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Abstract:

The gender earnings gap in Latin America is a barrier to achieving gender equality and sustainable development. In Ecuador, although there is no pronounced gender earnings gap at the aggregate level, an unexplained gap persists. Despite women often having a better labor profile than men, their income levels do not reflect this, suggesting the existence of gender biases. The total gap exists among informal sector workers, in rural areas, and among self-employed workers. Moreover, there is a heterogeneous income difference favoring men in most occupations.

To analyze the gender pay gap in Ecuador between 2000 and 2021, we used the National Employment, Unemployment, and Underemployment Surveys (ENEMDU) conducted by the National Institute of Statistics and Census (INEC) of Ecuador and harmonized by the Inter-American Development Bank (IDB). We present two methodologies for estimating the gap: the Blinder-Oaxaca decomposition and the Ñopo decomposition.

The analysis of over more than two decades shows a reduction in the total gender earnings gap in the analyzed period, while also pointing to the existence of gender discrimination. This indicates that additional efforts are needed to understand this disparity.

The analysis demonstrates that while the total gap has decreased, as in many other countries in the region, the reduction in the total gap is generally associated with the explained gap and not with a reduction in the unexplained gap, which persists over time.

JEL Classification: J16, J31, J71.

Keywords: Gender economics, earnings gap, discrimination.

Introduction

In recent years, Latin America and the Caribbean (LAC) have experienced significant changes in the traditionally established roles for men and women. There has been an increase in women's political representation, higher levels of education, and greater labor force participation. However, studies like Frisancho and Queijo (2022) indicate that challenges still exist regarding women's labor force inclusion and professional development opportunities[1].

Among the main gender gaps identified in the region, the gender earnings gap stands out. Previous studies have already identified the presence of a gender earnings gap affecting women in countries in the region Ñopo, (2012) showing that women have lower incomes compared to men even when working in similar positions and having similar levels of education. This situation calls for an analysis of the factors causing this disparity.

Ñopo (2012) analyzed the challenges regarding women's labor force inclusion and their professional development opportunities, highlighting a persistent problem in Latin America and the Caribbean. Among the conclusions, occupational and hierarchical segregation stands out: women work to a greater extent in the informal sector and are underrepresented in managerial positions. At the same time, there are considerable differences in the labor earnings received by women compared to those of men. While Latin America and the Caribbean have improved their gender equality indicators since the end of the last century Chioda (2011), as well as increased political and labor force participation by women (Ñopo, 2012), most countries still experience unjustified earnings differences between men and women in similar jobs (ILO, 2019c).

Furthermore, the COVID-19 pandemic has had a significant impact on women's labor force participation in the region. It is estimated that thirteen million women lost their jobs, and the female labor force participation rate dropped by 16 percentage points, while the male labor force participation rate only declined by 10 percentage points. The crisis highlighted that women are in more vulnerable sectors, exacerbating gender gaps and reversing some of the progress made Bustelo, Suaya, & Vezza (2021). Finally, it is worth noting that there was an increase in the concentration of women in part-time jobs.

Ecuador currently ranks 41st out of 146 countries in terms of gender equality, according to the Global Gender Gap Index by the World Economic Forum (WEF, 2022). The country has made improvements in gender equality compared to previous years and ranks 10th out of 22 countries measured in Latin America and the Caribbean, with a score of 0.743 out of 1. When compared to 2006, the year when the index was first implemented, Ecuador has improved its score by 0.0997 (it was 0.6433 in 2006). This represents a 41-position improvement since the index was first implemented in 2006,

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[1] The study evaluates the effect of gender inequalities in the countries of the Southern Cone of Latin America (Brazil, Chile, Paraguay, and Uruguay) and provides evidence on their economic consequences, drivers, and policy tools that can help mitigate them.

although it's worth noting that in the initial year, only 115 countries were covered.

Specifically, in the areas of participation and economic opportunities, Ecuador ranks 71st. This ranking is influenced by factors such as low female labor force participation (ranked 97th) and income inequality between men and women in similar jobs (ranked 106th). Regarding political representation, Ecuador ranks 41st, with 38.7% of parliamentary seats occupied by women.

Graph 1: Women's hourly labor earnings relative to men's hourly earnings in 2021.[2]
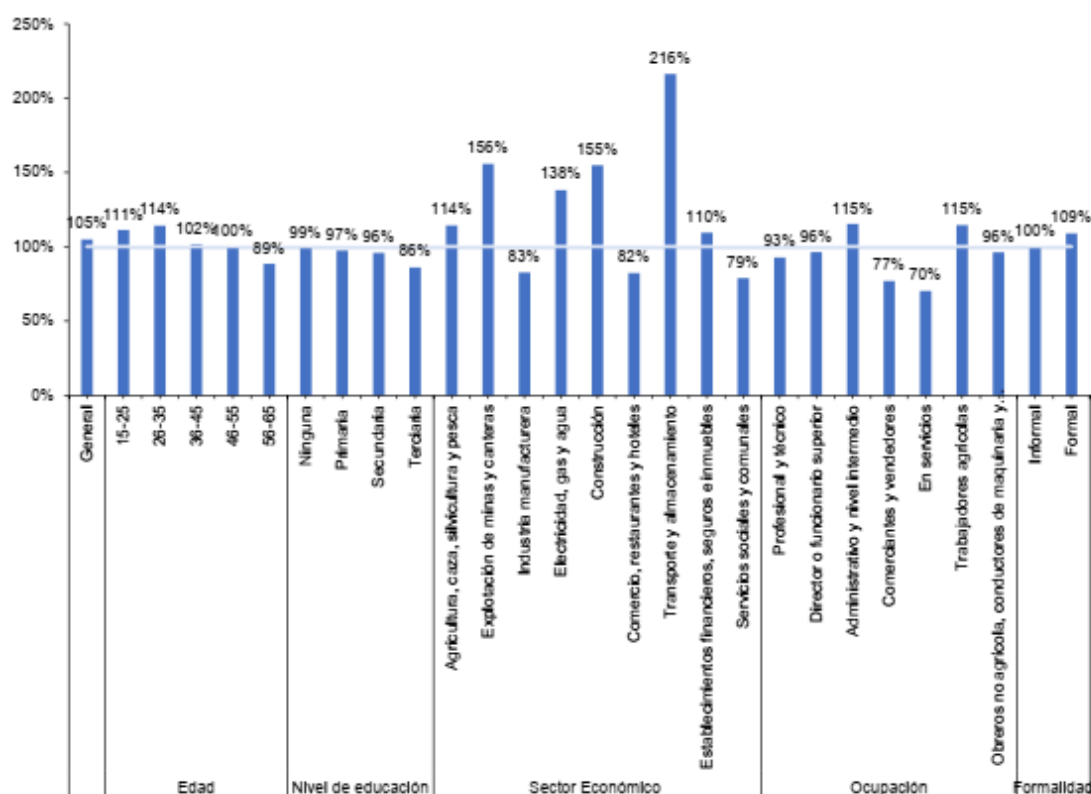
Source: Own elaboration based on employment surveys from Ecuador harmonized by the IDB.

*Only individuals with occupation and income were used.

The data analyzed from the employment surveys of Ecuador, harmonized by the IDB, are in line with this analysis. Figure 1 shows that although in 2021, women's hourly earnings, weighted by the employed population in each sector, were on average 105% of men's earnings, an unfavorable gap persists among individuals aged 56-65 (89%), those with tertiary education (86%), in the Manufacturing industry (83%), Trade, restaurants, and hotels (82%), and

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[2] Some results that may seem counterintuitive, such as women earning on average 216% of men's hourly income in the "Transportation and storage" activity, can be explained by selection bias. As analyzed in more detail in the methodological section, if there are few women in a sector of the economy or in certain regions, it is possible that the few who enter do so at higher hierarchical levels and with better incomes. This can be verified by analyzing women's participation in the sector (Table A1 and A2) and can have direct effects on women's labor force participation. However, this analysis requires a specific methodology different from that used in this document.

