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An Analysis from 1993 to 2021

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Changes in Venezuela's Gender Earnings Gap: An Analysis from 1993-2021*

Miguel Chalup, Liliana Serrate, and Manuel Urquidi**

Abstract

The gender earnings gap in Latin America poses a barrier to achieving gender equality and sustainable development. In Venezuela, this gap persists despite women often having a better labor profile than men, suggesting the possible existence of gender biases. Heterogeneous income differences in favor of men were found in most occupations, although a slight shift toward equity is observed in the persistent earnings gap among informal sector workers.

To analyze the gender earnings gap in Venezuela between 1993 and 2021, this study uses the Harmonized Household Surveys (HHS) and the National Survey of Living Conditions (ENCOVI) harmonized by the Inter-American Development Bank (IDB). Two methodologies are presented for estimating the gap: the Blinder-Oaxaca decomposition and the Ñopo method.

The analysis over more than two decades suggests the existence of gender biases as one of the unexplained factors of the gap. The analysis also shows a gradual reduction in the total gender earnings gap between men and women in the 1990s, followed by an increasing trend from the beginning of the 21st century. This indicates that additional efforts are needed to understand the observed disparity.

While the analysis shows variations in the total gap, these are generally related to the explained gap (derived from individual endowments in education, work experience, age) rather than a reduction of the gap that cannot be explained by these variables. Such unexplained gap might be associated with gender-differentiated regulations, biases, prejudices, discrimination, or other factors that need to be identified to establish policies for its reduction.

JEL Classification: J16, J31, J71.

Keywords: gender economics, earnings gap, discrimination.

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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

Introduction

In recent years, Latin America and the Caribbean (LAC) have witnessed significant changes in the traditionally assigned roles of men and women. There has been an increase in the political representation of women, as well as higher levels of education and participation in the labor market (Frisancho and Queijo, 2022). Despite these advancements, challenges persist concerning women's labor inclusion and their opportunities for professional development¹.

Previous studies have documented the presence of a labor earnings gap affecting women in the region (Ñopo, 2012). These studies demonstrate that, despite working in similar positions and having comparable levels of education, women earn lower salaries than their male counterparts. This underscores the need to analyze the underlying causes of this disparity.

Ñopo (2012) points out that one of the persistent issues in LAC is occupational and hierarchical gender segregation. Women tend to work to a greater extent in the informal sector and are underrepresented in executive positions. Additionally, significant differences exist in labor earnings between men and women. Despite improvements in gender equality indicators in LAC since the late 20th century (Chioda, 2011) and increased political and labor participation of women (Ñopo, 2012), wage differences in similar jobs persist in most countries, constituting an unjustifiable form of inequality (ILO, 2019c).

Furthermore, the crisis generated by COVID-19 has had a disproportionate impact on women's labor force participation. It is estimated that 13 million women in the region lost their jobs, resulting in a 16% reduction in the female labor force participation rate, compared to a 10% decrease among men. The crisis highlighted that women are overrepresented in vulnerable labor sectors, exacerbating gender gaps and partially reversing the progress made (Bustelo, Suaya, and Vezza, 2021). Additionally, there was an increase in the concentration of women in part-time jobs.

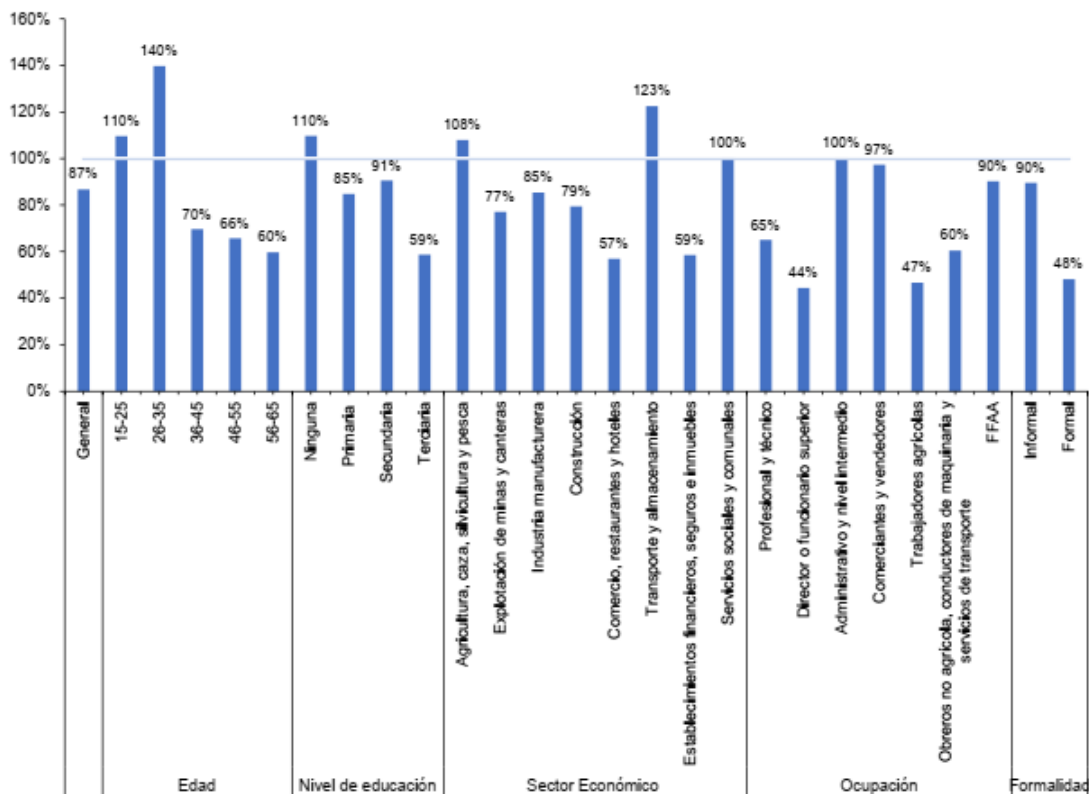
Data from household surveys in Venezuela harmonized by the IDB support these findings. As shown in Figure 1, in 2021, the average hourly earnings of women represented 87% of men's income. The pay gap was more pronounced among individuals aged 56 to 65 (60%), those with tertiary education (59%), in the trade, restaurant, and hotel sector (57%), financial, insurance, and real estate establishments (59%), in managerial and higher-ranking roles (44%), agricultural workers (47%), and in the formal sector (48%)². Some results that may seem counterintuitive, such as women in the transportation and storage sector earning on average 123% of men's hourly earnings, can be explained by selection bias. This phenomenon will be analyzed in more detail in the methodology section, as when there are few women in specific sectors or

¹ The study assesses the impact 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.

² Informal workers in Venezuela are considered to be economically active individuals who are not affiliated with and do not contribute to the country's pension system.

regions, those who enter often occupy higher-ranking positions and receive higher salaries. This can have a direct impact on women's overall labor force participation, although its analysis requires a specific methodology different from that used in this study.

Graph 1. Hourly Labor earnings of Women vs. Men in Venezuela in 2021*



Source: Own elaboration based on household surveys in Venezuela harmonized by the Inter-American Development Bank (IDB).

*Only individuals with occupation and income were included in the analysis.

While the availability of information remains limited, in recent years, there has been a significant increase in the number of studies on this topic in Latin America and the world. In the case of Venezuela, the quantity of research documents in recent years is relatively scarce compared to the rest of the region. Most of these studies use household surveys from the country and, since 2014, the Living Conditions Survey from three universities. Given the various approaches to addressing this issue, we acknowledge the difficulty of comparing the results of different studies and tracking the evolution of the gender earnings gap.

Furthermore, it is important to consider certain peculiarities related to Venezuela's economic context, which are not addressed in this document but are relevant for interpreting the results. Starting around 2013, Venezuela experienced an economic collapse that had a profound impact on the labor market. At the time of preparing this document, there is no clarity on how this phenomenon affects gender gaps in the labor market. In studies related to

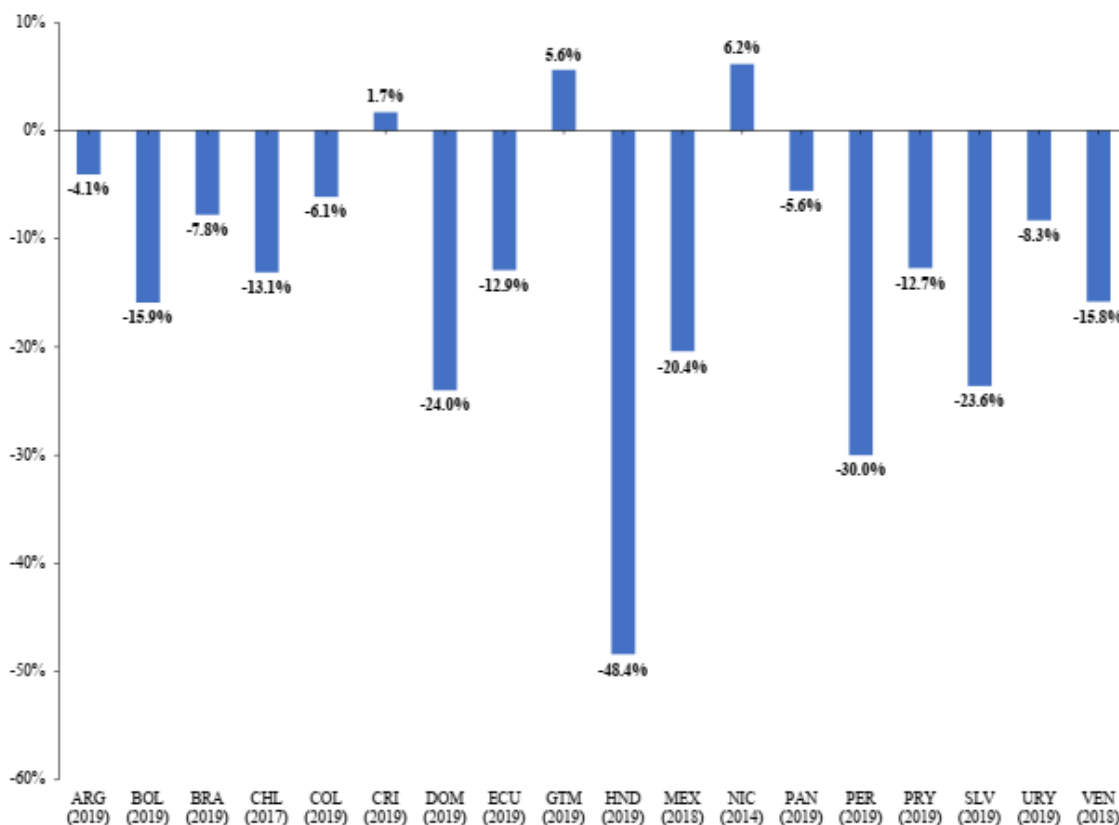
economic crises, different effects on the gender earnings gap have been observed. For example, Yun (2011) analyzed the economic crisis in the United States between 2008 and 2009 and found that gender-based wage discrimination worsened during the crisis. Other authors, like Aller and Arce (2001), found that during the recession in Spain in 1990-94, the gender wage gap decreased because the crisis affected the manufacturing sector more and stimulated the service sector, benefiting women and harming men due to existing occupational segregation. In this context, Rodríguez Pérez and German-Solo (2021) point out that there is no consensus on the relationship between the gender income gap and economic cycles, as some studies find evidence of a pro-cyclical relationship, while others find it to be counter-cyclical.

Additionally, migration movements have been of great significance in Venezuela since 2013. According to data from the United Nations Refugee Agency (UNHCR) as of March 2023, approximately 7.8 million Venezuelan migrants were identified worldwide, with 6.03 million in Latin American countries. Finally, another important aspect to consider is the high inflation in Venezuela, often categorized as hyperinflation, which can also have particular effects on gender earnings gaps. However, it is essential to note that this document does not address the analysis of the impact of the economic collapse in Venezuela or the hyperinflation that accompanies it. Addressing these complex research questions requires specific methodologies and a particular focus.

This work aims to enrich the current knowledge of gender earnings disparity in Venezuela through a rigorous analysis of the evolution of the earnings gap from 1993 to 2021. To achieve this, we reference three previous studies: the first one on Bolivia (Urquidi, Valencia, and Durand, 2021), the second one on Paraguay (Urquidi, Chalup, and Durand, 2022), and the third one on eighteen countries in the region (Urquidi and Chalup, 2023). Additionally, we employ two analytical methodologies: the Blinder-Oaxaca decomposition and the Ñopo method. This allows us to obtain results from both a parametric and a non-parametric model, facilitating year-to-year comparison and the comparison of the methodologies themselves to better identify the main variables affecting the earnings gap.

The previous regional study provides comparable information between countries (see Graph 2). This analysis expands the age range of these data, the time evolution, and provides information with greater geographic disaggregation for the country.

Graph 2. Total Hourly Labor Earnings Gap Estimated Using the Blinder-Oaxaca Decomposition Model*



Source: Urquidi and Chalup, 2023.

*Only individuals with occupation and income were included in the analysis.

The results of our analysis show that this wage gap persists, despite the fact that, in many cases, women have a superior labor profile to men, suggesting the existence of gender biases. We also observed that the gap was more pronounced among informal sector workers, although this trend seems to have changed in recent years. Additionally, we noticed a heterogeneous earnings 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, or region or area of the country. Therefore, it is likely related to normative factors, biases, and/or discrimination (Becker, 1957). In contrast, it is observed that if only the labor profile is considered, wages should be higher for women. Among the possible factors contributing to this gap are normative aspects, cognitive biases, and labor costs related to childcare³, which are not visible in society. The analysis over time suggests the existence of gender discrimination and reveals a gradual decrease in the total earnings gap between men and women in the 1990s, followed by an increasing trend from the beginning of

³ For strictly stylistic reasons, this document uses the inclusive unmarked masculine gender, regardless of the gender of individuals.

the 21st century. This underscores the need for additional efforts to understand this disparity and determine which factors may be causing it, in order to implement response policies.

The present study is organized as follows: in the first section, a review of the literature related to the gender earnings gap in Venezuela and LAC is conducted. In the second section, the data used is described, and descriptive statistics of the evolution of the earnings gap in Venezuela over the years analyzed are presented. In the third section, a brief description of the methodologies used for estimating the gender earnings gap is provided. In the fourth section, the results of the analysis are presented. Finally, in the fifth section, the study's conclusions and implications are discussed.

