4 | 37\% | 39.4 | 37\% | 45.6 | 36\% | 57.1 | 43\% | 73.7 | 42\% | 92.0 | 42\% | 93.8 | 46\% | 93.3 |
| Administrative and Intermediate Level | 60\% | 37.2 | 60\% | 37.5 | 61\% | 39.7 | 61\% | 40.6 | 59\% | 42.4 | 61\% | 47.2 | 62\% | 60.2 | 64\% | 66.6 | 65\% | 76.8 | 64\% | 86.1 |
| Merchants and Salespersons | 62\% | 23.1 | 57\% | 17.9 | 54\% | 16.4 | 53\% | 16.0 | 55\% | 18.4 | 58\% | 18.5 | 62\% | 27.2 | 64\% | 33.3 | 65\% | 35.7 | 65\% | 47.4 |
| In Services | 57\% | 19.0 | 68\% | 23.1 | 67\% | 21.9 | 67\% | 22.0 | 68\% | 23.2 | 69\% | 25.8 | 70\% | 32.2 | 72\% | 37.7 | 72\% | 41.8 | 73\% | 49.5 |


| Agricultural Workers | 9\% | 59.0 | 13\% | 23.9 | 10\% | 70.6 | 12\% | 27.3 | 12\% | 84.6 | 10\% | 40.3 | 17\% | 55.9 | 18\% | 62.8 | 18\% | 50.2 | 17\% | 64.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Agricultural Laborers, Machinery | 13\% | 18.9 | 13\% | 18.3 | 13\% | 18.7 | 15\% | 20.1 | 15\% | 20.3 | 15\% | 22.7 | 15\% | 28.1 | 15\% | 31.9 | 14\% | 36.0 | 14\% | 45.9 |
| FFAA | 10\% | 27.4 | 10\% | 30.5 | 4\% | 22.8 | 5\% | 22.6 | 6\% | 35.1 | 9\% | 28.3 | 3\% | 29.2 | 5\% | 42.3 | 6\% | 42.3 | 6\% | 51.3 |
| Others | 54\% | 20.8 | 61\% | 37.7 | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. | n.d. |
| Total | 54\% | 34.3 | 54\% | 35.4 | 54\% | 36.7 | 54\% | 34.9 | 54\% | 39.2 | 54\% | 41.8 | 54\% | 53.1 | 54\% | 61.8 | 54\% | 68.6 | 54\% | 80.3 |


|  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  | 2019 |  | 2020 |  | 2021 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ | (\%) | URY\$ |
| Professional and Technician | 56\% | 161.9 | 56\% | 171.8 | 54\% | 190.2 | 54\% | 215.7 | 53\% | 235.6 | 54\% | 267.7 | 54\% | 290.3 | 54\% | 314.6 | 55\% | 329.4 | 54\% | 343.1 | 55\% | 373.5 |
| Director or Senior Official | 45\% | 91.1 | 35\% | 197.9 | 34\% | 274.5 | 31\% | 320.5 | 34\% | 368.2 | 34\% | 363.9 | 35\% | 443.3 | 36\% | 435.9 | 36\% | 428.8 | 40\% | 450.1 | 38\% | 455.1 |
| Administrative and Intermediate Level | 63\% | 92.7 | 62\% | 109.4 | 63\% | 115.8 | 63\% | 133.5 | 63\% | 148.2 | 63\% | 164.0 | 63\% | 177.8 | 63\% | 192.2 | 64\% | 204.8 | 63\% | 218.6 | 61\% | 228.8 |
| Merchants and Salespersons | 63\% | 50.5 | 65\% | 57.4 | 65\% | 63.1 | 64\% | 70.8 | 64\% | 81.3 | 64\% | 84.0 | 64\% | 101.2 | 63\% | 103.6 | 63\% | 17.1 | 64\% | 117.5 | 65\% | 112.5 |
| In Services | 72\% | 53.6 | 71\% | 62.2 | 70\% | 68.5 | 71\% | 81.7 | 71\% | 97.5 | 70\% | 100.3 | 71\% | 113.0 | 71\% | 124.7 | 70\% | 134.1 | 71\% | 140.8 | 70\% | 137.1 |
| Agricultural Workers | 20\% | 70.8 | 19\% | 72.5 | 18\% | 72.9 | 18\% | 85.1 | 19\% | 88.9 | 19\% | 134.1 | 17\% | 122.5 | 17\% | 102.3 | 17\% | 157.9 | 17\% | 94.2 | 18\% | 141.3 |
| Non-Agricultural Laborers, Machinery Operators, and Transport Services | 13\% | 48.7 | 14\% | 53.1 | 14\% | 58.9 | 13\% | 71.1 | 13\% | 80.0 | 13\% | 89.1 | 13\% | 96.8 | 13\% | 107.3 | 13\% | 114.7 | 14\% | 110.4 | 14\% | 122.1 |
| FFAA | 6\% | 52.8 | 4\% | 58.6 | 7\% | 74.0 | 7\% | 67.6 | 5\% | 93.0 | 7\% | 120.9 | 9\% | 133.7 | 8\% | 116.3 | 7\% | 143.9 | 10\% | 173.6 | 7\% | 176.5 |
| Others | n.d. | n.d. | 22\% | 65.0 | 35\% | 81.6 | 24\% | 105.9 | 28\% | 85.2 | 31\% | 115.9 | 36\% | 140.3 | 32\% | 104.6 | 25\% | 133.7 | 21\% | 146.9 | 29\% | 314.6 |
| Total | 54\% | 86.6 | 54\% | 95.5 | 54\% | 105.4 | 54\% | 122.1 | 54\% | 135.8 | 54\% | 151.3 | 54\% | 169.4 | 54\% | 181.2 | 54\% | 194.7 | 54\% | 205.6 | 54\% | 212.1 |