Social and community services (79%), as well as among workers in service-related occupations (70%)[3].

While the number of studies on gender gaps has increased in recent years for both Latin America and other regions, the availability of information on income-related topics is still limited. For Ecuador, most studies on this topic use employment surveys as a source of information. However, since there are different ways to approach this issue, it is challenging to compare the results of different studies and track the evolution of the gap over time. Therefore, greater data availability and a continuous focus on this issue are needed to address and better understand the causes and trends of the gender earnings gap in Ecuador.

This study aims to expand current knowledge about gender disparity through a rigorous analysis of the evolution of the earnings gap from 2000 to 2021. To do this, three previous studies are used as references: the first focused on Bolivia (Urquidi, Valencia, and Durand, 2021), the second on Paraguay (Urquidi, Chalup, and Durand, 2022), and the third covering eighteen countries in the region (Urquidi and Chalup, 2023). In this context, two analysis methodologies are employed: i) the Blinder-Oaxaca decomposition, and ii) the Ñopo decomposition[4]. The use of these two methodologies allows for results from both a parametric and a non-parametric model, facilitating the comparison of the year-to-year evolution and the identification of key variables that influence the earnings gap.

The previous regional study provides comparable information between countries (see Figure 1). The current analysis extends the age range of this data, examines the evolution over time, and provides more detailed geographical information for the country.

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[3] Informal workers in Ecuador are considered those who are economically active but are not affiliated with or do not contribute to the pension system of Ecuador.
[4] A detailed explanation of both models is provided in the section where the methodology is explained.

Figure 1. Total hourly labor earnings gap estimated through the Blinder-Oaxaca decomposition model*
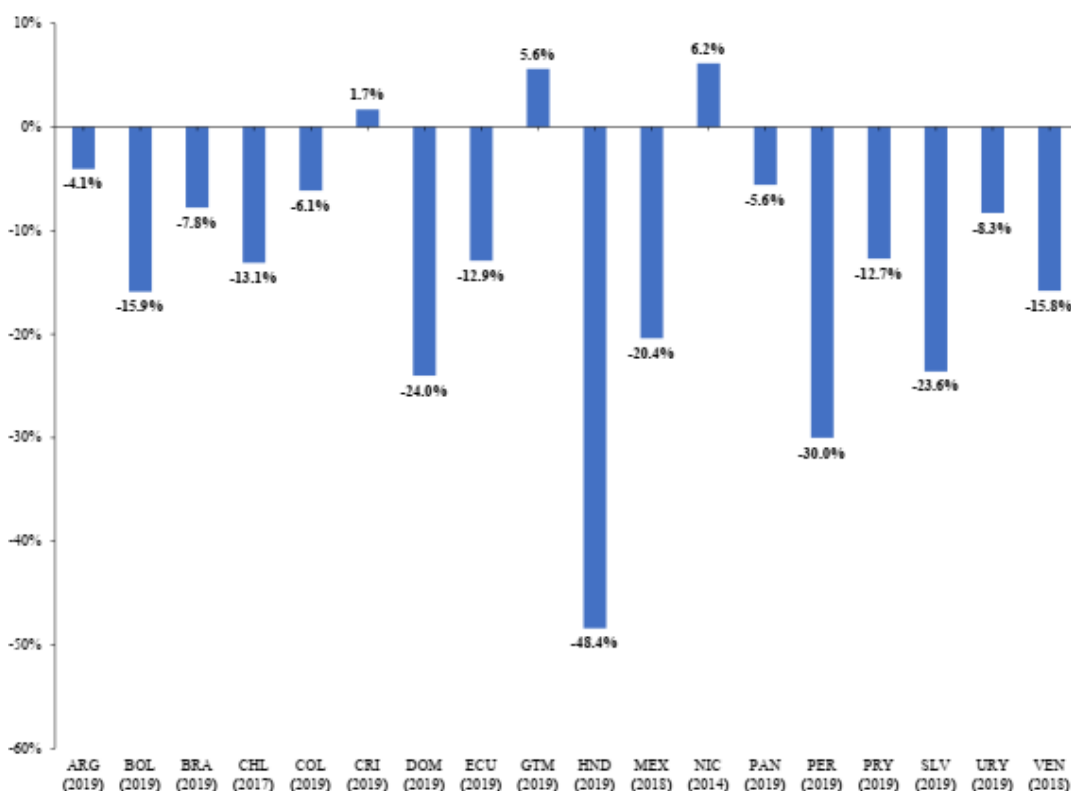
Source: Urquidi and Chalup, 2023.

*Only individuals with occupation and income were included.

The results of the analysis show that the overall gender pay gap has decreased during the studied period. However, this reduction is largely attributed to the improvement in women's labor profiles, which in many cases surpass those of men. On the other hand, an unexplained earnings gap persists, suggesting the possible presence of gender biases. It is also observed that the overall earnings gap persists among informal sector workers, in rural areas, and among self-employed workers. Furthermore, there is a variation in earnings that favors men in most occupations.

The unexplained earnings gap cannot be accounted for by various control variables used, such as experience, personal and family characteristics, sector and economic activity, or region or zone of the country. It is also evident that women's wages should be higher if only their labor profiles were considered. Possible factors contributing to this gap include normative factors, cognitive biases, discrimination (Becker, 1957), and labor costs related to childcare that are not recognized in society.

The analysis over time reveals a possible gender discrimination and a trend toward reducing the overall gender pay gap due to the improvement in women's labor profiles. This suggests that additional efforts are needed to understand and address this disparity, and it is necessary to analyze the factors affecting it to determine appropriate policy responses.

The structure of this study is organized as follows: in the first section, an analysis of the literature related to the gender earnings gap in Ecuador and Latin America and the Caribbean is conducted. The second section describes the data used and provides descriptive statistics of the evolution of the earnings gap over the years studied. The third section briefly describes the methodologies used to estimate the gender earnings gap. The fourth section presents the results of the analysis. Finally, the fifth section discusses the study's conclusions and implications.

Literature Review

In the context of the gender earnings gap, the literature has focused on distinguishing between the part of the gap explained by differences in individual characteristics and human capital, and the unexplained part, which has traditionally been associated mainly with gender prejudices, biases, and discrimination (Atal et al., 2009). To address this issue, the two most popular and widely used econometric techniques in analyses of this topic, using household and employment surveys in various countries, are as follows: i) the Blinder-Oaxaca decomposition, introduced by Oaxaca (1973), and ii) more recently, the Ñopo decomposition, introduced by Ñopo (2008).[5]

Additionally, new studies have emerged that focus on identifying previously unstudied components contributing to the gender earnings gap. In this regard, issues such as the motherhood penalty and its impact on the pay gap have been investigated, as addressed by Kleven, Landais, and Søgaard (2019) in their analysis of administrative data in Denmark. Differences in socio-emotional skills and their influence on the wage gap have also been examined, as demonstrated by Ajayi et al. (2022), who provide evidence from 17 African countries.

Moreover, widespread organizational barriers and management practices contributing to the glass ceiling in women's professional development have been explored, as investigated by Ammerman and Groysberg (2021) in the context of the United States. The effects of decisions regarding occupation and career choice on income have also been studied, as evidenced by studies such as Bustelo et al. (2021) and Brazil and Bordón, Canals, and Mizala (2020) in the case of Chile.

In the Latin American context, Frisancho and Queijo (2022) have compiled a series of studies documenting persistent gender inequalities in the Southern Cone countries of Latin America[6]. These studies explore how reducing these gender gaps could have a significant impact on economic growth and development in the region. They demonstrate that gender inequalities in access to public services, human capital accumulation, and the labor market limit overall productivity and economic growth. Therefore, policies addressing these inequalities have the potential to stimulate economic development and well-being in Latin America and the Caribbean.

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[5] These techniques are explained in detail in the third section.
[6] These countries are Argentina, Brazil, Chile, Paraguay, and Uruguay.