1. Literature Review

Regarding the gender earnings gap, the literature has aimed to differentiate between that generated by differences in individuals' characteristics and human capital and the unexplained part, which seems to be related to gender biases, biases, and/or discrimination (Atal, Ñopo, & Winder, 2009). In recent years, primarily two econometric techniques have been used to analyze this issue based on permanent household surveys in different countries: (i) the Blinder-Oaxaca decomposition introduced by Oaxaca (1973), and (ii) the Ñopo decomposition introduced more recently in Ñopo (2008)⁴. These techniques allow for decomposing the earnings gap between men and women into two parts: one that can be explained by differences in individual characteristics and another that cannot be explained and is generally attributed to gender discrimination factors.

Moreover, new studies have identified previously unanalyzed components that also contribute to the gender earnings gap. This includes the work of Kleven, Landais, and Søgaaard (2019) on the motherhood penalty and its effect on the income gap, using administrative data from Denmark. Ajayi et al. (2022) analyze the differences that socioemotional skills make in the income gap, providing evidence for 17 African countries. Meanwhile, Ammerman and Groysberg (2021) analyze widespread organizational obstacles and managerial actions that lead to the existence of the glass ceiling for women's professional development in the United States. On the other hand, Bustelo et al. (2021) focus on the impact of occupation and career selection on incomes, addressing the case of Brazil, while Bordón, Canals, and Mizala (2020) do the same with 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 America⁵ 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, the accumulation of human capital, and the labor market limit overall productivity and economic growth, underscoring 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), there had been an increase in women's labor force participation since 1980, facilitated by economic growth, trade liberalization, urbanization, fertility rate reduction, and increased levels of education. This phenomenon intensified from 2000 onwards when the region's high growth rates generated an increased labor demand, enabling the incorporation of more women into the labor market, as well as the direct promotion of female labor through public policies (Gasparini and Marchionni, 2015). However, Ñopo (2012) pointed out that women are still overrepresented in informal and low-paid jobs, and the income gap continues to be significant.

⁴ These techniques are explained in detail in the third section.

⁵ Argentina, Brasil, Chile, Paraguay y Uruguay.

A classic analysis on this topic is Psacharopoulos and Tzannatos (1992), who studied the earnings gap in 15 LAC countries in the late 1980s. Among their findings, they noted that, for similar jobs, women earned an average of 65% of what men earned. They also observed that two-thirds of this difference could not be explained by education or human capital levels but was likely due to normative factors, prejudices, or discrimination. Importantly, according to the literature, while it is true that the total earnings gap has narrowed and a significant part of this reduction is explained by the increased educational level of women, the unexplained gap persists (Chioda, 2011; Gasparini and Marchionni, 2015).⁶

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

In the case of Venezuela, they found that in 1992 the unexplained part of the gap remained between 15% and 17%, while in 2006, it was between 19% and 22%. When calculated by percentiles, they found that the unexplained gap was higher for lower percentiles (percentiles 1 to 20) in both studied periods.

Zúñiga and Orlando (2001) conducted an analysis of female participation in the Venezuelan labor market before the 21st century. They found that the female participation rate increased significantly between 1950 and 1998, but it was still well below the male participation rate. Divorced women and those with more than 12 years of education had the highest participation rates for all years studied (1961, 1971, 1981, 1990, and 1998). Using Household Surveys, they observed that the gender earnings gap increased from 25% to 31% between 1990 and 1997, even though the average levels of human capital (education and experience) between men and women were quite similar. By 1997, the gender earnings gap was 3 times larger for the informal sector than for the formal sector. In both 1990 and 1997, women occupied only 8% of employer or employee positions. Finally, the authors conducted the Oaxaca-Blinder decomposition. They found that the explained part of the gap was negative (-0.08 for 1997 and -0.12 for 1990), implying that, given the human capital endowments of women, they should have received higher earnings than men. On the other hand, the unexplained part of the gap was positive (0.21 for 1997 and 0.19 for 1990).

Alcindor and Pereira (2006) decomposed the gender income gap in Venezuela between 1997 and 2005 using Household Surveys and the Oaxaca-Blinder

⁶ As can be seen in Table A1 of the annex, the average years of education for women increased from 8.9 to 12.0 between 1993 and 2021, while for men, it increased from 7.6 to 10.2 during the same period.

decomposition technique. To compare the results, they estimated two models, one without the occupational group and the second including it. For the first model, the authors found that the explained part of the gap changed from -0.19 to -0.18, and the unexplained part changed from 0.31 to 0.18 between 1997 and 2005. While the gender wage gap for 2005 became close to zero, they observed that by capital accumulation, women should earn more. It is noteworthy that between 2000 and 2003, the gender pay gap was negative, favoring women. For the second model, the results were similar, with the explained part of the gap changing from -0.136 to -0.197 and the unexplained part changing from 0.256 to 0.201 between 1997 and 2005. Both models showed a reduction in the gender pay gap in this period.

Carrillo et al. (2014) used the quantile regression decomposition technique of Firpo, Fortin, and Lemieux (2009) to decompose the gender earnings gap in various Latin American countries. They found that there was a statistically significant unexplained gap in the region that favored men and was more pronounced at the extremes of the income distribution. They also found a correlation between sticky floors⁷ and glass ceilings⁸ with respect to GDP per capita and income inequality measured by a Gini index; countries with lower GDP per capita and higher income inequality had a higher gender wage gap at the first decile of the wage distribution. In contrast, countries with higher GDP per capita and lower income inequality showed a higher gender wage gap at the 90th percentile of the wage distribution.

In the case of Venezuela, using the 2003 Household Survey and limiting the analysis to Caracas, they found that the gender pay gap was higher for the 10th and 90th percentiles, at 0.119 and 0.138, respectively, compared to the 50th percentile, which was 0.025. Like in other countries in the region, the explained part of the gap had a negative sign, and the unexplained part had a positive sign. The explained part of the gap for the 10th, 50th, and 90th percentiles was -0.027, -0.047, and -0.097, respectively, while the unexplained part of the gap was 0.145, 0.072, and 0.235, respectively.

Furthermore, Marchionni, Gasparini, and Edo (2018) conducted an analysis of gender-based educational and labor gaps in Venezuela. For the year 2011, they found no educational gaps in favor of men in the country. The labor force participation rate for women aged 25 to 54 was approximately 69%, while for men, it was around 95% by 2015. The unemployment rate for women was 7.4%, while for men, it was 5.7%. Despite women's higher participation in high-skilled jobs by 80% compared to men, the gap in higher-ranking jobs indicated that women participated almost 55% less than men, suggesting the existence of glass ceilings. The wage ratio between women and men was 90% for individuals in urban areas aged 25 to 54, using the average wage without controlling for other variables. However, when performing multivariate regressions of the logarithm of hourly wages and considering a gender

⁷ A scenario where women have lower-level jobs, akin to being stuck, with barriers to achieving labor mobility (Guy, 1994).

⁸ Unobservable barriers that limit the career progression of women with higher endowments (greater accumulation of human capital in the case of Peru) in the upper part of the labor income distribution (Guy, 1994).

dichotomous variable, it was found that in Venezuela, the coefficient of this variable was negative and statistically significant, indicating the presence of a gender wage gap.

Maldonado (2020) decomposed the gender wage gap in the formal sector of Venezuela using household surveys from 1985 to 2015. He found that women earned on average 21% less than men. By using quantile regressions, he observed that at the 10th percentile, the gap was 24%, while it decreased to approximately 17.6% in percentiles 25 to 50. However, in the higher percentiles, the gap widened again, reaching 20%. Throughout the years, the gap slowly reduced, reaching its lowest value in 2015, the last year of the study, at 15%. Nevertheless, it was observed that the gap had intensified for low-income women. The author used three methods to decompose the gender wage gap: Blinder-Oaxaca (Oaxaca 1973, Blinder 1973), Cotton (1988), and a grouped model (Neumark 1988, Oaxaca and Ransom 1994). The results were similar in all three cases: the unexplained part of the gap ranged between 0.225 and 0.233, while the explained part of the gap fluctuated between -0.0452 and -0.0534.

One of the most recent studies on the gender wage gap in Venezuela was conducted by Zambrano et al. (2022), who explained that the wage gap between men and women increased during the period from 2013 to 2021. Using the Blinder-Oaxaca decomposition, they concluded that this increase was partly due to the fact that men tended to work more hours and were represented in sectors with higher salaries. However, they noted that women's higher educational levels contributed to preventing the gap from being even wider. Despite this, the authors highlighted that occupational segregation remained a factor, reflected in a more pronounced gap at higher income levels, especially among women with higher professional qualifications.

2. Data and Descriptive Statistics

The figures used in this study come from the database of Harmonized Permanent Household Surveys by the Inter-American Development Bank (IDB). Data from 25 surveys conducted between 1993 and 2021 were used, with the exception of the period between 2016 and 2019. Up to 2015, data from the Household Surveys by Sampling (EHM) were used, while the data for the years 2020 and 2021 was obtained from the National Survey of Living Conditions (ENCOVI).⁹

It is important to note the challenges related to data, as achieving comparability of data both over different years and among different countries in Latin America and the Caribbean requires a harmonization process. This harmonization is carried out through the IDB's Data Harmonization System.

The design and level of representativeness of these surveys are similar over different years since all of them are representative of the total population of Venezuela and are based on data from the main regions of the country¹⁰. Table 1 presents the sample taken for individuals between 15 and 65 years old, which is the age range used in the analysis in each of the years, along with their representativeness in the total Venezuelan population¹¹, disaggregated by gender and age group.

It can be seen that the sample proportions are very close to the proportions they represent in the population. Additionally, the sample is evenly distributed between genders, while the variation in the proportions of age groups aligns with the aging of the population, which is observed in most countries in Latin America and the Caribbean (Cardona Arango and Peláez, 2012). There is also a gradual increase in the sample size over time, coinciding with population growth. However, it is important to note that ENCOVI has a smaller sample size compared to the previous EHM survey.

As a first step to calculate the gender earnings gap, Table 2 presents the estimation of hourly labor earnings for women compared to men¹². The analysis is disaggregated by age groups, educational level, economic activity, occupation, formality, self-employed workers, and regions. Furthermore, Table A1 in the appendix shows the distribution of characteristics of the employed population receiving income, broken down by year and gender. This provides an overview of the characteristics of both men and women.

⁹ The ENCOVI Survey has been conducted from 2014 to 2022 by researchers from the Central University of Venezuela, Simón Bolívar University, and Andrés Bello Catholic University.

¹⁰ The regions included in the survey are the Federal District, Amazonas, Anzoátegui, Apure, Aragua, Barinas, Bolívar, Carabobo, Cojedes, Delta Amacuro, Falcón, Guárico, Lara, Mérida, Miranda, Monagas, Nueva Esparta, Portuguesa, Sucre, Táchira, Trujillo, Yaracuy, Zulia, and Vargas.

¹¹ Frequency weightings are used.

¹² The labor income from the main activity and frequency weightings are used.

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

	1993		1994		1995		1996		1997		1998		1999		2000		2001	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gender																		
Men	86.810	48%	27.984	48%	26.919	48%	23.001	48%	22.610	48%	23.650	48%	22.936	48%	24.137	49%	58.832	49%
Representativity	6.256.573	50%	6.438.855	50%	6.613.717	50%	6.786.599	50%	6.969.969	50%	7.157.986	50%	7.338.892	50%	7.531.226	50%	7.735.101	50%
Women	93.745	52%	30.182	52%	29.220	52%	25.048	52%	24.099	52%	25.435	52%	24.540	52%	25.489	51%	61.837	51%
Representativity	6.184.457	50%	6.361.848	50%	6.544.472	50%	6.718.567	50%	6.887.139	50%	7.079.105	50%	7.262.602	50%	7.461.530	50%	7.666.939	50%
Age																		
15-25	67.321	37%	21.076	36%	20.219	36%	17.189	36%	16.472	35%	17.220	35%	16.654	35%	17.624	36%	42.292	35%
Representativity	4.386.163	35%	4.535.198	35%	4.611.092	35%	4.698.295	35%	4.814.609	35%	4.913.851	35%	5.008.606	34%	5.132.848	34%	5.245.859	34%
26-35	43.039	24%	14.093	24%	13.528	24%	11.298	24%	11.265	24%	11.688	24%	11.147	23%	11.379	23%	28.360	24%
Representativity	3.108.244	25%	3.333.699	26%	3.435.209	26%	3.481.108	26%	3.536.119	26%	3.591.964	25%	3.640.481	25%	3.692.234	25%	3.744.388	24%
36-45	35.805	20%	11.675	20%	11.171	20%	9.715	20%	9.479	20%	9.912	20%	9.667	20%	9.916	20%	24.249	20%
Representativity	2.546.535	20%	2.438.375	19%	2.557.874	19%	2.618.728	19%	2.711.930	20%	2.785.993	20%	2.910.788	20%	2.976.195	20%	3.056.962	20%
46-55	20.728	11%	6.808	12%	6.749	12%	6.050	13%	5.904	13%	6.346	13%	6.337	13%	6.889	14%	16.495	14%
Representativity	1.412.997	11%	1.546.076	12%	1.590.869	12%	1.695.351	13%	1.781.385	13%	1.865.378	13%	1.930.091	13%	2.035.236	14%	2.134.410	14%
56-65	13.662	8%	4.514	8%	4.472	8%	3.797	8%	3.589	8%	3.919	8%	3.671	8%	3.818	8%	9.273	8%
Representativity	987.091	8%	947.355	7%	963.145	7%	1.011.684	7%	1.013.065	7%	1.079.905	8%	1.111.528	8%	1.156.243	8%	1.220.421	8%
Total																		
	180.555	100%	58.166	100%	56.139	100%	48.049	100%	46.709	100%	49.085	100%	47.476	100%	49.626	100%	120.669	100%
Representativity	12.441.030	100%	12.800.703	100%	13.158.189	100%	13.505.166	100%	13.857.108	100%	14.237.091	100%	14.601.494	100%	14.992.756	100%	15.402.040	100%

Table 1 (Continuation)

	2002		2003		2004		2005		2006		2007		2008		2009	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gender																
Men	71.107	49%	61.809	49%	24.809	48%	52.418	48%	51.106	48%	52.251	48%	51.675	48%	49.245	49%
Representativity	7.943.254	50%	8.132.311	50%	4.100.908	50%	8.922.530	50%	8.704.285	50%	8.893.813	50%	9.066.339	50%	9.246.798	50%
Women	74.819	51%	64.816	51%	26.601	52%	56.134	52%	54.540	52%	55.968	52%	55.100	52%	52.187	51%
Representativity	7.861.673	50%	8.048.859	50%	4.117.920	50%	8.869.305	50%	8.683.791	50%	8.866.578	50%	9.051.817	50%	9.232.163	50%
Age																
15-25	50.156	34%	42.729	34%	17.226	34%	36.349	33%	35.076	33%	35.393	33%	34.721	33%	32.494	32%
Representativity	5.327.420	34%	5.429.735	34%	2.713.507	33%	5.870.017	33%	5.654.811	33%	5.698.575	32%	5.748.377	32%	5.788.814	31%
26-35	35.221	24%	30.192	24%	11.974	23%	25.034	23%	24.209	23%	24.714	23%	24.021	22%	22.852	23%
Representativity	3.844.729	24%	3.918.336	24%	1.958.389	24%	4.235.660	24%	4.132.672	24%	4.256.474	24%	4.324.016	24%	4.457.315	24%
36-45	29.560	20%	25.915	20%	10.580	21%	21.918	20%	21.132	20%	21.628	20%	21.309	20%	19.904	20%
Representativity	3.137.127	20%	3.225.686	20%	1.673.504	20%	3.569.574	20%	3.458.722	20%	3.491.668	20%	3.568.339	20%	3.593.565	19%
46-55	20.085	14%	18.052	14%	7.463	15%	16.094	15%	16.094	15%	16.606	15%	16.639	16%	16.162	16%
Representativity	2.204.505	14%	2.279.647	14%	1.171.056	14%	2.555.759	14%	2.566.504	15%	2.641.461	15%	2.715.624	15%	2.822.518	15%
56-65	10.904	7%	9.737	8%	4.167	8%	9.157	8%	9.135	9%	9.878	9%	10.085	9%	10.020	10%
Representativity	1.291.146	8%	1.327.766	8%	702.372	9%	1.560.825	9%	1.575.367	9%	1.672.213	9%	1.761.800	10%	1.816.749	10%
Total	145.926	100%	126.625	100%	51.410	100%	108.552	100%	105.646	100%	108.219	100%	106.775	100%	101.432	100%
Representativity	15.804.927	100%	16.181.170	100%	8.218.828	100%	17.791.835	100%	17.388.076	100%	17.760.391	100%	18.118.156	100%	18.478.961	100%

Source: Own elaboration based on harmonized household surveys in Venezuela by the IDB. .