Source: Self-generated based on Uruguay household surveys harmonized by the Inter-American Development Bank (IDB).
Probabilistic weightings are applied.


[^0]:    ** The opinions expressed in this work are those of the authors and do not necessarily reflect the views of the InterAmerican Development Bank, its Board of Directors, or the countries they represent.
    We appreciate the valuable comments from Liliana Serrate, Nicolás Campos, Delina Otazú, and Mónica Pacheco; the support of María del Mar Zamora in the literature review specific to the Gender Earnings Gap in Uruguay; as well as the technical reviews and comments from Georgina Gómez, David Kaplan, and Carlos Foronda.
    This document is part of a series of country-specific studies, so parts of it may be similar across specific studies.
    **Inter-American Development Bank

[^1]:    ${ }^{+}$The study evaluates the effect of gender inequalities in the countries of the Southern Cone of Latin America (Brazil, Chile, Paraguay, and Uruguay) and provides evidence on their economic consequences, drivers, and policy tools that can help mitigate them. It also shows that the female employment rate in Uruguay ranged between $40 \%$ and $52 \%$ during the analysis period from 1991 to 2019, with a rate of $49 \%$ in the last year of analysis. Furthermore, Uruguay had the third-highest monthly income gap in the Southern Cone in 2019, with a value close to $24 \%$.

[^2]:    \# People who are economically active in Uruguay and are not affiliated with or do not contribute to the pension system are considered informal.

[^3]:    ${ }^{\S}$ For strictly stylistic reasons, this document uses the inclusive masculine gender, regardless of the gender of the individuals.

[^4]:    ** These techniques are explained in detail in the third section.
    ${ }^{\text {t+ }}$ Argentina, Brazil, Chile, Paraguay and Uruguay.

[^5]:    ${ }^{\ddagger \ddagger}$ As can be seen in Annex Table A1, the average years of education for women increased from 9.4 to 11.5 between 1990 and 2021, while for men, it increased from 8.8 to 10.1 over the same period.

[^6]:    ${ }^{\S \S}$ This matrix comprises 23 production variables, including the informal sector that produces only for the domestic market and the public sector. Additionally, it has three factors of production (skilled labor, unskilled labor, and capital), two types of domestic institutions (households and the government), and three trading partners (Argentina, Brazil, and the rest of the world).

[^7]:    *** The regions included in the survey are Montevideo, Artigas, Canelones, Cerro Largo, Colonia, Durazno, Flores, Florida, Lavalleja, Maldonado, Paysandú, Río Negro, Rivera, Rocha, Salto, San José, Soriano, Tacuarembó, and Treinta y Tres.
    ${ }^{\text {t+t }}$ Frequency weightings are used.
    ${ }^{\ddagger \ddagger \text { I }}$ The labor income from the main activity and frequency weightings are used.

[^8]:    Source: Own elaboration based on the household surveys of Uruquay harmonized by the IDB.

[^9]:    Source: Own elaboration based on the household surveys of Uruguay harmonized by the IDB.

[^10]:    ${ }^{12}$ The calculations not included in the model showed that the aggregation of these variables significantly decreased the common support and increased the standard deviation of the variables but did not alter the overall results.

[^11]:    ${ }^{13}$ Calculated as diferencia/yhora $a_{\text {mujer }}$, the explained gap is calculated as diferencia $a_{\text {explicada }} /$ yhora $a_{\text {mujer }}$, while the unexplained gap is calculated as diferencia no explicaal $/$ yhora $_{\text {mujer }}$
    ${ }^{14}$ Regarding which information is available starting from the year 2007.

[^12]:    ${ }^{15}$ The $31 \%$ corresponds to the sum of the explained gap (9\%) and the CEO effect (22\%).