A previous study by Chioda (2011) observed an increase in women's labor force participation in the region starting from the 1980s. This increase was facilitated by factors such as economic growth, trade liberalization, urbanization, reduced fertility rates, and increased levels of education. This trend became even more evident from the year 2000 onwards, due to high growth rates in the region, which generated greater demand for labor and allowed for the incorporation of more women into the labor market. Furthermore, women's participation in the workforce was directly promoted through public policies (Gasparini and Marchionni, 2015).

However, Ñopo (2012) points out that women are still overrepresented in informal and low-paid jobs, and the earnings gap between men and women remains significant despite these advancements.

The classic analysis on this topic, developed by Psacharopoulos and Tzannatos (1992), focused on studying the earnings gap in fifteen countries in Latin America and the Caribbean in the late 1980s. Among the most notable findings was that, for similar jobs, women earned on average 65% of what men earned. Furthermore, it was observed that approximately two-thirds of this earnings difference could not be explained by the educational level or human capital of individuals, suggesting that these factors might be related to social norms, prejudices, or discrimination.

It's important to highlight that the literature also indicates that a significant part of the reduction in the total gender earnings gap is due to the increase in the educational level of women. However, despite these advances, an unexplained gap still persists (Chioda, 2011; Gasparini and Marchionni, 2015).[7]

Despite the significant reduction in the explained gap, the unexplained portion decreased only from 34 to 30 percent (Hoyos and Ñopo, 2010). The reduction occurred mainly among workers who had one or more of the following characteristics: they were in the lower income distribution, had children in the household, were self-employed, worked part-time, or lived in rural areas. These are the segments of the labor market that previously had greater gender disparities. Most of the reduction in the unexplained component of the gap occurred within the different segments of the labor market and not due to a recomposition or structural change in labor markets.

One of the most recent analyses for Latin America and the Caribbean in this area was presented by the International Labour Organization (ILO, 2019b), where 17 countries were studied using Ñopo's decomposition technique (2008), comparing earnings between individuals with the same observable characteristics. Firstly, it was found that the unexplained gender earnings gap decreased by a couple of percentage points between 2012 and 2017 in Latin America. Secondly, it was observed that this gap is generally higher for self-employed workers than for employees, and it also increases when there are

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[7] As can be seen in Annex Table A1, the average years of education for women increased from 8.6 years to 10.4 years between 2000 and 2021, while for men, it increased from 8.7 years to 10.2 years over the same period.

children under 6 years old in the household and in part-time and informal work.

Additionally, in this document, different aspects of the gender gap in the Latin American labor market are analyzed. It shows that 40% of the Latin American labor force is composed of self-employed workers, and in almost all countries in the region, the gender gaps are higher in this group. It was also found that this gap is marked in people living in rural areas and in the informal sector. Finally, it was shown that the gap is influenced by people's life cycle. The gap is smaller among young people and presumably those without children, and it increases as people get older, with a significant jump between 25-29 years for self-employed workers and 30-34 years for employees, reaching its peak between 50 and 54 years.

Finally, in this ILO document, for Ecuador, it was found that the unexplained gender income gap for self-employed workers was around 19%, while for employees, it was around 12%. It was also observed that in Ecuador, women's labor force participation was 54.9%, in contrast to the male labor force participation rate of 80.7%.

In 2019, in ILO (2019a), another study explores the causes of gender gaps using information from 18 countries and the decomposition techniques proposed by Fortin, Lemieux, and Firpo (2011). This document separates countries into four groups: high-income, upper-middle-income, lower-middle-income, and low-income to analyze and compare the gap across the income distribution, i.e., by quantiles. This document suggests that the variable with the most weight in the explained part of the gap is education, so they analyze this variable separately. They find that, for high-income countries and in most of their quantiles, education is not significant or even increases the gap. However, this situation changes when analyzing middle-income and low-income countries, where this variable contributes to reducing the income gap, especially in the lower quantiles, i.e., the lower end of the distribution. Nevertheless, this document presents that, despite the role of education, in most of the analyzed countries, there is a gender income gap generated by discrimination and the proportion of women in occupational categories with lower incomes.[8]

The literature on this topic for Ecuador is extensive. For a more comprehensive analysis of this gender earnings gap, it is important to consider how the country's economy is organized. Mahé, Zanoni, and Oliveri (2022) have studied the trends, correlations, and patterns that impact women's labor force participation in Ecuador between 2015 and 2021. Female employment is disproportionately concentrated in the informal and low-productivity sectors in this country. They used the National Survey of Employment, Unemployment, and Underemployment (ENEMDU) from 2015 to 2021, considering a worker as informal if they are an active and employed person who does not have access to social security. The authors found an increase in the proportion of women, aged 15 and older, who are employed and belong to the informal sector. Additionally, they showed that informal work is perceived

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[8] Unqualified, low-skilled, or semi-skilled.

as a second-best strategy by women, especially those with economic constraints and low qualifications, as it allows them to substitute formal employment when facing obstacles in meeting basic needs. Such studies are important when analyzing the gender earnings gap as they help understand the country's economic structure and the perception of certain variables affecting this gap.

Regarding the analysis of the earnings gap itself, there are several studies that follow the methodology outlined in this document, and others that, although not using the same techniques, follow a similar research approach. Among these are Lapo and Castillo (2019), who used the Mincer equation and data from the National Survey of Employment, Unemployment, and Underemployment (ENEMDU) to identify that woman earned 17% less than men in 2018. They also observed that the gap became even more evident when the analysis was limited to the urban population, where the gap was 24%.

Constante Rodríguez (2019) employed a technique of unconditional quantile regression to analyze the gender income gap in Ecuador. In his study, he found that women had lower labor incomes across most of the wage distribution, especially in the lower percentiles, indicating wider income disparities in lower-income segments[9]. Using RIF (Regressions of the Impact Function) analysis with data from ENEMDU[10] in 2007, 2012, and 2017, Constante Rodríguez examined the gender income gap in Ecuador and found that the gap was larger in the lower percentiles. He showed that if a married woman in the 90th percentile received the same return as a married man, her income would decrease by 9.7%. In the 10th percentile, it would mean an income increase of 12.3%. In general terms, he found that if women's characteristics in the 10th percentile were rewarded in the same way as men's, women would receive 51.1%, 47.5%, and 38.0% more income in 2007, 2012, and 2017, respectively. This difference decreased as the years progressed and as women belonged to higher-income percentiles. For example, in the 50th percentile, women would receive higher income by 17.6%, 5.3%, and 2.0% for these same years.

Alvarado (2012), using the Blinder-Oaxaca decomposition (BO) and the Income and Expenditure Survey (ENIGH) for the year 2009, found a gap of 45.83% (0.19 points) in favor of men. This occurred despite no significant differences in schooling and experience between men and women. In his analysis, the gap was mostly attributed to discrimination in the labor market.

Other authors such as Canelas and Salazar (2014) and Linthon-Delgado and Méndez-Heras (2022) also used the Blinder-Oaxaca decomposition and the National Survey of Employment, Unemployment, and Underemployment (ENEMDU) to contribute to the analysis of the gender earnings gap in

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[9] Developed by Firpo et al. (2009)
[10] Considering only those individuals with a fixed contract and self-employed individuals between the ages of 15 and 65 in urban areas who reported positive incomes.

Ecuador[11]. They found that a percentage of the wage gap in Ecuador is explained by individual characteristics or endowments, and another percentage is attributed to discrimination.[12] Linthon-Delgado and Méndez-Heras (2022) found that in 2020, the gender wage gap is 35.6 percentage points, meaning that the average salary of a woman represents only 64.4% of a man's salary, and discrimination accounts for 79.3% of the gap, indicating that in the absence of discrimination, women's salaries should be 55.8% higher than what they actually receive[13]. Canelas and Salazar (2014) found similar results, but when examining the gap across the income distribution, they found that the portion of the gap attributed to characteristics favors women in all quantiles of the distribution and increases along the distribution. This suggests that women have better human capital endowments than men[14] and that these advantages compensate for most of the gap attributed to discrimination in the upper quantiles, significantly reducing the total gap. However, in the lower tail of the distribution, they found a larger gap indicating the presence of sticky floors[15] for women.