Table 1 (Continuation)

	2010		2011		2012		2013		2014		2015		2020		2021	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gender																
Men	48.315	48%	49.557	48%	49.884	49%	47.954	49%	43.174	49%	38.424	49%	10.477	48%	13.591	48%
Representativity	9.420.427	50%	9.588.608	50%	9.743.691	50%	9.896.863	50%	10.067.970	50%	10.248.718	50%	9.107.136	47%	9.314.866	49%
Women	51.677	52%	52.729	52%	52.959	51%	50.741	51%	45.549	51%	40.564	51%	11.533	52%	14.777	52%
Representativity	9.412.979	50%	9.585.166	50%	9.756.029	50%	9.916.013	50%	10.047.182	50%	10.236.231	50%	10.191.897	53%	9.667.548	51%
Age																
15-25	32.212	32%	32.975	32%	32.420	32%	30.507	31%	26.913	30%	23.756	30%	5.369	24%	6.557	23%
Representativity	5.899.150	31%	5.886.765	31%	5.884.746	30%	5.891.778	30%	5.865.782	29%	5.897.066	29%	4.727.489	24%	5.148.284	27%
26-35	22.208	22%	22.635	22%	23.184	23%	22.134	22%	20.052	23%	17.712	22%	4.431	20%	5.586	20%
Representativity	4.468.146	24%	4.594.226	24%	4.721.014	24%	4.811.769	24%	4.854.809	24%	4.921.535	24%	3.798.641	20%	4.176.466	22%
36-45	19.254	19%	19.496	19%	19.397	19%	18.703	19%	16.770	19%	14.996	19%	4.326	20%	5.525	19%
Representativity	3.641.355	19%	3.711.979	19%	3.760.037	19%	3.845.745	19%	4.007.620	20%	4.058.058	20%	3.801.844	20%	3.902.522	21%
46-55	16.035	16%	16.466	16%	16.451	16%	15.936	16%	14.422	16%	12.972	16%	4.128	19%	5.594	20%
Representativity	2.916.161	15%	2.988.801	16%	3.053.113	16%	3.128.536	16%	3.265.974	16%	3.392.254	17%	3.510.487	18%	3.189.410	17%
56-65	10.283	10%	10.714	10%	11.391	11%	11.415	12%	10.566	12%	9.552	12%	3.756	17%	5.106	18%
Representativity	1.908.594	10%	1.992.003	10%	2.080.810	11%	2.135.048	11%	2.120.967	11%	2.216.036	11%	3.460.572	18%	2.565.732	14%
Total	99.992	100%	102.286	100%	102.843	100%	98.695	100%	88.723	100%	78.988	100%	22.010	100%	28.368	100%
Representativity	18.833.406	100%	19.173.774	100%	19.499.720	100%	19.812.876	100%	20.115.152	100%	20.484.949	100%	19.299.033	100%	18.982.414	100%

Source: Own elaboration based on harmonized household surveys in Venezuela by the IDB.

Table 2. Hourly labor earnings of women versus men*

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
General	87,6%	87,6%	87,7%	86,7%	89,4%	84,9%	93,7%	103,8%	97,5%	98,3%	99,8%	97,6%	96,0%
Age													
15-25	97,2%	97,8%	106,7%	95,4%	108,0%	97,5%	117,5%	119,3%	112,3%	109,9%	106,6%	108,5%	103,1%
26-35	91,3%	95,3%	96,6%	94,9%	91,6%	92,6%	91,3%	110,6%	100,3%	102,9%	102,9%	95,1%	94,5%
36-45	86,1%	82,6%	74,9%	84,0%	77,5%	79,0%	88,1%	99,9%	93,9%	93,5%	99,8%	96,7%	97,3%
46-55	80,5%	74,1%	80,1%	67,8%	86,5%	70,8%	83,3%	86,6%	87,2%	88,5%	89,0%	94,7%	87,8%
56-65	68,2%	71,4%	57,3%	67,3%	74,8%	67,0%	79,9%	82,4%	76,9%	80,3%	82,6%	79,3%	85,4%
Level of Education													
None	76,8%	81,0%	76,0%	83,4%	92,0%	75,2%	89,4%	101,4%	94,3%	95,0%	93,2%	98,9%	86,2%
Primary	78,2%	75,1%	74,3%	70,5%	78,2%	77,9%	80,7%	93,7%	86,3%	88,5%	91,5%	84,0%	84,6%
Secondary	77,7%	80,3%	79,7%	73,0%	83,1%	75,1%	84,8%	92,9%	86,9%	87,0%	87,1%	88,9%	83,8%
Tertiary	80,4%	76,6%	79,5%	83,7%	67,0%	73,0%	80,1%	95,1%	82,1%	82,1%	85,3%	85,5%	88,6%
Economic Sector													
Agriculture, hunting, forestry, and fishing	95,9%	119,7%	94,0%	74,9%	102,3%	129,2%	84,1%	114,2%	114,1%	89,3%	105,9%	93,2%	97,4%
Mining and quarrying	101,0%	88,3%	121,7%	106,0%	120,4%	91,2%	130,8%	109,5%	109,7%	115,9%	176,7%	116,3%	123,8%
Manufacturing industry	84,0%	88,1%	76,4%	86,9%	83,8%	77,9%	85,5%	101,1%	92,6%	89,0%	96,9%	78,3%	75,3%
Electricity, gas, and water	108,9%	89,4%	56,7%	74,2%	83,2%	100,5%	144,6%	113,4%	96,7%	94,4%	104,8%	84,5%	98,6%
Construction	121,3%	155,6%	150,7%	113,7%	133,2%	144,0%	128,1%	138,8%	124,2%	143,0%	121,4%	133,8%	157,4%
Trade, restaurants, and hotels	74,7%	71,3%	72,1%	70,1%	86,4%	77,6%	87,0%	96,6%	90,4%	88,1%	92,9%	94,2%	91,9%
Transport and storage	108,3%	104,0%	89,8%	79,0%	120,1%	96,4%	113,4%	111,0%	121,9%	118,1%	108,9%	94,7%	107,9%
Financial establishments, insurance, and real estate	87,4%	87,4%	87,9%	87,8%	83,8%	79,5%	100,1%	117,2%	117,9%	106,4%	110,3%	109,1%	106,0%
Social and community services	81,3%	77,3%	88,9%	81,3%	81,9%	83,3%	88,0%	95,9%	90,2%	95,3%	90,8%	89,7%	94,1%
Occupation													
Professional and technician	73,4%	74,7%	78,3%	79,3%	77,4%	69,7%	77,5%	92,0%	82,2%	80,7%	83,9%	84,6%	90,6%
Director or senior official	92,6%	93,3%	90,6%	73,4%	73,6%	79,2%	89,9%	102,2%	85,1%	88,7%	83,2%	79,0%	71,7%
Administrative and intermediate level	90,3%	84,5%	95,4%	93,0%	101,4%	86,8%	85,6%	91,4%	89,1%	91,1%	89,3%	103,7%	93,5%
Merchants and salespersons	72,7%	69,6%	69,4%	65,3%	87,8%	78,2%	88,0%	95,2%	89,4%	86,2%	92,0%	83,3%	92,2%
In services	70,2%	69,8%	65,5%	76,6%	66,6%	78,3%	76,0%	82,1%	87,7%	85,6%	81,0%	78,7%	78,7%
Agricultural workers	100,8%	125,0%	99,4%	77,6%	106,6%	148,8%	86,8%	123,4%	113,6%	98,0%	109,9%	84,0%	89,0%
Non-agricultural laborers, machinery operators, and transport services	83,1%	76,6%	73,7%	81,3%	76,8%	74,5%	81,8%	97,4%	93,5%	82,1%	95,2%	77,9%	74,9%
Armed Forces	299,2%	268,5%	103,4%	17,4%	61,9%	45,8%	53,4%	101,5%	120,2%	n.d.	167,7%	46,8%	96,8%
Others	n.d.	n.d.	n.d.	n.d.	80,0%	n.d.	n.d.	n.d.	n.d.	138,4%	n.d.	113,7%	123,9%
Formality													
Informal	n.d.	75,8%	74,9%	76,1%	79,8%	79,4%	88,8%	103,1%	90,2%	92,2%	95,6%	90,5%	85,4%
Formal	n.d.	95,3%	99,2%	98,9%	98,3%	91,2%	97,7%	103,1%	106,3%	104,5%	104,1%	103,3%	107,1%
Area													
Rural	90,0%	85,4%	79,8%	95,9%	79,8%	78,6%	90,3%	95,1%	96,0%	n.d.	n.d.	n.d.	n.d.
Urban	84,7%	84,6%	84,9%	82,7%	90,6%	85,6%	93,7%	104,8%	98,3%	n.d.	n.d.	n.d.	n.d.
Self-Employed													
Not self-employed			90,7%	92,1%	90,2%	87,7%	94,1%	102,0%	99,9%	99,0%	101,3%	99,8%	100,8%
Self-employed			80,6%	78,1%	87,9%	80,1%	94,2%	107,5%	95,3%	99,1%	98,9%	93,2%	88,0%
Regions													
Distrito Federal	87,7%	82,7%	88,4%	79,8%	90,2%	85,1%	90,6%	104,2%	97,7%	95,6%	95,9%	101,5%	88,0%
Amazonas	77,6%	87,6%	76,1%	83,2%	103,5%	68,2%	103,7%	91,2%	115,9%	114,5%	123,3%	99,6%	93,6%
Anzoátegui	79,4%	71,5%	117,2%	97,6%	86,1%	90,8%	84,3%	109,6%	87,0%	103,9%	87,4%	95,3%	91,5%
Apure	89,1%	83,1%	102,1%	91,5%	92,1%	86,6%	107,4%	98,4%	113,5%	93,3%	105,1%	120,0%	105,6%
Aragua	103,8%	101,3%	86,2%	120,4%	73,9%	79,2%	69,8%	115,6%	99,4%	91,4%	93,1%	96,1%	119,4%
Barinas	82,8%	83,2%	83,6%	76,1%	77,3%	66,1%	81,6%	95,2%	94,3%	105,2%	101,3%	116,6%	104,9%
Bolívar	90,8%	91,5%	83,6%	84,8%	80,0%	94,8%	86,4%	114,6%	88,9%	91,3%	85,0%	85,9%	85,5%
Carabobo	75,0%	81,8%	95,2%	113,8%	73,7%	95,2%	107,1%	167,8%	89,2%	97,5%	96,0%	93,9%	95,9%
Cojedes	81,1%	85,0%	86,0%	71,6%	81,2%	89,6%	89,4%	100,8%	104,9%	109,3%	108,5%	129,7%	104,0%
Delta Amacuro	82,4%	69,8%	66,8%	71,7%	95,8%	73,3%	92,9%	106,4%	112,6%	107,9%	116,0%	109,2%	107,0%
Falcón	74,2%	84,8%	77,8%	89,9%	95,1%	91,1%	100,2%	104,1%	88,1%	92,8%	86,6%	96,5%	96,6%
Guárico	95,6%	93,5%	99,7%	100,7%	64,1%	92,9%	90,0%	107,3%	100,6%	94,7%	99,1%	86,1%	97,5%
Lara	85,7%	83,7%	85,8%	87,0%	78,3%	75,1%	88,4%	89,9%	97,8%	95,5%	107,9%	95,8%	96,2%
Mérida	83,0%	82,2%	63,8%	50,8%	79,4%	66,7%	79,4%	84,8%	103,4%	101,0%	108,5%	90,8%	96,7%
Miranda	78,2%	97,8%	104,3%	97,8%	110,9%	81,8%	81,3%	101,3%	86,8%	86,3%	95,5%	86,5%	93,5%
Monagas	88,4%	82,0%	76,4%	60,9%	130,4%	103,9%	96,4%	94,6%	107,4%	88,1%	81,1%	85,4%	91,7%
Nueva Esparta	93,3%	76,0%	73,4%	97,9%	96,1%	102,2%	104,0%	96,3%	89,8%	109,1%	105,7%	95,2%	98,4%
Portuguesa	83,4%	89,6%	90,2%	90,3%	109,0%	113,8%	77,1%	114,2%	103,5%	92,6%	88,4%	93,4%	87,9%
Sucre	97,2%	103,1%	141,9%	115,1%	134,5%	92,2%	109,3%	106,5%	113,2%	101,4%	103,2%	122,9%	117,1%
Táchira	83,6%	89,3%	45,4%	98,5%	86,3%	154,1%	100,5%	108,0%	108,3%	100,7%	95,6%	99,9%	87,0%
Trujillo	85,4%	85,2%	90,4%	81,5%	91,0%	80,2%	103,5%	103,3%	101,1%	106,1%	110,5%	132,3%	115,0%
Yaracuy	74,7%	98,3%	84,6%	84,6%	76,9%	88,8%	86,1%	99,7%	114,8%	110,4%	115,4%	122,9%	115,8%
Zulia	105,0%	108,6%	103,8%	106,5%	97,3%	85,8%	99,1%	129,1%	97,7%	104,3%	111,7%	93,8%	88,5%
Vargas	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	103,2%	101,1%	92,8%	94,4%	98,5%