The analysis of the presence of glass ceilings[16] and sticky floors in the country, through the analysis of the income gap by quantiles, has gained importance in recent years in Ecuador, allowing the examination of wage inequality in these dimensions. Gallardo and Ñopo (2009) found that the gender income gap in the country ranged from 7.1% to 11.2% between 2003 and 2007 and that throughout the period, this gap favored men despite women having, on average, greater endowments. This study observed income distribution and the gap in different percentiles, finding that the unexplained part of the wage gap is larger for those in the lower percentiles of the distribution, and for these individuals, occupational classification is the variable with the most relevance in gap reduction, while for those at the other end of the distribution, household responsibilities (being the head of the family) have more weight in the gap. By analyzing by percentiles, the authors identified the glass ceiling effect in the higher percentiles and the "maid effect[17]" in the central percentiles of the distribution.

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[11] Linthon-Delgado and Méndez-Heras (2022) restrict their sample to individuals between the ages of 18 and 65 who are employed in the private or public sector, while Canelas and Salazar (2014) consider only individuals who report being employed, are between the ages of 20 and 70, and live in nuclear families.

[12] Linthon-Delgado and Méndez-Heras (2022) analyze it using means, while Canelas and Salazar (2014) examine the gap across the income distribution.

[13] The authors also identify that the portion of the gap generated by endowments has a negative sign, and if this determined labor income, women should receive a higher average salary than men. This is because the average years of education for women (14 years) are higher than those for men (12.3 years).

[14] Especially regarding the proportion that has tertiary education.

[15] A scenario where women have lower-level jobs, similar to being stuck, with barriers to upward mobility towards better-paying jobs (Guy, 1994).

[16] Unobservable barriers that limit the career advancement of women with higher endowments (more accumulation of human capital in the case of Ecuador) in the upper part of the labor income distribution (Guy, 1994).

[17] Women with lower salaries than the rest of the population, with comparable and observable combinations of characteristics but lacking a counterfactual (Gallardo and Ñopo, 2009).

Pérez and Torresano (2015) used four different methodologies to identify the evolution of the gap, using the ENEMDU from 2007 and 2013. The first is a multiple linear regression where they identified that the average salary of women was 13% lower than that of men. The second methodology is the Blinder-Oaxaca decomposition, where they found that, for the most part, the gap is unfavorable for women due to discrimination. The third methodology is the decomposition by Machado and Mata (2005), where they found that the gap is larger in the lower quartiles of the income distribution, indicating the presence of sticky floors. Finally, they used the quantile decomposition of Juhn et al. (1993), finding that glass ceiling patterns do not show significant variation compared to previous years. However, this result is contrary to what is observed in sticky floors, which do change over time.

Antón et al. (2020) found similar results using multiple linear regression, the Blinder-Oaxaca decomposition, and the quantile decomposition, following Koenker and Bassett (1978), to analyze the gender wage gap by dividing it into the public and private sectors. They found that women earn, on average, lower salaries than men in general, that wage inequality exists in the 25th, 50th, and 75th percentiles, that the gender wage gap is mainly explained by possible discrimination within the private sector[18], and that the effects of sticky floors and glass ceilings are present in the country.

Linthon-Delgado, Méndez-Heras, and Cornejo-Marcos (2022) analyzed the income gap for 2010, 2015, and 2021, finding that it has a U-shape, implying that men have higher salaries than women both at the lower end of the distribution (sticky floors) and at the upper end (glass ceiling). They observed a consistent positive trend for both sticky floors and glass ceilings, highlighting that the difference in salary between men and women is more pronounced at the extremes of the distribution. However, the main problem identified by the authors is that the gap is driven by labor market discrimination rather than individual characteristics, which diminishes the impact of human capital accumulation and its return for women.

The analysis demonstrates the existence of a gender earnings gap in Ecuador, both in the mean and across the income distribution. Furthermore, it reveals the presence of glass ceilings and sticky floors in the Ecuadorian labor market.

Data and Descriptive Statistics

The study uses data from the Harmonized Household and Labor Force Surveys by the Inter-American Development Bank (IDB). Information from twenty-two consecutive surveys from 2000 to 2021 was employed. The year 2000 was chosen as the starting point due to the initiation of data collection for the National Employment, Unemployment, and Underemployment Survey (ENEMDU) in Ecuador.

It is essential to highlight the data-related challenges since harmonization is required to ensure comparability of the data over the years and across

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[18] For the public sector, they do not find evidence of wage inequality.

different countries in Latin America and the Caribbean. Data harmonization is carried out through the IDB's data harmonization system.

The design and level of representativeness of these surveys are similar in different years, as they are all representative of Ecuador's total population and contain data from the country's main regions[19]. It is important to note that in 2002, the survey was only conducted in urban areas, so the results for that year should be considered with caution. Table 1 shows the sample taken from individuals between 15 and 65 years old, which is the age range used in the analysis for each of the years, along with their representativeness in Ecuador's total population[20], disaggregated by gender and age group.

It can be observed 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 reflects the aging of the population in Ecuador and most countries in Latin America and the Caribbean (Cardona Arango and Peláez, 2012). There is a gradual increase in the sample size over time, in line with population growth, although there is a decrease starting from the year 2017.

As a first step in calculating the gender earnings gap, the estimation of women's hourly labor earnings relative to men's is presented in Table 2[21]. The analysis is disaggregated by age group, educational level, economic activity, occupation, formality, area, self-employment, and regions. Additionally, Table A1 in the annex shows the distribution of characteristics of the employed population receiving income per year by gender. This provides an overview of the general characteristics of both men and women.

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[19] The regions included in the survey are Azuay, Bolívar, Cañar, Carchi, Cotopaxi, Chimborazo, El Oro, Esmeraldas, Guayas, Imbabura, Loja, Los Ríos, Manabí, Pichincha, Tungurahua, Santo Domingo de los Tsáchilas, Santa Elena, Amazonia, and non-delimited areas.
[20] Frequency weights are used in the analysis.
[21] 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

	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gender																						
Men	18,341	49%	18,038	49%	7,554	49%	23,867	49%	24,080	49%	23,115	49%	23,074	49%	22,652	49%	23,190	48%	23,960	49%	25,390	49%
Representativity	3,795,808	49%	3,884,393	49%	2,563,972	49%	3,886,110	49%	3,950,983	49%	4,062,307	49%	4,099,105	49%	4,108,935	49%	4,182,309	48%	4,325,300	49%	4,420,816	49%
Women	19,143	51%	18,531	51%	7,888	51%	24,668	51%	25,251	51%	23,691	51%	23,934	51%	23,702	51%	24,838	52%	25,201	51%	26,242	51%
Representativity	3,946,338	51%	3,977,712	51%	2,652,352	51%	3,980,989	51%	4,135,849	51%	4,170,922	51%	4,236,576	51%	4,310,912	51%	4,487,584	52%	4,589,167	51%	4,629,813	51%
Age																						
15-25	13,623	36%	12,967	35%	5,335	35%	16,930	35%	16,761	34%	16,052	34%	16,024	34%	15,299	33%	15,906	33%	16,517	34%	17,017	33%
Representativity	2,813,161	36%	2,807,945	36%	1,779,036	34%	2,722,909	35%	2,696,561	33%	2,783,663	34%	2,808,196	34%	2,724,848	32%	2,825,763	33%	2,965,102	33%	2,926,373	32%
26-35	7,998	21%	8,311	23%	3,557	23%	10,265	21%	10,243	21%	9,540	20%	9,254	20%	9,668	21%	9,528	20%	9,261	19%	9,581	19%
Representativity	1,662,151	21%	1,787,480	23%	1,191,951	23%	1,703,966	22%	1,717,216	21%	1,744,503	21%	1,695,695	20%	1,814,667	22%	1,779,977	21%	1,708,706	19%	1,722,028	19%
36-45	7,374	20%	7,037	19%	3,225	21%	9,431	19%	9,758	20%	9,317	20%	9,363	20%	9,051	20%	9,337	19%	9,282	19%	9,654	19%
Representativity	1,524,901	20%	1,541,129	20%	1,101,383	21%	1,550,409	20%	1,619,037	20%	1,670,300	20%	1,671,070	20%	1,661,503	20%	1,704,431	20%	1,712,087	19%	1,726,438	19%
46-55	5,154	14%	4,943	14%	2,113	14%	7,065	15%	7,346	15%	7,104	15%	7,424	16%	7,148	15%	7,638	16%	8,042	16%	8,679	17%
Representativity	1,088,974	14%	1,049,642	13%	718,724	14%	1,135,034	14%	1,215,678	15%	1,247,993	15%	1,334,642	16%	1,315,584	16%	1,390,170	16%	1,451,268	16%	1,516,477	17%
56-65	3,335	9%	3,311	9%	1,212	8%	4,844	10%	5,223	11%	4,793	10%	4,943	11%	5,188	11%	5,619	12%	6,059	12%	6,701	13%
Representativity	652,959	8%	675,909	9%	425,230	8%	754,781	10%	838,340	10%	786,770	10%	826,078	10%	903,245	11%	969,552	11%	1,077,304	12%	1,159,313	13%
Total	37,484	100%	36,569	100%	15,442	100%	48,535	100%	49,331	100%	46,806	100%	47,008	100%	46,354	100%	48,028	100%	49,161	100%	51,632	100%
Representativity	7,742,146	100%	7,862,105	100%	5,216,324	100%	7,867,099	100%	8,086,832	100%	8,233,229	100%	8,335,681	100%	8,419,847	100%	8,669,893	100%	8,914,467	100%	9,050,629	100%