Cuadro 2 (Continuation)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2021
General	93,5%	92,9%	94,5%	95,5%	95,1%	93,1%	93,2%	93,4%	92,5%	85,2%	71,5%	86,7%
Age												
15-25	101,4%	92,1%	104,9%	106,8%	105,3%	102,4%	107,0%	114,2%	100,1%	98,2%	76,7%	109,6%
26-35	96,3%	96,2%	93,8%	97,0%	97,1%	97,1%	95,7%	95,9%	97,7%	79,0%	90,8%	139,7%
36-45	90,4%	93,9%	92,3%	90,5%	92,7%	88,8%	89,9%	86,5%	85,9%	85,6%	68,4%	69,6%
46-55	85,6%	85,1%	88,5%	90,8%	87,0%	85,9%	85,0%	85,9%	85,5%	85,2%	68,3%	65,7%
56-65	81,4%	86,3%	85,4%	86,1%	86,1%	82,9%	82,5%	83,1%	89,9%	79,9%	54,0%	59,7%
Level of Education												
None	83,7%	90,2%	88,3%	90,6%	93,6%	85,8%	88,1%	83,0%	93,8%	95,0%	69,6%	109,7%
Primary	81,4%	78,8%	82,9%	86,6%	84,0%	82,8%	82,5%	84,0%	87,6%	84,4%	73,7%	84,8%
Secondary	86,9%	84,4%	86,5%	86,4%	86,2%	86,0%	87,5%	89,5%	87,6%	74,5%	68,4%	90,6%
Tertiary	79,7%	83,0%	83,0%	86,6%	85,2%	82,8%	84,8%	84,4%	80,6%	86,0%	67,8%	58,7%
Economic Sector												
Agriculture, hunting, forestry, and fishing	84,5%	107,2%	93,9%	109,9%	99,0%	104,5%	97,9%	96,8%	92,3%	93,7%	56,3%	107,9%
Mining and quarrying	127,0%	110,6%	95,5%	116,3%	86,4%	117,4%	87,8%	102,2%	98,5%	98,1%	91,5%	77,1%
Manufacturing industry	88,6%	87,8%	86,1%	89,9%	85,6%	82,7%	78,8%	82,1%	88,9%	88,8%	115,1%	85,4%
Electricity, gas, and water	90,4%	94,3%	85,5%	110,3%	94,3%	99,8%	103,0%	86,2%	94,0%	102,0%	39,6%	n.d.
Construction	115,0%	100,2%	119,7%	122,9%	120,4%	125,4%	110,3%	130,0%	105,2%	95,8%	159,7%	79,4%
Trade, restaurants, and hotels	89,0%	85,2%	89,4%	87,0%	85,1%	81,1%	89,1%	91,7%	91,1%	88,4%	72,7%	56,9%
Transport and storage	110,3%	102,1%	104,7%	105,3%	108,2%	106,6%	111,9%	99,2%	89,3%	95,2%	74,1%	122,5%
Financial establishments, insurance, and real estate	118,4%	112,4%	110,4%	114,3%	110,2%	105,4%	104,5%	108,7%	102,5%	55,0%	71,2%	58,5%
Social and community services	85,3%	90,9%	91,7%	92,1%	92,6%	93,2%	90,9%	91,1%	90,6%	89,6%	86,2%	100,3%
Occupation												
Professional and technician	83,0%	85,8%	82,7%	85,6%	89,5%	84,4%	83,1%	86,9%	82,9%	83,7%	59,7%	65,0%
Director or senior official	77,3%	82,3%	86,4%	90,8%	83,8%	81,6%	92,9%	93,1%	92,8%	90,0%	43,5%	44,3%
Administrative and intermediate level	100,2%	98,1%	95,2%	97,6%	92,2%	99,7%	95,3%	95,7%	97,7%	89,3%	90,1%	100,2%
Merchants and salespersons	86,0%	82,2%	88,1%	84,1%	81,9%	78,7%	87,5%	91,1%	89,4%	63,3%	87,5%	97,3%
In services	78,3%	81,6%	84,1%	87,9%	86,3%	85,6%	82,1%	86,1%	90,2%	97,2%	n.d.	n.d.
Agricultural workers	81,9%	99,3%	94,2%	102,3%	96,3%	105,0%	101,5%	94,2%	89,7%	95,8%	68,1%	46,6%
Non-agricultural laborers, machinery operators, and transport services	79,9%	76,4%	80,0%	87,9%	81,6%	82,4%	81,0%	82,1%	85,9%	85,5%	83,9%	60,4%
Armed Forces	64,5%	86,2%	60,7%	80,7%	98,2%	80,4%	78,0%	180,2%	85,0%	79,3%	88,6%	90,2%
Others	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Formality												
Informal	83,3%	81,7%	86,4%	86,8%	86,7%	83,0%	86,5%	86,4%	88,3%	80,6%	72,6%	89,5%
Formal	104,1%	103,1%	100,4%	103,8%	101,0%	100,4%	98,0%	98,7%	97,8%	95,8%	58,6%	48,2%
Area												
Rural	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
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.
Self-Employed												
Not self-employed			96,5%	99,8%	98,7%	97,8%	95,5%	94,5%	94,2%	92,5%	69,9%	102,5%
Self-employed			90,1%	88,3%	88,5%	83,9%	88,8%	90,9%	90,0%	77,7%	81,0%	84,6%
Regions												
Distrito Federal	93,2%	92,7%	92,8%	96,4%	92,6%	92,1%	101,3%	86,6%	93,2%	88,4%	88,0%	58,3%
Amazonas	92,1%	95,9%	96,2%	99,4%	96,8%	84,8%	99,3%	106,0%	111,7%	105,2%	n.d.	n.d.
Anzoátegui	94,9%	87,8%	91,1%	81,2%	79,7%	85,7%	79,5%	80,7%	80,7%	81,5%	92,9%	101,8%
Apure	98,0%	117,1%	106,2%	108,8%	110,5%	94,2%	88,7%	94,5%	81,9%	94,7%	57,9%	70,6%
Aragua	91,3%	91,4%	99,2%	106,5%	94,8%	90,6%	83,9%	87,1%	89,6%	91,6%	74,2%	48,5%
Barinas	107,2%	104,2%	100,9%	110,7%	104,8%	107,9%	115,5%	94,2%	98,1%	92,3%	101,7%	80,6%
Bolívar	84,4%	84,6%	79,7%	81,7%	90,7%	77,8%	93,5%	77,9%	83,4%	82,4%	84,4%	94,7%
Carabobo	83,7%	84,2%	91,9%	94,1%	94,3%	88,2%	86,2%	89,3%	86,5%	81,9%	95,0%	74,7%
Cojedes	98,3%	127,6%	115,3%	103,8%	97,6%	120,0%	109,0%	84,4%	97,4%	99,8%	64,6%	135,0%
Delta Amacuro	100,8%	113,0%	105,2%	114,4%	113,2%	113,2%	113,2%	105,9%	98,6%	106,4%	n.d.	n.d.
Falcón	95,0%	96,9%	100,9%	110,1%	91,4%	99,1%	94,1%	93,9%	86,7%	84,8%	34,8%	58,3%
Guárico	83,3%	94,8%	106,3%	86,4%	101,9%	84,7%	88,1%	77,6%	97,1%	78,2%	77,7%	84,5%
Lara	104,5%	94,5%	99,9%	102,2%	92,2%	88,5%	90,7%	86,1%	103,5%	99,0%	50,1%	95,4%
Mérida	90,5%	93,0%	99,9%	97,6%	98,6%	99,2%	92,4%	98,0%	90,1%	88,3%	84,4%	78,0%
Miranda	90,2%	86,6%	85,8%	89,6%	86,7%	90,4%	88,3%	93,9%	89,3%	91,8%	80,1%	82,0%
Monagas	92,2%	86,0%	82,1%	92,9%	91,7%	95,4%	84,6%	93,8%	86,9%	90,5%	78,7%	72,9%
Nueva Esparta	85,4%	85,7%	76,6%	95,0%	93,1%	95,1%	89,8%	83,2%	96,2%	83,1%	64,5%	68,7%
Portuguesa	91,9%	101,6%	98,5%	98,1%	100,1%	100,0%	104,8%	96,3%	90,5%	93,9%	62,5%	108,1%
Sucre	92,5%	88,2%	101,9%	98,7%	98,5%	100,2%	102,8%	103,1%	101,3%	104,1%	54,5%	33,4%
Táchira	87,9%	88,3%	93,2%	96,5%	92,7%	97,1%	95,9%	94,4%	88,1%	84,8%	75,6%	98,5%
Trujillo	107,0%	106,5%	111,1%	103,4%	105,0%	110,0%	97,5%	107,0%	97,0%	100,0%	64,0%	69,4%
Yaracuy	109,9%	101,2%	111,5%	103,5%	103,0%	92,9%	78,6%	84,1%	99,5%	87,4%	81,6%	49,6%
Zulia	95,6%	95,8%	95,9%	92,0%	104,0%	92,5%	95,5%	110,1%	98,8%	63,8%	51,3%	70,4%
Vargas	93,8%	90,9%	88,4%	88,7%	92,5%	94,4%	97,4%	100,0%	97,1%	102,1%	64,6%	71,5%

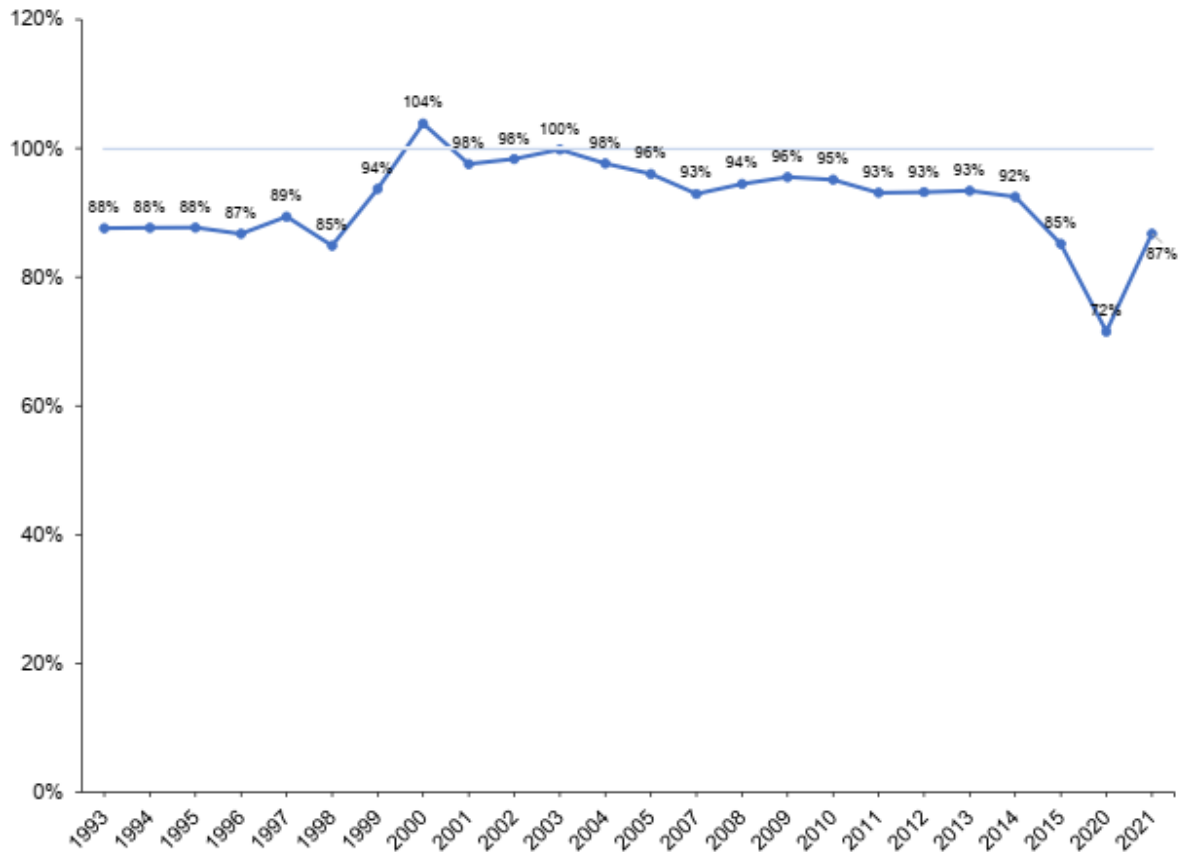
Source: Own elaboration based on household surveys in Venezuela harmonized by the IDB.

n.d. Not Available. When available data is not sufficient to calculate the percentage.

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

In Graph 3, you can see the evolution of hourly earnings for women versus men. There is an earnings gap in almost every year analyzed, with the exception of the year 2000, as well as a gradual increase since the beginning of the century. In the year 2021, which is the last year of the study, the average earnings for women represented 87% of that of men.