Table 1: Continuation

	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Gender																						
Men	21,252	49%	22,534	49%	24,616	49%	34,976	49%	34,147	49%	34,923	49%	34,146	49%	18,982	49%	18,825	49%	9,959	49%	9,650	48%
Representativity	4,456,311	48%	4,560,277	49%	4,890,268	49%	4,924,538	48%	5,055,936	49%	5,183,822	49%	5,279,841	49%	5,312,932	49%	5,349,092	49%	5,475,613	49%	5,572,620	49%
Women	22,473	51%	23,824	51%	25,569	51%	36,931	51%	35,945	51%	36,802	51%	36,173	51%	19,817	51%	19,898	51%	10,335	51%	10,506	52%
Representativity	4,759,843	52%	4,837,980	51%	5,116,116	51%	5,245,092	52%	5,319,024	51%	5,451,515	51%	5,557,373	51%	5,514,253	51%	5,574,623	51%	5,605,837	51%	5,791,603	51%
Age																						
15-25	13,668	31%	14,425	31%	15,803	31%	23,103	32%	22,305	32%	22,625	32%	22,132	31%	11,879	31%	11,476	30%	6,114	30%	6,053	30%
Representativity	2,840,228	31%	2,860,784	30%	3,106,020	31%	3,165,022	31%	3,239,829	31%	3,302,603	31%	3,348,479	31%	3,292,673	30%	3,251,888	30%	3,350,518	30%	3,457,264	30%
26-35	8,500	19%	8,617	19%	10,522	21%	15,219	21%	15,765	22%	15,483	22%	14,875	21%	7,604	20%	7,465	19%	3,994	20%	3,946	20%
Representativity	1,823,554	20%	1,821,991	19%	2,133,394	21%	2,321,529	23%	2,422,164	23%	2,466,388	23%	2,496,746	23%	2,263,371	21%	2,273,875	21%	2,299,135	21%	2,315,734	20%
36-45	8,381	19%	8,664	19%	9,787	20%	13,950	19%	13,898	20%	14,181	20%	13,766	20%	7,629	20%	7,556	20%	3,874	19%	3,759	19%
Representativity	1,762,748	19%	1,729,946	18%	1,967,168	20%	2,056,508	20%	2,073,527	20%	2,118,241	20%	2,150,526	20%	2,227,945	21%	2,214,136	20%	2,184,295	20%	2,257,669	20%
46-55	7,224	17%	8,097	17%	7,979	16%	11,450	16%	10,692	15%	11,388	16%	11,220	16%	6,507	17%	6,732	17%	3,418	17%	3,488	17%
Representativity	1,552,251	17%	1,643,573	17%	1,620,564	16%	1,570,930	15%	1,570,266	15%	1,643,841	15%	1,664,105	15%	1,736,622	16%	1,795,445	16%	1,801,512	16%	1,824,447	16%
56-65	5,952	14%	6,555	14%	6,094	12%	8,185	11%	7,432	11%	8,048	11%	8,326	12%	5,180	13%	5,494	14%	2,894	14%	2,910	14%
Representativity	1,237,373	13%	1,341,963	14%	1,179,238	12%	1,055,641	10%	1,069,174	10%	1,104,264	10%	1,177,358	11%	1,306,574	12%	1,388,371	13%	1,445,990	13%	1,509,109	13%
Total	43,725	100%	46,358	100%	50,185	100%	71,907	100%	70,092	100%	71,725	100%	70,319	100%	38,799	100%	38,723	100%	20,294	100%	20,156	100%
Representativity	9,216,154	100%	9,398,257	100%	10,006,384	100%	10,169,630	100%	10,374,960	100%	10,635,337	100%	10,837,214	100%	10,827,185	100%	10,923,715	100%	11,081,450	100%	11,364,223	100%

Source: Own elaboration based on the national employment surveys in Ecuador harmonized by the IDB.

Table 2: Hourly labor earnings of women in relation to the hourly earnings of men

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
General	85.3%	78.7%	68.7%	103.1%	94.1%	96.3%	102.9%	96.1%	98.0%	98.3%	101.0%
Age											
15-25	95.9%	85.7%	60.1%	93.6%	91.2%	92.7%	135.2%	106.6%	110.3%	109.9%	102.6%
26-35	107.4%	81.7%	80.7%	144.5%	97.2%	104.7%	101.0%	112.8%	98.4%	99.3%	99.1%
36-45	89.5%	78.4%	88.0%	92.5%	89.9%	97.2%	97.3%	96.0%	96.0%	103.8%	99.7%
46-55	71.9%	68.2%	60.8%	92.5%	88.1%	91.1%	105.4%	86.3%	94.0%	89.5%	100.0%
56-65	64.8%	88.0%	36.4%	81.3%	120.4%	93.5%	89.1%	83.0%	105.6%	96.0%	112.2%
Level of Education											
None	97.1%	76.5%	72.3%	100.4%	124.8%	104.2%	100.7%	103.1%	103.0%	100.1%	88.7%
Primary	92.7%	74.4%	106.2%	101.2%	110.6%	102.9%	107.6%	112.0%	95.8%	96.7%	105.8%
Secondary	95.9%	86.6%	75.7%	88.6%	94.8%	94.2%	104.3%	85.9%	94.9%	94.3%	96.6%
Tertiary	67.5%	71.1%	51.4%	101.4%	61.6%	76.2%	75.4%	72.5%	72.2%	69.1%	70.4%
Economic Sector											
Agriculture, hunting, forestry, and fishing	78.9%	109.9%	49.9%	98.0%	106.9%	94.6%	111.1%	91.7%	94.9%	93.3%	136.7%
Mining and quarrying	122.8%	188.0%	38.3%	196.5%	68.8%	82.1%	179.2%	211.6%	68.1%	95.2%	118.8%
Manufacturing industry	88.0%	76.6%	78.5%	93.1%	94.8%	113.2%	108.8%	108.4%	92.1%	96.6%	108.9%
Electricity, gas, and water	81.6%	124.0%	161.0%	66.7%	86.0%	98.5%	86.4%	119.7%	65.9%	95.1%	96.0%
Construction	71.3%	57.3%	90.0%	132.8%	180.1%	119.2%	189.4%	198.1%	140.4%	123.7%	128.0%
Trade, restaurants, and hotels	77.1%	69.9%	75.8%	81.0%	101.2%	81.6%	90.8%	91.6%	89.9%	84.0%	82.4%
Transport and storage	139.4%	128.7%	108.1%	109.4%	152.1%	99.1%	141.5%	110.1%	148.6%	106.2%	123.8%
Financial establishments, insurance, and real estate	79.7%	97.2%	63.0%	82.6%	93.1%	95.0%	94.9%	73.3%	88.9%	90.3%	82.7%
Social and community services	92.5%	66.2%	65.5%	114.3%	71.3%	82.8%	84.6%	78.6%	78.0%	74.7%	76.4%
Occupation											
Professional and technician	74.9%	77.1%	62.7%	91.4%	77.5%	77.0%	82.7%	75.5%	85.1%	78.1%	77.8%
Director or senior official	109.6%	86.4%	38.7%	139.9%	64.8%	67.0%	74.6%	70.2%	89.9%	91.6%	81.4%
Administrative and intermediate level	57.0%	99.5%	82.9%	78.4%	43.4%	109.1%	91.2%	93.8%	94.0%	96.8%	98.0%
Merchants and salespersons	80.7%	69.0%	82.0%	84.0%	108.0%	91.4%	101.7%	87.4%	78.7%	65.8%	72.5%
In services	110.7%	99.7%	86.6%	104.0%	113.3%	110.9%	100.8%	101.4%	88.5%	92.9%	83.7%
Agricultural workers	79.5%	92.4%	146.9%	112.4%	106.1%	95.7%	99.0%	94.4%	92.1%	92.6%	147.4%
Non-agricultural laborers, machinery operators, and transport services	105.8%	73.5%	82.8%	85.5%	114.5%	105.8%	126.1%	96.3%	86.5%	89.4%	96.0%
Armed Forces	84.2%	n.d.	n.d.	67.3%	50.9%	n.d.	n.d.	95.6%	n.d.	45.1%	76.1%
Others	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.
Formality											
Informal	85.9%	72.5%	67.8%	119.0%	114.6%	96.4%	108.5%	96.7%	100.7%	100.6%	106.1%
Formal	87.3%	92.1%	70.2%	86.7%	73.1%	93.6%	94.9%	91.4%	91.0%	90.5%	90.7%
Area											
Rural	88.7%	75.3%	n.d.	106.2%	111.5%	103.9%	107.8%	102.6%	119.6%	113.4%	122.6%
Urban	84.4%	78.2%	68.7%	99.8%	90.7%	93.3%	99.8%	92.7%	92.7%	93.6%	93.8%
Self-Employed											
Not self-employed	76.3%	84.9%	61.8%	111.5%	89.5%	96.0%	99.9%	97.3%	99.9%	99.1%	102.4%
Self-employed	108.6%	67.1%	97.9%	85.4%	112.2%	98.2%	111.7%	95.2%	94.2%	97.1%	96.7%
Regions											
Azuay	85.2%	78.7%	32.1%	88.0%	85.6%	92.4%	96.4%	95.4%	89.2%	96.4%	92.1%
Bolívar	80.7%	185.9%	65.4%	92.3%	98.9%	118.0%	110.7%	120.8%	112.0%	135.6%	121.7%
Cañar	73.9%	233.9%	79.9%	92.8%	98.8%	86.2%	94.2%	118.6%	101.6%	110.2%	106.6%
Carchi	78.7%	108.3%	95.7%	87.1%	89.6%	93.5%	104.1%	102.2%	105.6%	136.3%	113.0%
Cotopaxi	93.1%	70.4%	92.5%	81.9%	143.9%	95.1%	132.8%	103.1%	88.0%	97.6%	80.5%
Chimborazo	84.7%	47.2%	65.6%	98.4%	91.6%	91.7%	124.6%	105.4%	101.4%	103.6%	93.1%
El Oro	96.9%	95.4%	86.8%	75.5%	115.3%	91.9%	123.3%	113.8%	107.5%	110.3%	128.7%
Esmeraldas	82.7%	68.4%	30.9%	103.9%	73.4%	98.1%	99.7%	97.9%	121.3%	117.3%	106.6%
Guayas	75.5%	67.1%	84.2%	108.4%	100.9%	91.8%	103.7%	100.8%	104.7%	94.8%	100.6%
Imbabura	106.3%	95.0%	102.0%	116.2%	75.8%	99.7%	82.1%	100.7%	104.3%	96.1%	93.8%
Loja	82.3%	74.1%	94.4%	105.5%	86.9%	98.1%	93.8%	100.1%	95.2%	94.6%	111.7%
Los Ríos	51.1%	95.8%	105.4%	94.6%	93.4%	108.3%	100.4%	98.3%	106.6%	96.4%	110.3%
Manabí	91.7%	57.0%	45.5%	103.3%	98.5%	111.4%	108.7%	97.9%	117.6%	113.8%	133.0%
Pichincha	97.1%	82.1%	65.4%	109.0%	89.9%	92.8%	96.4%	83.9%	86.1%	81.6%	83.9%
Tungurahua	84.5%	89.1%	72.1%	77.4%	77.0%	105.9%	109.9%	102.2%	97.0%	93.5%	95.2%
Santo Domingo de los Tsáchilas	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	104.8%	114.1%
Santa Elena	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	128.1%	128.5%
Amazonia	85.8%	79.0%	196.1%	90.8%	76.5%	105.4%	115.2%	106.8%	95.2%	108.1%	104.4%
Zonas no delimitadas	n.d.	n.d.	75.3%	110.7%	89.4%	72.7%	67.6%	94.5%	49.3%	118.3%	128.4%