Graph 3. Hourly Labor Earnings for Women vs. Men*

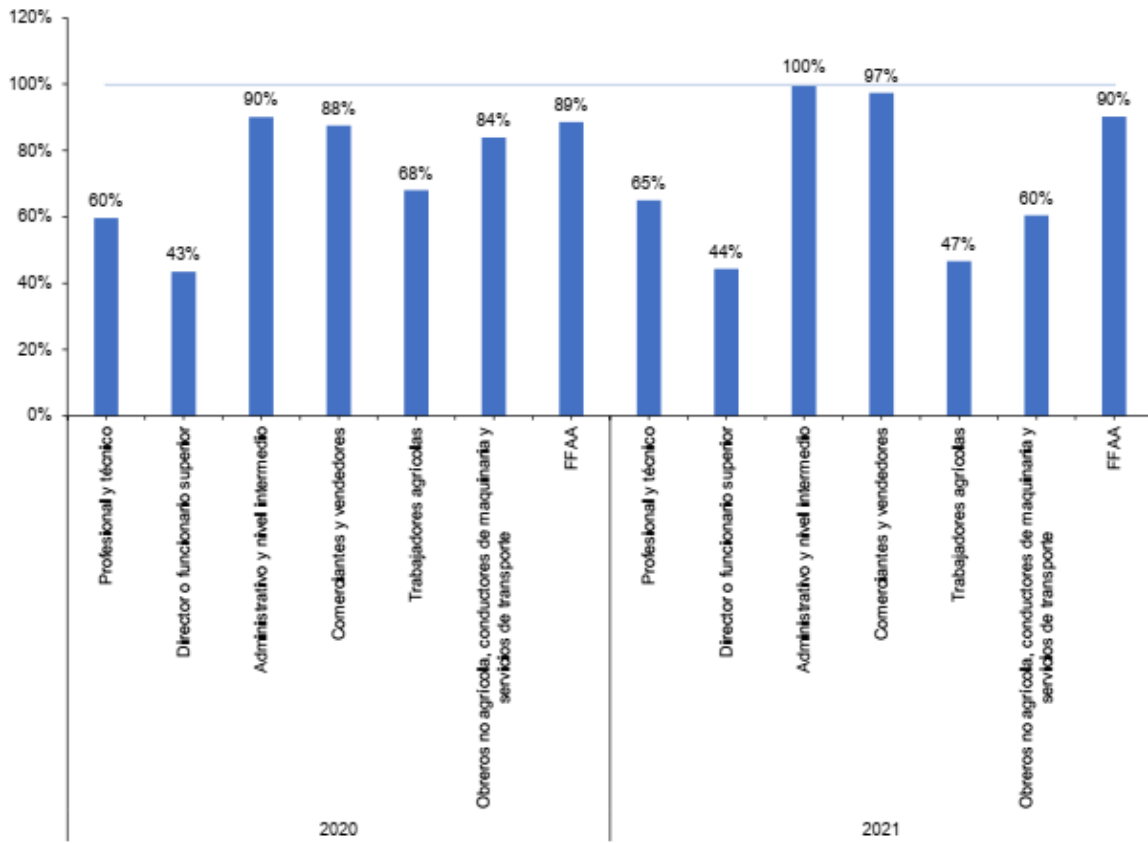


Source: Own elaboration based on harmonized household surveys from Venezuela by the IDB.

*Only individuals with occupation and income were used.

The analysis by occupation observes the situation of 2020 and 2021, as in those years the Venezuelan and the world economy were hit by the COVID-19 disruption. In graph 4 for 2020 there was a gap in favor of man in every occupation. Afterwards, in 2021 the patterns persist showing an acute hourly earnings gap among directors or upper executives, and agricultural workers. The occupations where the gap is the lowest are those of professionals and intermediate level, as well as merchants and sellers.

Graph 4. Labor Hourly Earnings of Women vs. Men by Occupation*



Source: Self-generated based on harmonized household surveys in Venezuela by the IDB.

*Only individuals with occupation and income were included.

1. Methodology

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 incomes 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 earnings difference between the two groups using the explanatory variables X .

$$EGap = E(Y_H) - E(Y_M) \quad (1)$$

Where $E(Y_g)$ denotes the expectation of the logarithm of labor earnings, which is the variable of interest, and g can be 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 $Y_g = \alpha_g + \sum_{i=1}^k X_{ik} \beta_{gik} + \varepsilon_{gi}$. This expression can be substituted into equation

[]):

$$EGap = E \left(\alpha_H + \sum_{i=1}^k X_{ik} \beta_{Hik} + \varepsilon_{Hi} \right) - E \left(\alpha_M + \sum_{i=1}^k X_{ik} \beta_{Mik} + \varepsilon_{Mi} \right)$$

(2)

$$EGap = \widehat{\alpha}_H + \sum_{i=1}^k \overline{X}_{ik} \widehat{\beta}_{Hik} - \widehat{\alpha}_M - \sum_{i=1}^k \overline{X}_{ik} \widehat{\beta}_{Mik}$$

(3)

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

$$EGap = (\widehat{\alpha}_H - \widehat{\alpha}_M) + \sum_{i=1}^k \overline{X}_{ik} (\widehat{\beta}_{Hik} - \widehat{\beta}_{Mik}) + \sum_{i=1}^k (\overline{X}_{Hik} - \overline{X}_{Mik}) \widehat{\beta}_{Hik}$$

(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:

- $yhora_i$ are the logarithm of nominal hourly labor earnings;
- $gaedu_i$ 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.
- exp_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.
- $casado_i$ is a binary variable that takes the value of 1 if the person is married.

- $men6_i$ is a binary variable that takes the value of 1 if there are children under six years of age living in the household.
- cnt_{prop}_i is a binary variable that takes the value of 1 if the person is self-employed or an independent worker.
- $rama_i$ are binary variables related to the different economic activities in which people are engaged, with agriculture, hunting, forestry, and fishing as the base category.
- $ocupa_i$ 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.
- $zona_i$ 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 income. 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 earnings 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.

$$\delta = \delta_X + \delta_F + \delta_M + \delta_0 \quad (6)$$

Where δ represents the total gender earnings difference; δ_X represents the earnings difference related to observable characteristics; δ_F is the measurement of the maid effect; δ_M is the measurement of the CEO effect; and δ_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:

gaedu_i, gedad_i, casado_i, men6_i, cnt_{prop}_i, rama_i, ocupa_i, formal_i, zona_i, 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.¹³

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).

¹³ 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.

4. Results

In Table 3, the results of the Blinder-Oaxaca decomposition are presented. It can be observed that during the 25 years included in the calculation, the average hourly earnings gap decreased in the 1990s to approach zero in the early 21st century. However, it then increased, reaching a value of 15%¹⁴ in 2021, as seen in Graph 4. This evolution can be partly explained by the gender gap in labor force participation in Venezuela, a variable particularly relevant for the country, as it had the lowest female participation rate in the region in 2020 (Zambrano et al., 2022). Additionally, the same authors point out that the most significant increase in the gender earnings gap coincides with 2019, a year in which there were signs of economic recovery in some sectors of the Venezuelan economy, suggesting that this process benefited men to a greater extent. This positive relationship between female labor force participation and the gender earnings gap has been documented by other authors, such as Aldan (2021), who argues that as more women enter the labor market, there is a higher number of women with less work experience and a set of skills entering sectors where the gap is more pronounced. Furthermore, Rummery (1992) has suggested that differences in years of work experience between men and women explain approximately 40% of the wage gap, highlighting the importance of active participation in the labor market to reduce this gap.

In different periods, the unexplained component appears to be the main driver of the earnings gap, partially offset by the explained component that benefits women due to their better average labor profile. Starting in 2020, an explained component unfavorable to women is also observed.

Table 4 shows the decomposition of the gap according to different aggregated explanatory variables. It can be seen that the gap explained by education is negative and statistically significant, indicating that the average education level of female workers, which is higher than that of men (Table A1), is reducing the total earnings gap.

On the other hand, personal and family characteristics such as age, marital status, and the presence of minors in the household have a positive and statistically significant effect on the earnings gap, meaning they contribute to increasing earnings disparity. Similarly, it is observed that the economic activities in which most women work, as well as self-employment, are also contributing to increasing the total earnings gap. These results are consistent with the work of Zambrano et al. (2022), who find similar results using the same methodology.

Finally, the region of the country where workers (both men and women) reside appears to have a negative and statistically significant effect on the gap, indicating that the fact that female workers are more concentrated in areas of greater economic dynamism is also reducing gender earning inequalities.

¹⁴ Calculated as $diferencia/whora_{mujer}$, the explained gap is calculated as $diferencia_{explicada}/whora_{mujer}$, while the unexplained gap is calculated as $diferencia_{no explicada}/whora_{mujer}$.

Table 3. Blinder-Oaxaca Decomposition*

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Differential													
Estimation for Men	0.110*** (0.000557)	0.149*** (0.00149)	0.225*** (0.00335)	0.398*** (0.00920)	0.714*** (0.0185)	0.997*** (0.0160)	1.084*** (0.0149)	1.181*** (0.0147)	1.447*** (0.0155)	1.586*** (0.0165)	1.757*** (0.0142)	2.285*** (0.0287)	2.945*** (0.0360)
Estimation for Women	0.0966*** (0.000777)	0.131*** (0.00186)	0.197*** (0.00415)	0.345*** (0.0187)	0.638*** (0.0138)	0.846*** (0.0146)	1.016*** (0.0197)	1.226*** (0.0247)	1.411*** (0.0150)	1.560*** (0.0169)	1.753*** (0.0234)	2.231*** (0.0310)	2.826*** (0.0486)
Difference	0.0137*** (0.000956)	0.0184*** (0.00238)	0.0277*** (0.00533)	0.0528* (0.0208)	0.0758** (0.0231)	0.151*** (0.0216)	0.0685** (0.0247)	-0.0451 (0.0288)	0.0361 (0.0216)	0.0263 (0.0236)	0.00403 (0.0274)	0.0543 (0.0422)	0.119* (0.0605)
Decomposition													
Explained	-0.00591*** (0.000763)	-0.0109*** (0.00189)	-0.0165*** (0.00342)	-0.0242* (0.0108)	-0.0399* (0.0162)	-0.0571*** (0.0153)	-0.0943*** (0.0171)	-0.109*** (0.0195)	-0.126*** (0.0159)	-0.170*** (0.0176)	-0.186*** (0.0182)	-0.278*** (0.0266)	-0.219*** (0.0453)
Unexplained	0.0196*** (0.000923)	0.0293*** (0.00266)	0.0443*** (0.00589)	0.0770** (0.0259)	0.116*** (0.0218)	0.208*** (0.0252)	0.163*** (0.0319)	0.0637 (0.0349)	0.162*** (0.0266)	0.197*** (0.0280)	0.190*** (0.0333)	0.332*** (0.0476)	0.338*** (0.0604)
Decomposition (as a percentage of hourly labor earnings for women)													
Total	14%	14%	14%	15%	12%	18%	7%	-4%	3%	2%	0%	2%	4%
Explained	-6%	-8%	-8%	-7%	-6%	-7%	-9%	-9%	-9%	-11%	-11%	-12%	-8%
Unexplained	20%	22%	22%	22%	18%	25%	16%	5%	11%	13%	11%	15%	12%
Observations	89511	28231	27348	20737	23254	24837	24060	24733	62007	70479	59095	25592	51436
t-Statistic in parentheses													
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$													

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2021
Differential												
Estimation for Men	3.915*** (0.0323)	5.229*** (0.0972)	6.896*** (0.0394)	8.551*** (0.0514)	10.62*** (0.0561)	13.32*** (0.0699)	16.86*** (0.111)	24.13*** (0.150)	40.05*** (0.262)	86.48*** (4.689)	14.31*** (1.058)	923.8*** (81.60)
Estimation for Women	3.613*** (0.0339)	4.805*** (0.0581)	6.477*** (0.0492)	8.168*** (0.0621)	10.10*** (0.0786)	12.40*** (0.0919)	15.74*** (0.131)	22.54*** (0.378)	37.02*** (0.385)	73.65*** (0.832)	10.77*** (0.873)	801.2*** (79.72)
Difference	0.301*** (0.0468)	0.424*** (0.113)	0.419*** (0.0630)	0.383*** (0.0806)	0.518*** (0.0966)	0.920*** (0.115)	1.119*** (0.172)	1.593*** (0.406)	3.025*** (0.466)	12.84** (4.762)	3.533* (1.372)	122.6 (114.1)
Decomposition												
Explained	-0.342*** (0.0406)	-0.382*** (0.0822)	-0.502*** (0.0489)	-0.598*** (0.0673)	-0.947*** (0.0705)	-0.994*** (0.0951)	-1.246*** (0.120)	-0.931*** (0.162)	-1.940*** (0.359)	-3.345*** (0.973)	1.541 (0.918)	19.95 (48.89)
Unexplained	0.643*** (0.0571)	0.806*** (0.0737)	0.922*** (0.0787)	0.981*** (0.110)	1.464*** (0.110)	1.914*** (0.147)	2.366*** (0.214)	2.524*** (0.439)	4.965*** (0.628)	16.18** (5.316)	1.993 (1.114)	102.7 (134.5)
Decomposition (as a percentage of hourly labor earnings for women)												
Total	8%	9%	6%	5%	5%	7%	7%	7%	8%	17%	33%	15%
Explained	-9%	-8%	-8%	-7%	-9%	-8%	-8%	-4%	-5%	-5%	14%	2%
Unexplained	18%	17%	14%	12%	14%	15%	15%	11%	13%	22%	19%	13%
Observations	53204	59586	59118	53057	51028	52297	50002	36898	46860	39234	11838	12102
t-Statistic in parentheses												
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$												

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

Only individuals with occupation, income, and probabilistic weightings were used.

**Table 4, Components of Explained Difference in Blinder-Oaxaca*
(Hourly Earnings)**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Explained Difference	-0.00591***	-0.0109***	-0.0165***	-0.0242*	-0.0399*	-0.057***	-0.094***	-0.109***	-0.126***	-0.170***	-0.186***	-0.278***	-0.219***
Education	-0.00857***	-0.0117***	-0.0212***	-0.041***	-0.069***	-0.084***	-0.094***	-0.067***	-0.122***	-0.120***	-0.134***	-0.175***	-0.256***
Experience	-0.000263	-0.00106	-0.00133	-0.00013	0.00190	0.00301	-0.00251	-0.00491	0.00114	-0.0061*	-0.00298	0.00369	-0.00511
Personal and Family Characteristics	0.00284***	0.00468***	0.00449***	0.00371	0.0115***	0.0173***	0.0180***	0.00644	0.0143***	0.0198***	0.0174***	0.0134	0.0292*
Self-Employment	0.0000185	-0.000276	0.0000280	0.000834	0.000385	-0.0047*	-0.00109	-0.0035*	-0.0037*	-0.0037*	-0.00245	0.0000901	0.000780
Economic Activity	0.00569***	0.00405*	0.0155***	0.0425*	0.0532**	0.0772***	0.0517***	0.0351*	0.0485*	0.0875***	0.0726***	0.0522	0.100*
Occupation	-0.00396***	-0.0068***	-0.0138***	-0.0258*	-0.0325**	-0.0627**	-0.059***	-0.0608**	-0.0508	-0.130***	-0.118***	-0.137**	-0.0565
Region	-0.00091***	-0.0022***	-0.000873	-0.00428	-0.0048*	-0.00423	-0.0058*	-0.014***	-0.016***	-0.017***	-0.018***	-0.0262***	-0.02***
Formality	n.d.	0.00313***	0.00213**	0.00208	0.00272	0.00234	0.00216	0.00158	0.00201*	-0.00063	-0.00118	-0.0084***	-0.0119**
Area	-0.00076***	-0.00077**	-0.00145	-0.00210	-0.00316	-0.00182	-0.0033*	-0.00162	0.000775	n.d.	n.d.	n.d.	n.d.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2021
Explained Difference	-0.342***	-0.382***	-0.502***	-0.598***	-0.947***	-0.994***	-1.246***	-0.931***	-1.940***	-3.345***	1.541	19.95
Education	-0.277***	-0.360***	-0.523***	-0.541***	-0.697***	-0.794***	-0.896***	-1.189***	-2.107***	-2.887**	-0.373	-132.2**
Experience	-0.0109	-0.0383	-0.0183	-0.0268*	-0.0103	-0.0592**	-0.0292	-0.0748	-0.0952	-0.427	-0.560	26.85
Personal and Family Characteristics	0.0291***	0.000752	0.0399***	0.0540**	0.0390*	0.0461	0.0452	-0.0412	0.284**	-0.923	0.347	50.94*
Self-Employment	-0.00390*	-0.00512	0.00247	-0.00308	0.00170	0.00187	0.0169**	0.0286*	0.0741***	0.557***	0.310	78.83***
Economic Activity	0.156***	0.272***	0.346***	0.341***	0.256***	0.560***	0.437***	0.856***	0.446	1.655*	0.359	99.32
Occupation	-0.204***	-0.182***	-0.292***	-0.375***	-0.422***	-0.624***	-0.622***	-0.210	-0.595	-2.354	1.317	-59.89
Region	-0.0171***	-0.0377***	-0.0240***	-0.0381***	-0.0684***	-0.0646***	-0.127***	-0.159***	-0.147*	-0.461	0.129	-44.26*
Formality	-0.0136***	-0.0314***	-0.0325***	-0.00868	-0.0455***	-0.0602***	-0.0712***	-0.142***	0.199***	1.495***	0.0116	0.334
Area	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

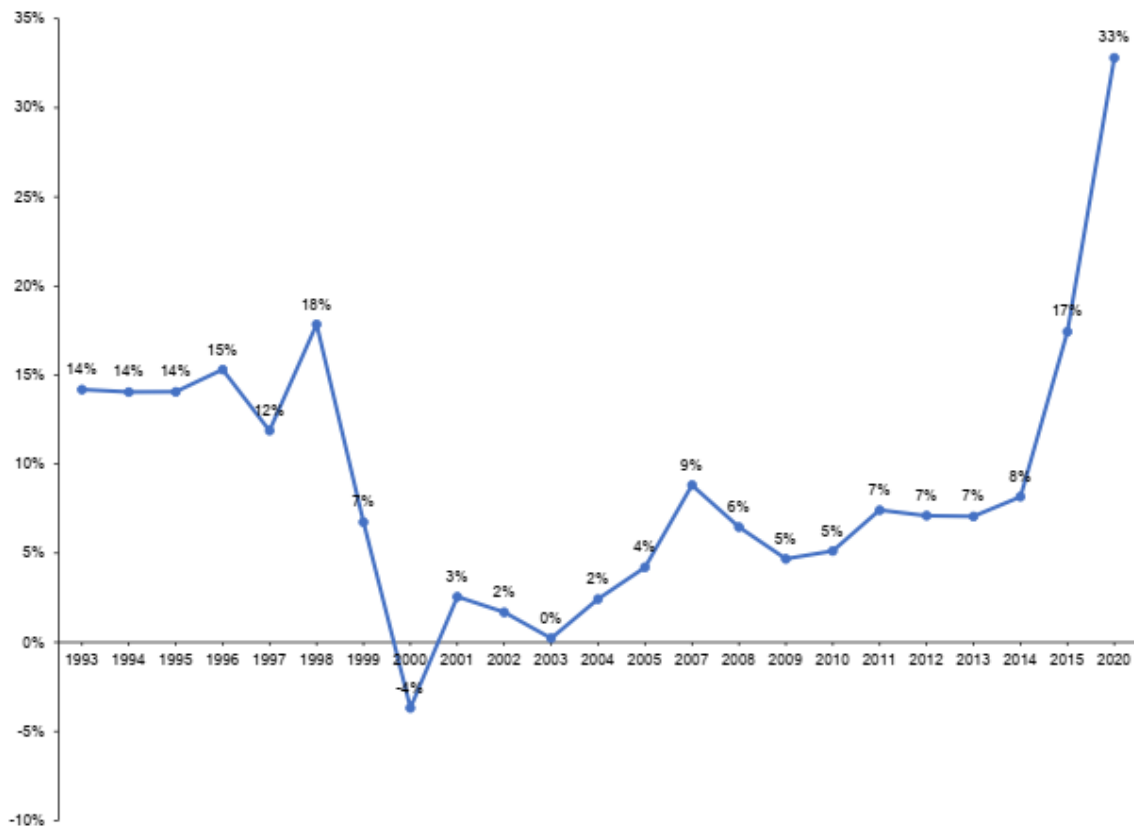
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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

Only individuals with occupation, income, and probabilistic weightings were used.

n.d. Not Available. When data is insufficient to calculate the percentage.

Graph 5. Estimated total earnings gap using the Blinder-Oaxaca decomposition*



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

*Only individuals with occupation and income were used.

In Table 5, the results of the Ñopo decomposition are presented. There is a gender earnings gap in all the analyzed years, except for 2000, which decreases from 14% to 0% in the 1990s, and then increases to 15% in 2021. Similar to the results of the Blinder-Oaxaca model, the reduction in the gap would be explained by the explanatory variables, while most of it is due to factors not explained by the analyzed variables, as well as what Ñopo (2008) has called the "Maid Effect." The "CEO Effect" seems to be helping to narrow the gap in some years. While there are small differences between the estimates obtained from Blinder-Oaxaca and those obtained from Ñopo, these differences are essentially related, and both methods are used following common practices in the international literature, with their variations stemming from methodological aspects.

The common support for different years, both for men and women, is never less than 23%. This value is similar to the models for LAC countries used in Hoyos and Ñopo (2010) and Ñopo (2012), which employ similar control variables to those presented in this study. Like the Blinder-Oaxaca model, there is a gradual decrease in the total earnings gap in the 1990s, followed by an increase from the beginning of the 21st century.

Table 5. Ñopo Decomposition***(Hourly Earnings)**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
(Total)	14%	14%	14%	15%	12%	18%	7%	-4%	2%	2%	0%	3%	4%
(Unexplained)	18%	20%	13%	19%	13%	18%	11%	1%	8%	9%	11%	5%	4%
(CEO Effect)	-5%	-10%	-4%	-8%	0%	4%	2%	-2%	2%	-3%	-1%	-2%	4%
(Maid Effect)	2%	7%	8%	1%	0%	3%	0%	3%	0%	0%	0%	3%	0%
(Explained)	-1%	-2%	-3%	3%	-2%	-8%	-6%	-5%	-8%	-3%	-9%	-3%	-4%
% Men	36%	24%	24%	23%	24%	24%	23%	23%	31%	37%	34%	26%	31%
% Women	62%	43%	43%	39%	39%	41%	41%	40%	53%	61%	57%	40%	51%
Standard Error	1%	2%	5%	4%	3%	3%	3%	4%	2%	2%	2%	2%	2%

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2020	2021
(Total)	8%	9%	7%	5%	5%	7%	6%	7%	8%	16%	32%	15%
(Unexplained)	16%	12%	12%	9%	13%	12%	11%	5%	9%	12%	25%	-17%
(CEO Effect)	1%	2%	-1%	-2%	-3%	-3%	-4%	-5%	-3%	5%	10%	18%
(Maid Effect)	-1%	0%	2%	2%	1%	2%	2%	5%	3%	1%	3%	6%
(Explained)	-7%	-5%	-7%	-4%	-6%	-4%	-2%	2%	-1%	-2%	-5%	7%
% Men	32%	34%	33%	32%	30%	31%	33%	29%	31%	38%	23%	23%
% Women	55%	56%	55%	53%	52%	54%	54%	48%	52%	62%	32%	37%
Standard Error	1%	2%	1%	1%	1%	1%	1%	2%	2%	1%	13%	13%

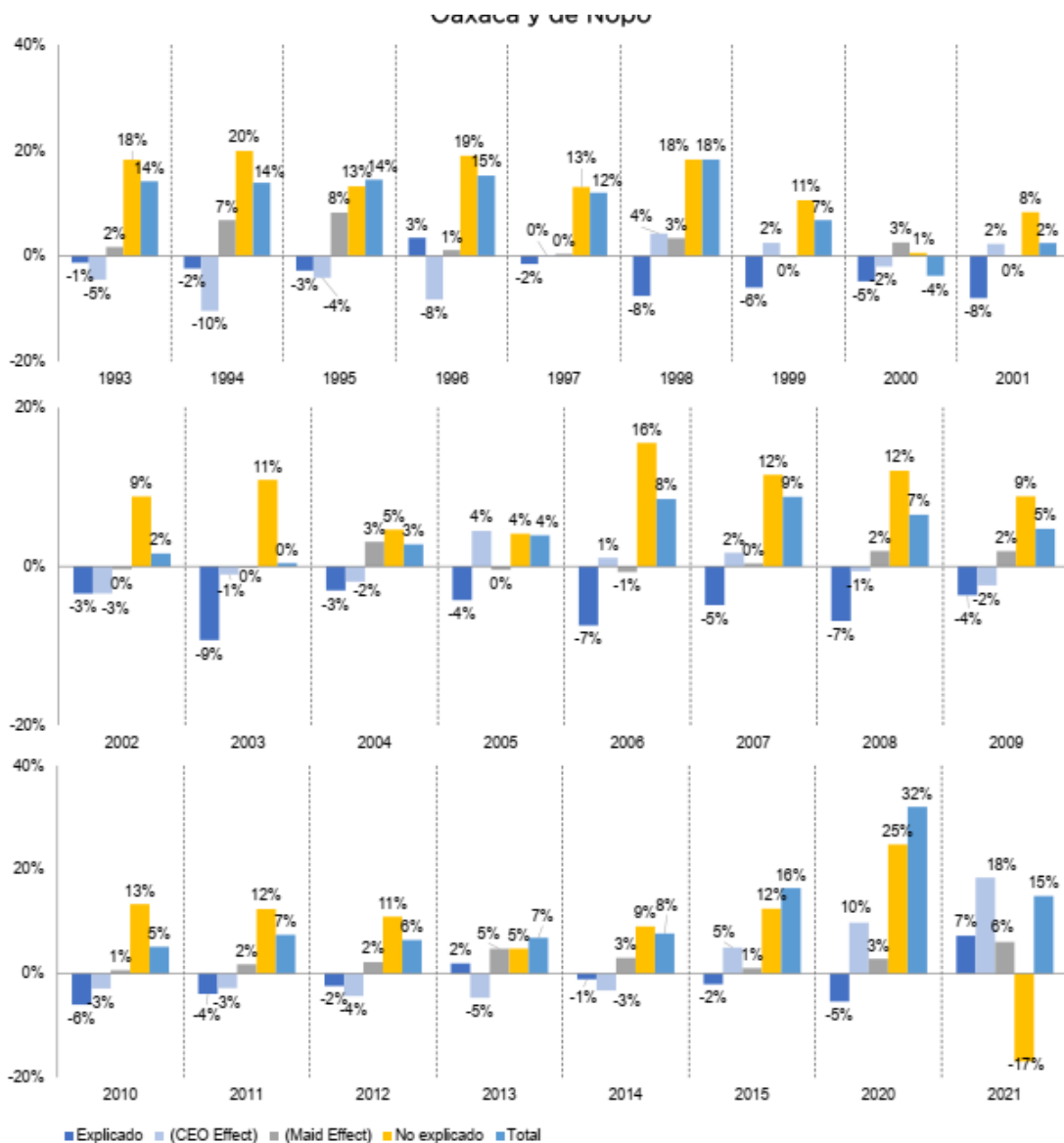
Source: Own elaboration based on household surveys harmonized by the IDB.

Only individuals with occupation and income, and frequency weightings, were used.

In graph 6, the evolution of the gender earnings gap estimated using Ñopo's decomposition is also presented. It can be observed that the unexplained part (yellow bar) remained high in all years of analysis, except for 2021.

On the other hand, for 2020, the component explained by the variables used in the model would also be helping to close the gap by 5%, while the unexplained component would be causing a gap of 25%. This latter part represents the difference in income earned by women, which is due to other unobservable factors that may include biases and/or discrimination, as mentioned earlier, or other factors that, if determined, would allow for policy responses similar to those already applied to what we consider explainable factors.

Graph 6. Total earnings gap estimated using Blinder-Oaxaca and Ñopo decompositions*

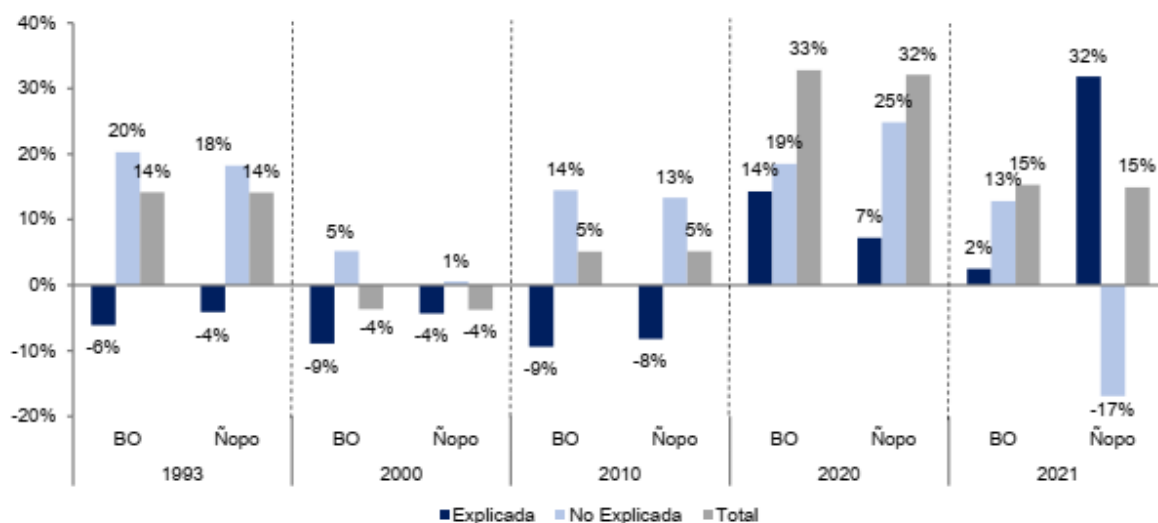


Source: Own elaboration based on harmonized household surveys in Venezuela by the IDB.

* Only individuals with occupation and income were used.

In Graph 7, gender earnings gaps calculated using both methodologies for the years 1993, 2000, 2010, 2020, and 2021 are compared. These years were chosen to maintain consistent time intervals and to attempt to capture a post-2020 picture, the year when the COVID-19 crisis emerged. Both methodologies consistently show that for different years, there is an unexplained earnings gap in favor of men, and explanatory variables mitigate this gap, with the exception of Ñopo's model in 2021, in which the CEO effect plays a significant role in shifting the importance from the unexplained component.