Table 2 (Continuation)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
General	102.2%	100.8%	99.8%	96.8%	95.1%	106.4%	100.7%	103.1%	104.1%	102.9%	104.9%
Age											
15-25	116.0%	108.5%	108.1%	101.7%	98.8%	105.0%	109.8%	119.3%	115.0%	111.3%	111.3%
26-35	101.1%	101.6%	106.1%	101.4%	103.6%	124.3%	102.0%	109.7%	111.3%	102.5%	114.1%
36-45	101.1%	99.0%	102.6%	95.1%	93.5%	99.6%	98.1%	91.3%	101.8%	102.9%	101.9%
46-55	100.1%	95.8%	86.1%	87.4%	85.5%	93.8%	94.5%	102.2%	95.0%	95.7%	99.8%
56-65	102.5%	104.9%	96.7%	95.4%	83.8%	89.7%	99.4%	97.1%	95.8%	100.4%	88.5%
Level of Education											
None	99.1%	93.8%	102.2%	96.8%	96.2%	98.6%	99.5%	109.7%	120.4%	86.7%	99.2%
Primary	92.7%	95.1%	93.7%	92.8%	86.3%	103.6%	93.9%	88.8%	90.5%	103.9%	97.4%
Secondary	90.4%	86.4%	89.9%	88.8%	89.4%	88.3%	90.9%	87.9%	89.6%	86.6%	95.9%
Tertiary	86.3%	83.4%	76.9%	77.6%	71.4%	88.9%	80.2%	89.6%	89.0%	80.5%	86.1%
Economic Sector											
Agriculture, hunting, forestry, and fishing	103.7%	95.3%	111.0%	91.8%	94.2%	98.0%	96.5%	89.7%	117.6%	110.6%	114.3%
Mining and quarrying	106.7%	176.5%	105.5%	98.5%	92.9%	67.7%	104.1%	90.8%	124.2%	65.0%	155.7%
Manufacturing industry	95.2%	86.7%	76.0%	83.7%	79.0%	87.0%	93.8%	88.8%	92.6%	106.1%	82.7%
Electricity, gas, and water	105.2%	111.7%	134.9%	98.8%	65.2%	66.3%	90.5%	98.0%	117.6%	158.0%	138.1%
Construction	138.9%	127.8%	145.4%	153.1%	122.3%	1241.6%	177.9%	127.5%	149.2%	159.3%	154.9%
Trade, restaurants, and hotels	87.1%	86.6%	89.3%	87.5%	89.1%	85.9%	92.3%	86.8%	89.9%	85.1%	82.2%
Transport and storage	131.7%	104.9%	130.0%	104.3%	127.4%	129.7%	130.8%	118.3%	134.8%	154.7%	216.3%
Financial establishments, insurance, and real estate	99.3%	100.6%	100.1%	112.4%	98.0%	110.0%	100.7%	119.0%	102.6%	77.1%	109.5%
Social and community services	76.9%	77.6%	73.8%	71.7%	70.8%	74.7%	74.5%	77.4%	77.4%	76.8%	78.9%
Occupation											
Professional and technician	88.9%	90.5%	81.5%	86.7%	77.7%	85.8%	89.8%	96.1%	90.8%	86.6%	92.7%
Director or senior official	79.8%	63.0%	61.1%	76.5%	66.0%	155.0%	78.4%	94.9%	108.9%	68.1%	96.4%
Administrative and intermediate level	88.5%	85.7%	87.8%	97.6%	95.8%	113.8%	102.0%	100.2%	99.0%	85.5%	115.3%
Merchants and salespersons	86.9%	76.6%	83.0%	81.2%	86.8%	90.9%	88.9%	79.4%	89.0%	73.8%	77.0%
In services	81.4%	82.0%	83.7%	75.2%	75.7%	86.2%	75.1%	76.5%	71.0%	67.3%	70.2%
Agricultural workers	108.7%	97.0%	120.7%	91.7%	95.7%	96.1%	95.4%	91.9%	119.4%	111.9%	114.6%
Non-agricultural laborers, machinery operators, and transport services	86.5%	93.4%	89.0%	82.7%	82.8%	87.9%	98.4%	84.7%	84.0%	102.9%	96.2%
Armed Forces	n.d.	55.6%	143.5%	126.4%	81.5%	83.9%	117.7%	n.d.	n.d.	76.4%	n.d.
Others	n.d.	n.d.	108.5%	107.0%	95.5%	80.3%	155.4%	119.2%	105.6%	127.1%	n.d.
Formality											
Informal	101.0%	92.7%	94.4%	94.5%	93.9%	97.9%	97.5%	94.3%	98.7%	99.1%	100.1%
Formal	97.7%	100.4%	95.9%	94.6%	91.4%	106.0%	99.8%	104.2%	101.9%	100.5%	108.9%
Area											
Rural	113.7%	102.4%	103.0%	97.9%	93.6%	103.2%	98.8%	101.9%	106.4%	109.1%	107.5%
Urban	97.3%	97.2%	95.8%	94.7%	93.1%	104.7%	99.2%	100.2%	101.1%	99.8%	102.3%
Self-Employed											
Not self-employed	105.8%	105.3%	101.3%	99.8%	97.1%	112.0%	102.8%	109.5%	107.9%	106.3%	111.6%
Self-employed	91.7%	87.9%	96.6%	91.4%	92.4%	94.6%	98.9%	89.5%	96.4%	100.3%	97.6%
Regions											
Azuay	89.9%	98.8%	91.1%	89.9%	92.7%	99.2%	99.1%	n.d.	104.6%	118.4%	108.5%
Bolívar	119.8%	125.3%	118.0%	124.8%	113.8%	107.5%	111.1%	n.d.	100.2%	64.5%	88.4%
Cañar	118.3%	137.4%	108.6%	105.9%	95.2%	121.6%	100.7%	n.d.	112.0%	103.8%	79.2%
Carchi	92.2%	118.8%	113.3%	101.5%	99.4%	99.9%	92.4%	n.d.	60.2%	21.7%	96.7%
Cotopaxi	112.9%	100.8%	92.5%	89.0%	98.9%	87.6%	83.3%	n.d.	114.5%	110.9%	116.3%
Chimborazo	100.9%	99.9%	98.0%	99.2%	98.0%	98.3%	105.0%	n.d.	108.8%	85.8%	91.8%
El Oro	112.3%	107.3%	117.8%	112.3%	99.5%	100.8%	97.0%	n.d.	83.0%	102.5%	78.7%
Esmeraldas	114.1%	112.0%	109.7%	98.9%	97.3%	119.3%	112.9%	n.d.	149.0%	114.7%	134.9%
Guayas	97.5%	99.3%	88.9%	92.7%	94.9%	96.9%	98.2%	n.d.	98.7%	101.0%	110.8%
Imbabura	103.6%	91.9%	94.3%	92.5%	97.7%	101.3%	87.6%	n.d.	88.2%	82.6%	100.7%
Loja	119.1%	116.6%	110.3%	96.5%	100.7%	111.1%	96.9%	n.d.	100.8%	119.6%	96.2%
Los Ríos	143.7%	89.5%	104.5%	109.9%	125.3%	110.0%	119.9%	n.d.	112.1%	117.1%	108.1%
Manabí	118.1%	130.6%	116.4%	110.5%	96.8%	110.5%	104.9%	n.d.	125.1%	125.2%	103.4%
Pichincha	88.0%	86.6%	93.1%	86.3%	80.9%	110.2%	96.6%	n.d.	95.1%	96.7%	95.2%
Tungurahua	95.9%	92.2%	96.1%	90.5%	86.5%	86.8%	97.4%	n.d.	114.6%	89.5%	99.5%
Santo Domingo de los Tsáchilas	98.4%	103.6%	105.9%	98.5%	107.4%	96.0%	90.4%	n.d.	89.4%	119.3%	98.2%
Santa Elena	134.2%	97.5%	138.0%	114.2%	109.9%	103.9%	122.1%	n.d.	123.4%	82.4%	109.5%
Amazonia	113.4%	112.0%	103.1%	101.6%	102.8%	114.1%	98.9%	n.d.	100.8%	103.4%	99.1%
Zonas no delimitadas	143.3%	131.8%	93.5%	109.2%	116.2%	102.1%	77.6%	n.d.	107.7%	n.d.	n.d.

Source: Own elaboration based on the national employment surveys in Ecuador harmonized by the IDB.
n.d. Not available. When the available data is not sufficient to calculate the percentage.
Only individuals with occupation and income, and frequency-weighted.

Figure 2 shows the evolution of women's hourly earnings in relation to men's earnings. It can be observed that over the years, women's earnings compared to men's are quite similar and fluctuate around equality. The year 2002 is a notable exception, but it is important to note that in that year, the National Employment, Unemployment, and Underemployment Survey (ENEMDU) was only conducted in urban areas and did not include people living in rural areas. In the year 2021, which is the last year of the study, women's average earnings represented 105% of men's earnings.

Figure 2: Women's hourly earnings in relation to men's
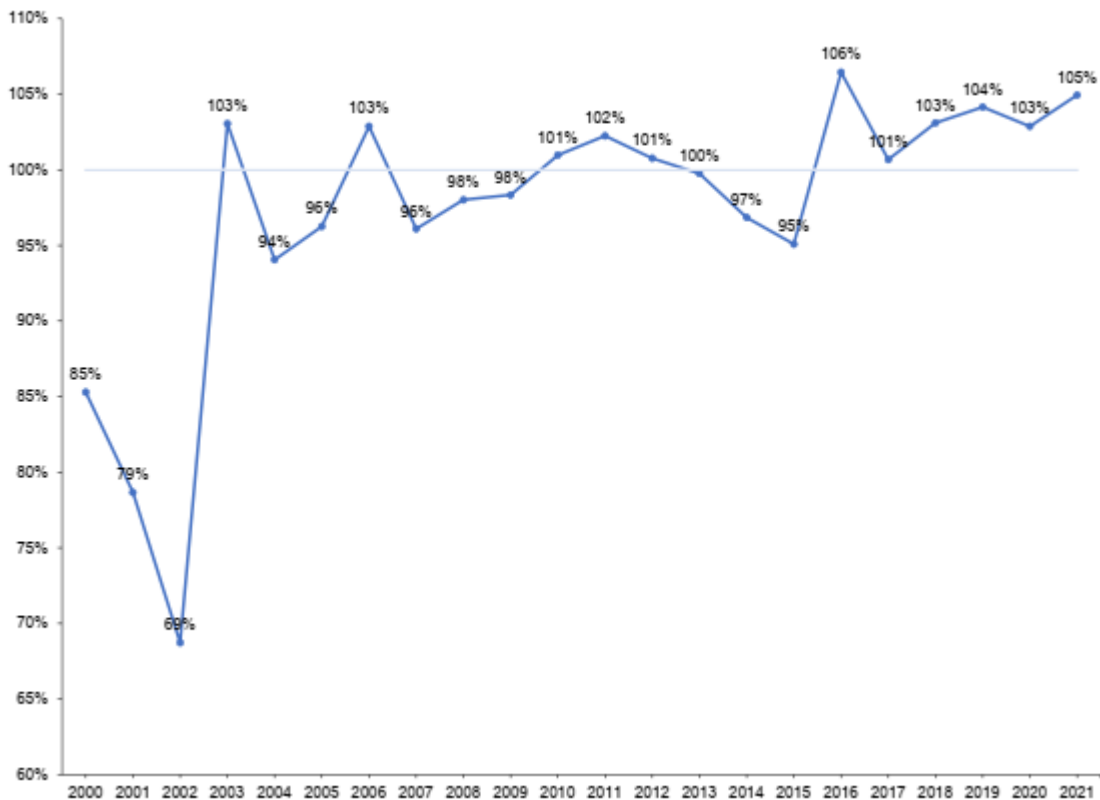
Source: Own elaboration based on harmonized employment surveys from Ecuador by the IDB.