Graph 7. Total earnings gap estimated using Blinder-Oaxaca (BO) and Ñopo's decompositions*



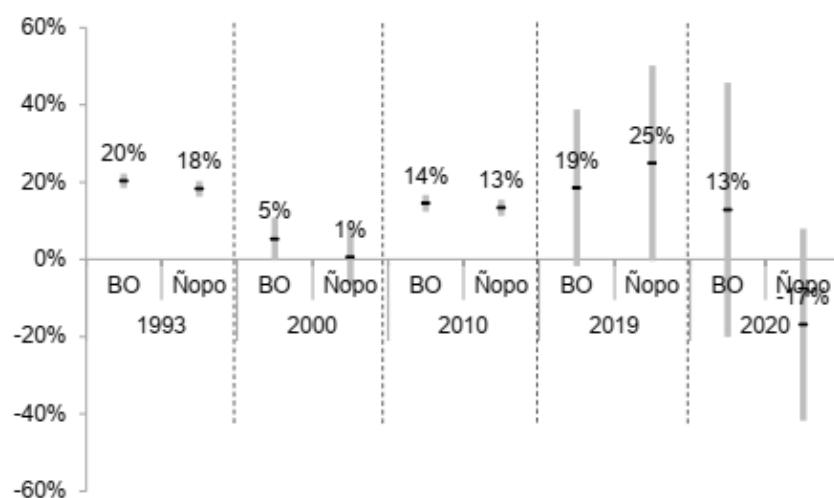
Source: Own elaboration based on harmonized household surveys by the IDB.

*Only individuals with occupation and income.

Note: For Ñopo's 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 graph 8, the evolution of the unexplained gap for the same periods used in graph 6 is presented. Confidence intervals for 1.96 standard deviations above and below the estimator are included, allowing you to see that both methodologies show a statistically significant unexplained earnings gap in 1993 and 2010, being statistically the same for both methodologies at the 95% confidence level. However, for 2020 and 2021, the confidence intervals are too wide to verify a statistically significant unexplained gap.

Graph 8. Unexplained Earnings Gap Estimated Through Blinder-Oaxaca and Ñopo's Decompositions



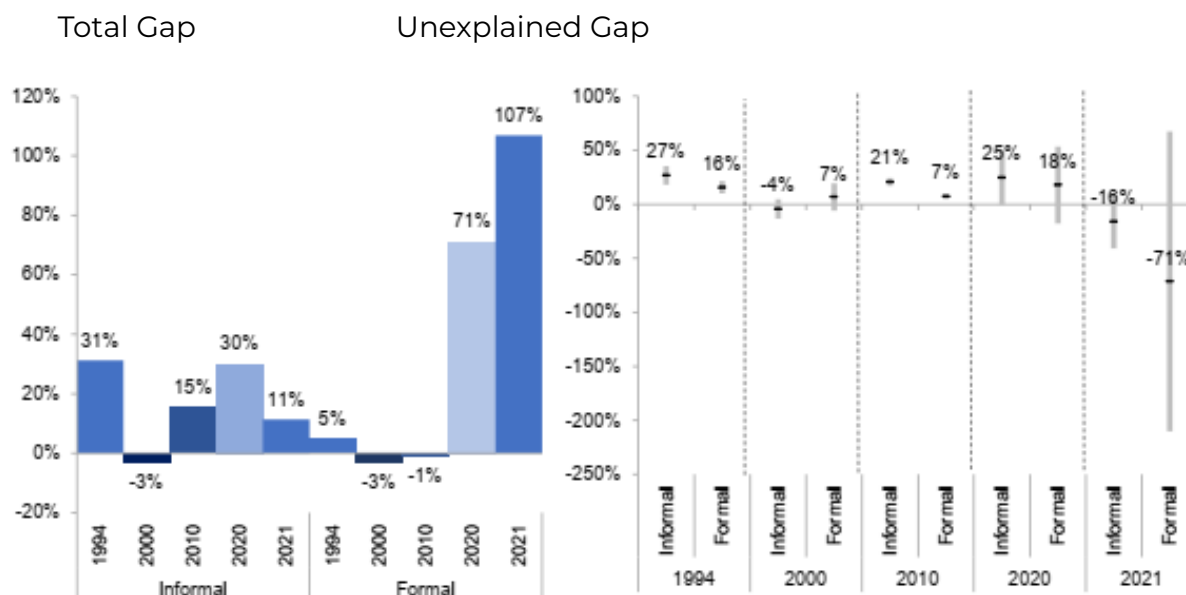
Source: Own elaboration based on harmonized household surveys from the Inter-American Development Bank (IDB).

Note: The bars represent the unexplained component at a 95% confidence level.

Additionally, Ñopo's decomposition allows for disaggregating the earnings gap by the categories of different explanatory variables. In Graph 8, the earnings gap is presented both as a total and unexplained by formality status. There is a clear distinction in the total earnings gap between individuals working in the formal sector and those in the informal sector. A higher total earnings gap is observed for people in the informal sector, even becoming negative (favorable to women) in the formal sector. Starting from the year 2020 and the change in methodology, there are fewer observations for formal sector workers, and a higher earnings gap is shown in this group.

On the other hand, the unexplained gap is statistically significant both in the formal and informal sectors, except for the formal sector in the year 2021. However, for 2020 and 2021, the confidence intervals are too wide to confirm a statistically significant unexplained gap. Figure 8 includes confidence intervals using 1.96 standard deviations above and below the estimator, which corresponds to a 95% confidence level.

Graph 9. Earnings Gap Estimated through the Ñopo Decomposition by Formality



Source: Own elaboration based on harmonized household surveys in Venezuela by the IDB.

Note: The bars represent the unexplained component at a 95% confidence level.

5. Conclusions

According to the findings of this study, there is a gender earnings gap that experienced a gradual decline in the 1990s but began to increase in the early 21st century. This earnings gap appears to be primarily related to unobservable factors in household surveys. This suggests that regulations, biases, or discrimination may be playing a more important role than individual characteristics or preferences in explaining it.

This earnings gap has also been shown to be heterogeneous among different groups, being more pronounced in the informal sector. However, in recent years, this trend seems to be changing. Additionally, there are differences in the earnings gap by occupation, but in most of them, it remains statistically significant. These results indicate that the unexplained earnings gap between men and women has not decreased steadily in the last three decades, limiting income opportunities for women.

The main variable that appears to be closing the gender pay gap in Venezuela is education. On the other hand, the economic activities in which women mostly engage, the low proportion of women who are self-employed (as shown in Table A1), as well as personal and family characteristics such as age, marital status, and the presence of children in the household, seem to be factors that generate an earnings gap in favor of men. Additionally, it was found that the region of the country is also contributing to reducing the income gap due to the high proportion of women working in areas with high economic dynamism.

These conclusions mostly coincide with the literature on gender earnings gaps in Venezuela. Like Hoyos and Ñopo (2010), it was determined that the unexplained gap continues to be very significant in the country, while given their human capital endowments, women would be expected to have higher wages.

In line with authors like Chioda (2011) and Gasparini and Marchionni (2015), education is a relevant factor in closing the gap, given the increase in the proportion of women who have completed their secondary education. Like the ILO (2019a), this study concludes that the unexplained gap persists and was primarily present among informal workers, although this trend seems to have changed in recent years.

In line with the findings of Zúñiga and Orlando (2001), Alcindor and Pereira (2006), Carrillo et al. (2014), Marchionni, Gasparini, and Edo (2018), Maldonado (2020), and Zambrano et al. (2022), this study shows that the unobservable factor (traditionally interpreted as discrimination) is the main driver of the earnings gap unfavorable to women. Like Zúñiga and Orlando (2001), this study found that the greater endowment of human capital, i.e., the better labor profile of women, partially compensates for this disadvantage. Furthermore, unlike the latter work, this study observes that in recent years, the gap appears to be more pronounced in the formal sector.

This document contributes to diagnosing the evolution of the gender earnings gap in Venezuela from 1993 to 2021. The conclusions are relevant to support

evidence-based policy formulation. Furthermore, it highlights the need for future analyses that delve into the earnings gap for specific groups and examine the consequences of the pandemic and economic collapse on this gap in Venezuela. At the same time, it is important to propose ways to determine the factors that are currently considered unobservable in order to propose response policies that can reduce them over time.

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Table A1. Distribution of characteristics of the employed population receiving income by year and gender, men (M) and women (W).

	1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005		
	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	
Years of Education	7,6	8,9	7,4	8,7	7,5	8,9	7,7	9,2	7,9	9,2	7,9	9,1	7,9	9,2	7,8	9,1	7,9	9,2	7,9	9,1	7,9	9,2	8,2	9,4	8,2	9,5	
None	21%	13%	24%	15%	22%	14%	20%	12%	19%	12%	19%	12%	18%	13%	20%	13%	19%	13%	19%	13%	20%	13%	18%	12%	18%	12%	
Primaria	53%	47%	51%	47%	52%	45%	53%	44%	52%	43%	52%	45%	52%	43%	52%	44%	50%	43%	50%	43%	49%	43%	49%	40%	48%	40%	
Secondary	19%	29%	19%	29%	21%	31%	21%	32%	23%	34%	23%	33%	25%	34%	23%	34%	26%	34%	26%	34%	26%	34%	28%	36%	29%	37%	
Tertiary	6%	11%	5%	9%	5%	10%	6%	12%	6%	10%	6%	10%	5%	10%	5%	10%	5%	10%	5%	10%	5%	10%	6%	11%	5%	11%	
Years of Experience	21,8	19,9	21,7	19,9	21,5	20,1	21,6	20,2	21,1	20,1	21,4	20,3	21,4	20,7	21,7	21,0	21,5	20,8	21,8	21,1	21,9	21,1	21,9	21,2	21,8	21,0	
15-25	24%	23%	25%	23%	26%	22%	24%	20%	26%	22%	25%	22%	25%	21%	25%	21%	25%	22%	24%	21%	24%	21%	23%	20%	24%	20%	
26-35	30%	32%	31%	33%	30%	33%	30%	33%	30%	32%	30%	31%	29%	31%	29%	30%	29%	29%	29%	30%	29%	29%	28%	28%	28%	30%	
36-45	25%	28%	23%	27%	23%	28%	24%	28%	23%	26%	23%	27%	24%	28%	24%	27%	24%	27%	24%	27%	24%	27%	25%	28%	24%	27%	
46-55	13%	12%	14%	13%	14%	13%	15%	14%	15%	15%	15%	17%	15%	16%	16%	15%	16%	17%	15%	17%	15%	17%	16%	17%	16%	17%	
56-65	8%	5%	7%	4%	7%	4%	7%	4%	7%	5%	7%	5%	7%	5%	7%	5%	7%	6%	7%	6%	7%	6%	8%	7%	8%	6%	
Married	65%	50%	65%	49%	62%	49%	63%	47%	64%	50%	64%	51%	63%	51%	63%	52%	64%	52%	65%	54%	65%	54%	64%	53%	64%	53%	
Children under 6 years old in the household	47%	43%	49%	45%	47%	45%	46%	42%	46%	44%	47%	43%	44%	42%	44%	43%	44%	41%	44%	42%	43%	41%	41%	39%	42%	41%	
Agriculture, hunting, forestry, and fishing	14%	1%	18%	1%	18%	2%	17%	2%	13%	1%	14%	1%	13%	2%	15%	1%	14%	1%	15%	1%	16%	2%	15%	1%	15%	2%	
Mining and quarrying	1%	0%	1%	0%	1%	0%	2%	0%	2%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	
Manufacturing industry	17%	14%	15%	13%	15%	13%	14%	12%	16%	12%	15%	12%	16%	12%	15%	11%	14%	11%	13%	10%	13%	10%	12%	9%	13%	10%	
Electricity, gas, and water	1%	0%	1%	1%	1%	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	
Construction	13%	1%	12%	1%	11%	1%	11%	1%	13%	1%	13%	1%	12%	1%	13%	1%	13%	1%	12%	1%	11%	1%	13%	1%	13%	1%	
Trade, restaurants, and hotels	21%	26%	20%	26%	21%	28%	19%	30%	21%	30%	21%	33%	22%	33%	21%	34%	21%	35%	22%	35%	21%	33%	20%	32%	19%	32%	
Transport and storage	9%	2%	9%	2%	8%	2%	10%	1%	9%	2%	9%	2%	10%	2%	9%	2%	10%	2%	11%	2%	11%	2%	12%	2%	11%	3%	
Financial establishments, insurance, and real estate	6%	9%	5%	8%	5%	7%	6%	8%	5%	7%	5%	6%	5%	6%	5%	5%	5%	5%	5%	5%	4%	5%	5%	5%	5%	4%	
Social and community services	19%	45%	19%	48%	19%	47%	20%	45%	20%	46%	20%	44%	20%	44%	19%	45%	20%	45%	21%	46%	22%	48%	22%	49%	22%	48%	
Distrito Federal	12%	16%	12%	17%	14%	18%	14%	17%	12%	15%	12%	15%	11%	14%	10%	12%	9%	11%	8%	10%	7%	9%	7%	9%	6%	8%	
Amazonas	5%	4%	4%	3%	2%	2%	4%	3%	4%	4%	4%	5%	4%	4%	4%	4%	0%	0%	0%	0%	0%	0%	1%	1%	0%	1%	
Anzoátegui	1%	1%	1%	2%	2%	2%	1%	1%	2%	2%	1%	2%	2%	2%	2%	2%	4%	4%	4%	4%	4%	5%	5%	4%	4%	4%	
Apure	8%	8%	6%	5%	6%	6%	4%	3%	4%	5%	3%	4%	6%	6%	7%	7%	2%	2%	2%	2%	1%	2%	2%	2%	2%	2%	
Aragua	2%	2%	4%	4%	4%	4%	4%	4%	3%	2%	3%	2%	3%	2%	3%	2%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	6%
Barinas	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	5%	4%	5%	5%	5%	4%	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	
Bolívar	8%	8%	6%	7%	7%	8%	7%	8%	9%	9%	8%	9%	9%	8%	9%	10%	5%	4%	5%	5%	4%	5%	4%	5%	4%	5%	5%
Carabobo	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	9%	9%	10%	9%	10%	10%	10%	10%	10%	10%	
Cojedes	4%	4%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Delta Amacuro	3%	3%	2%	1%	2%	1%	2%	2%	3%	2%	3%	2%	2%	2%	3%	2%	1%	0%	0%	1%	0%	0%	1%	1%	1%	1%	
Falcón	6%	6%	7%	6%	5%	4%	6%	5%	6%	5%	7%	6%	6%	5%	7%	6%	3%	3%	3%	4%	3%	4%	3%	3%	3%	3%	
Guárico	3%	4%	3%	4%	4%	3%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	3%	3%	2%	2%	
Lara	10%	12%	12%	13%	12%	12%	13%	13%	13%	15%	13%	14%	12%	14%	11%	13%	7%	7%	7%	6%	7%	6%	6%	6%	7%	6%	
Mérida	2%	2%	2%	2%	3%	3%	2%	2%	3%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	4%	3%	4%	3%	4%	3%	3%	
Miranda	1%	1%	2%	2%	2%	2%	2%	1%	2%	1%	1%	1%	1%	1%	1%	10%	11%	11%	12%	11%	12%	12%	13%	13%	10%	11%	
Monagas	3%	2%	5%	4%	6%	4%	6%	4%	3%	2%	3%	2%	3%	2%	3%	2%	2%	2%	3%	2%	3%	3%	3%	2%	3%	2%	
Nueva Esparta	3%	3%	3%	3%	4%	3%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	
Portuguesa	4%	4%	4%	4%	5%	5%	5%	5%	4%	4%	4%	5%	4%	4%	4%	4%	3%	3%	4%	3%	4%	3%	4%	3%	5%	3%	
Sucre	3%	2%	3%	2%	4%	3%	4%	3%	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	3%	4%	3%	3%	3%	3%	4%	3%
Táchira	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
Trujillo	13%	11%	10%	8%	9%	9%	11%	11%	13%	13%	14%	14%	13%	13%	13%	14%	2%	2%	2%	2%	3%	2%	3%	2%	2%	2%	
Yaracuy	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	2%	1%	1%	1%	
Zulia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	14%	13%	14%	13%	14%	13%	14%	13%	14%	16%	16%
Vargas	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.	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
Urbano	85%	93%	81%	90%	81%	90%	79%	89%	88%	86%	88%	87%	88%	87%	89%	87%	69%	70%	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Formal	n.d.	n.d.	39%	52%	38%	49%	36%	47%	37%	44%	38%	42%	37%	42%	38%	43%	36%	39%	34%	37%	32%	35%	34%	39%	34%	37%	
Cuenta propia	26%	23%	31%	26%	32%	29%	34%	32%	30%	32%	32%	38%	32%	38%	35%	39%	32%	39%	34%	39%	35%	40%	36%	36%	34%	37%	

Table A1 (Continuation)

	2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2020		2021		
	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	H	M	
Years of Education	8,3	9,8	8,5	10,1	8,6	10,2	8,8	10,4	8,9	10,6	9,1	10,7	9,1	10,7	9,3	10,9	9,3	11,1	9,6	11,4	10,2	11,7	10,2	12,0	
None	17%	10%	16%	9%	15%	9%	14%	8%	14%	7%	13%	7%	12%	7%	11%	6%	11%	6%	10%	5%	10%	6%	9%	5%	
Primaria	47%	37%	46%	35%	45%	34%	44%	33%	43%	32%	41%	30%	43%	32%	41%	31%	40%	29%	39%	27%	29%	19%	31%	18%	
Secondary	31%	40%	33%	41%	34%	43%	35%	42%	36%	43%	38%	44%	37%	42%	39%	41%	39%	42%	41%	43%	42%	39%	40%	39%	
Tertiary	5%	12%	6%	14%	6%	15%	7%	17%	7%	18%	8%	19%	8%	19%	9%	22%	10%	24%	10%	26%	19%	37%	21%	39%	
Years of Experience	21,9	21,1	22,0	21,2	22,1	21,0	22,1	21,1	22,2	21,2	22,2	21,2	22,3	21,5	22,3	21,3	22,1	21,2	22,3	21,3	24,0	22,4	22,5	21,0	
15-25	23%	19%	23%	18%	22%	18%	22%	17%	21%	17%	21%	16%	20%	15%	20%	15%	20%	15%	18%	14%	17%	13%	16%	13%	
26-35	28%	29%	28%	29%	28%	30%	28%	29%	28%	29%	28%	30%	29%	30%	28%	30%	28%	29%	28%	29%	22%	24%	27%	27%	
36-45	24%	27%	23%	27%	23%	27%	23%	27%	23%	27%	23%	27%	23%	27%	23%	27%	24%	28%	24%	28%	24%	28%	26%	30%	
46-55	16%	18%	17%	18%	17%	18%	18%	18%	18%	19%	18%	19%	18%	20%	18%	20%	18%	20%	19%	21%	20%	24%	19%	22%	
56-65	8%	7%	9%	7%	9%	8%	9%	8%	10%	8%	10%	8%	10%	8%	10%	8%	10%	8%	10%	8%	16%	12%	12%	8%	
Married	64%	52%	63%	52%	63%	53%	63%	53%	62%	52%	62%	51%	62%	52%	62%	52%	62%	53%	0%	0%	60%	48%	64%	51%	
Children under 6 years old in the household	40%	39%	38%	38%	38%	38%	37%	36%	36%	36%	36%	36%	36%	36%	37%	36%	37%	36%	37%	35%	35%	27%	28%	29%	27%
Agriculture, hunting, forestry, and fishing	14%	2%	13%	1%	12%	2%	13%	2%	13%	2%	12%	2%	12%	1%	11%	1%	12%	2%	10%	1%	11%	2%	17%	4%	
Mining and quarrying	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	2%	0%	2%	0%	2%	0%	1%	1%	1%	0%	1%	0%	
Manufacturing industry	14%	10%	14%	10%	14%	9%	13%	10%	13%	10%	13%	9%	13%	9%	13%	9%	13%	10%	14%	10%	3%	3%	2%	2%	
Electricity, gas, and water	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	2%	1%	2%	0%	
Construction	15%	1%	15%	1%	16%	1%	15%	1%	15%	1%	15%	1%	14%	1%	13%	1%	13%	1%	14%	1%	8%	0%	6%	0%	
Trade, restaurants, and hotels	18%	32%	18%	31%	18%	31%	18%	32%	18%	33%	18%	33%	19%	34%	20%	33%	19%	33%	19%	31%	21%	13%	20%	17%	
Transport and storage	12%	2%	13%	2%	13%	2%	13%	3%	14%	2%	14%	2%	14%	2%	14%	2%	13%	2%	13%	2%	15%	10%	13%	8%	
Financial establishments, insurance, and real estate	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	7%	5%	7%	
Social and community services	21%	48%	20%	49%	20%	50%	20%	46%	20%	46%	20%	47%	21%	47%	21%	47%	21%	46%	22%	48%	35%	63%	33%	61%	
Distrito Federal	7%	9%	7%	9%	8%	9%	7%	9%	7%	10%	7%	9%	6%	8%	5%	8%	6%	8%	6%	8%	8%	10%	8%	10%	
Amazonas	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	n.d.	n.d.	n.d.	n.d.	
Anzoátegui	5%	6%	6%	6%	6%	6%	6%	5%	6%	6%	6%	6%	5%	5%	6%	5%	5%	5%	5%	5%	5%	6%	4%	4%	
Apure	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	
Aragua	5%	5%	5%	5%	5%	5%	4%	5%	4%	5%	4%	4%	5%	6%	6%	6%	6%	7%	7%	7%	6%	7%	6%	6%	
Barinas	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	3%	2%	
Bolívar	4%	4%	4%	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%	5%	3%	4%	6%	5%	5%	4%	
Carabobo	8%	8%	8%	8%	7%	7%	8%	9%	9%	9%	10%	10%	9%	8%	10%	10%	9%	9%	10%	10%	10%	9%	1%	1%	
Cojedes	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	9%	10%	
Delta Amacuro	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	n.d.	n.d.	n.d.	n.d.	
Falcón	3%	3%	4%	4%	4%	4%	4%	3%	3%	3%	4%	3%	4%	3%	3%	3%	3%	3%	3%	3%	2%	3%	3%	2%	
Guárico	3%	3%	3%	3%	3%	3%	3%	2%	3%	3%	3%	3%	3%	2%	2%	3%	3%	3%	2%	2%	4%	3%	4%	3%	
Lara	7%	7%	7%	6%	7%	7%	7%	7%	7%	6%	6%	6%	6%	6%	5%	5%	6%	6%	6%	5%	6%	5%	6%	6%	
Mérida	3%	3%	3%	3%	3%	3%	3%	3%	4%	3%	3%	3%	3%	3%	4%	4%	4%	3%	4%	4%	3%	4%	3%	4%	
Miranda	12%	14%	12%	14%	12%	14%	13%	15%	13%	14%	13%	14%	12%	14%	13%	15%	12%	13%	12%	14%	10%	11%	9%	13%	
Monagas	3%	3%	3%	3%	3%	3%	3%	3%	4%	3%	3%	3%	3%	3%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	
Nueva Esparta	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	
Portuguesa	4%	2%	4%	2%	4%	3%	4%	3%	4%	3%	4%	3%	4%	3%	4%	3%	4%	2%	4%	3%	3%	3%	3%	2%	
Sucre	4%	3%	4%	3%	4%	3%	4%	3%	3%	3%	3%	3%	3%	3%	4%	3%	3%	3%	4%	3%	3%	2%	3%	2%	

Táchira	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	5%
Trujillo	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	2%	3%	3%	3%	2%	3%	3%	3%	3%
Yaracuy	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	1%	2%	1%	1%	1%	2%	2%	2%	2%	2%	2%	3%	2%
Zulia	12%	12%	12%	13%	13%	12%	11%	12%	10%	10%	11%	11%	13%	13%	12%	11%	13%	12%	11%	11%	13%	11%	12%	10%
Vargas	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%
Urbano	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.	n.d.	n.d.	n.d.	n.d.
Formal	35%	39%	37%	43%	38%	45%	39%	45%	38%	45%	39%	47%	38%	46%	38%	47%	38%	48%	39%	50%	5%	7%	4%	7%
Cuenta propia	33%	36%	33%	35%	35%	34%	36%	37%	38%	37%	38%	37%	38%	36%	37%	34%	38%	35%	38%	33%	46%	35%	54%	42%

Source: Self-prepared based on household surveys harmonized by the IDB.

n.d. Not Available. When the available data is insufficient to calculate the percentage.

Probabilistic weightings are used.

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

	1993		1994		1995		1996		1997		1998		1999		2000		2001		2002		2003		2004		2005	
	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.
Professional and Technician	53%	0,2	54%	0,2	56%	0,3	56%	0,6	56%	1,1	57%	1,3	57%	1,6	60%	1,9	61%	2,4	61%	2,8	62%	3,0	63%	3,7	64%	4,9
Director or Senior Official	18%	0,2	22%	0,3	22%	0,4	23%	0,6	24%	1,4	26%	2,0	29%	2,3	29%	2,4	29%	3,1	28%	3,3	29%	3,1	32%	3,2	31%	3,5
Administrative and Intermediate Level	57%	0,1	60%	0,1	58%	0,2	64%	0,3	62%	0,6	61%	0,8	64%	0,9	62%	1,2	63%	1,4	64%	1,6	63%	1,8	67%	2,5	65%	3,0
Merchants and Salespersons	35%	0,1	34%	0,1	38%	0,2	42%	0,3	45%	0,6	48%	0,8	47%	1,0	48%	1,1	52%	1,3	52%	1,4	52%	1,6	52%	2,0	53%	2,5
In Services	56%	0,1	57%	0,1	55%	0,1	55%	0,2	58%	0,4	57%	0,6	56%	0,7	59%	0,9	59%	1,0	59%	1,1	59%	1,3	61%	1,5	59%	2,0
Agricultural Workers	3%	0,1	3%	0,1	3%	0,1	4%	0,2	3%	0,4	4%	1,0	4%	0,6	3%	0,9	5%	1,0	4%	0,9	5%	1,1	5%	1,2	7%	1,8
Non-Agricultural Laborers, Machinery Operators, and Transport Services	11%	0,1	11%	0,1	11%	0,2	10%	0,3	11%	0,5	11%	0,7	11%	0,8	10%	1,1	11%	1,2	11%	1,2	11%	1,6	12%	1,7	11%	2,1
FFAA	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.	1%	4,4	2%	1,5	7%	4,6
Others	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	21%	0,2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	2%	2,7	n.d.	n.d.	28%	2,9	n.d.	n.d.
Total	31%	0,1	31%	0,1	32%	0,2	33%	0,3	35%	0,6	35%	0,8	35%	1,0	35%	1,2	37%	1,4	38%	1,6	38%	1,8	39%	2,2	38%	2,8
	2006		2007		2008		2009		2010		2011		2012		2013		2014		2015		2020		2021			
	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.	(%)	Bs.		
Professional and Technician	61%	5,9	65%	7,4	65%	9,4	64%	11,6	64%	14,5	64%	17,7	63%	22,3	64%	30,6	65%	46,0	66%	87,8	61%	11,0	53%	1224,9		
Director or Senior Official	30%	5,5	34%	6,9	31%	9,1	31%	11,6	32%	13,5	33%	16,1	34%	24,4	38%	32,0	35%	48,5	35%	93,7	50%	18,4	39%	2040,3		
Administrative and Intermediate Level	66%	4,1	66%	5,2	67%	6,8	65%	8,5	66%	10,7	67%	13,3	67%	17,1	66%	22,5	66%	36,2	68%	66,7	65%	8,0	61%	521,3		
Merchants and Salespersons	53%	3,2	52%	4,1	53%	5,9	54%	7,2	54%	8,6	53%	10,2	53%	15,0	51%	20,8	51%	35,9	49%	73,8	39%	14,5	35%	854,5		
In Services	59%	2,7	60%	3,7	60%	5,0	59%	6,5	58%	8,0	59%	10,2	57%	13,4	57%	18,5	57%	32,5	56%	65,5	n.d.	n.d.	n.d.	n.d.		
Agricultural Workers	6%	2,1	6%	3,2	6%	4,3	6%	6,0	6%	6,6	6%	9,0	6%	11,8	7%	16,5	7%	27,6	6%	61,2	9%	22,4	5%	337,2		
Non-Agricultural Laborers, Machinery Operators, and Transport Services	10%	3,0	10%	4,0	10%	5,4	10%	7,4	9%	8,6	9%	10,9	10%	14,3	10%	20,0	11%	34,9	10%	72,1	11%	14,3	8%	540,1		
FFAA	3%	3,7	3%	6,6	5%	5,9	9%	8,4	6%	14,2	5%	14,0	4%	16,6	9%	67,9	10%	38,1	11%	67,2	39%	11,7	34%	587,3		
Others	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.	n.d.	n.d.	n.d.	n.d.	n.d.	
Total	38%	3,7	39%	4,9	39%	6,5	39%	8,2	39%	10,1	39%	12,4	39%	16,6	39%	22,9	39%	37,6	39%	74,6	41%	12,0	35%	796,0		

Source: Self-prepared based on household surveys harmonized by the IDB. Probabilistic weightings are used.