*Only individuals with occupation and income were considered.

Figure 3 shows the analysis of the earnings gap by occupation, divided into the period before and after 2020, the year in which the economy of Ecuador and the world was affected by the outbreak of COVID-19.

In Figure 3, it can be observed that in 2019, there was a difference in favor of men in most occupations (5 out of 8). In 2021, this pattern continues, and in 5 out of 8 occupations, women have a pay disadvantage. It is important to note that in both years, an unfavorable pay gap for women is observed in the categories of professionals and technicians, traders and sellers, services, and non-agricultural workers, machinery operators, and transportation services. However, in the latter category, women's labor participation is low (see Table A2).

On the other hand, there is a highly favorable pay gap for women in the agricultural workers sector (119%) in 2019. However, this category also has low female labor

participation (see Table A2). The pay gap in favor of women could be due to a selection bias, meaning that the few women in these occupations have a very high labor profile, which could result in higher salaries. This is because in women, the potential salary could have a greater impact on labor participation.

Graph 3: Hourly labor earnings of women in relation to men's hourly income by occupation

Professional y técnico	Professional y técnico	Director o funcionario superior	Director o funcionario superior	Administrativo y nivel intermedio	Administrativo y nivel intermedio	Comerciantes y vendedores	Comerciantes y vendedores	En servicios	En servicios	Trabajadores agrícolas	Trabajadores agrícolas	Obreros no agrícola, conductores de maquinaria y servicios de transporte	Obreros no agrícola, conductores de maquinaria y servicios de transporte
2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021
91%	93%	111%	97%	98%	113%	79%	70%	68%	68%	94%	95%	72%	88%

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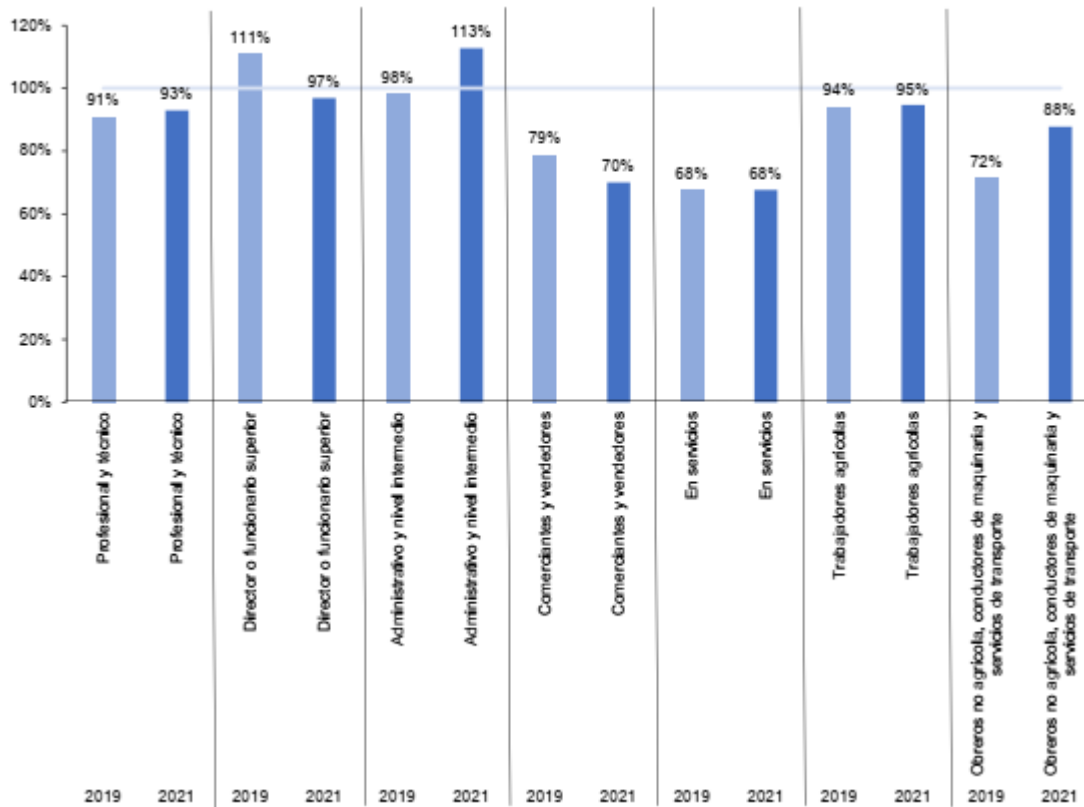
*Only individuals with occupation and income were used.

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 earnings into:

(i) a part explained by group differences and individual characteristics, such as education and work experience,

(ii) a second residual component that is unexplained.

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

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

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

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

$$(2)$$

$$EGap = \widehat{\alpha_H} + \sum_{i=1}^{k} \overline{X_{\iota k}}\,\widehat{\beta_{H\iota k}} - \widehat{\alpha_M} - \sum_{i=1}^{k} \overline{X_{\iota k}}\,\widehat{\beta_{M\iota k}}$$

(3)

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

$$EGap = (\widehat{\alpha_H} - \widehat{\alpha_M}) + \sum_{i=1}^{k} \overline{X_{\iota k}}(\widehat{\beta_{H\iota k}} - \widehat{\beta_{M\iota k}}) + \sum_{i=1}^{k} (\overline{X_{H\iota k}} - \overline{X_{M\iota k}})\widehat{\beta_{H\iota k}}$$

(4)

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

The model was estimated using the following specification:

$$yhora_i = \beta_0 + \sum_{i=1}^{3} \beta_i\, gaedu_i + \beta_4 exp_i + \beta_5 exp_i^2 + \sum_{i=6}^{9} \beta_i\, gedad_i + \beta_{10} casado_i + \beta_{11} men6_i +$$
$$\beta_{12} cnt\_prop_i + \sum_{i=13}^{20} \beta_i rama_i + \sum_{i=21}^{28} \beta_i ocupa_i + \beta_{29} formal_i + \beta_{30} zona_i +$$
$$\sum_{i=31}^{n} \beta_i region_i + \epsilon_i$$

(5)

Where:

- $yhora_i$ 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 earnings. This is done through discrete characteristics, and thus, it does not require matching by propensity score or any other notion of distance between men's and women's characteristics (Ñopo 2008).

This procedure generates three groups:

(i) Women and men matched in the "common support."

(ii) Women with observable characteristics for which there are no comparable men, referred to as the "maid effect."

(iii) Men for whom there are no comparable women, referred to as the "CEO effect."

The method allows men and women with identical characteristics to be part of a "common support," facilitating the breakdown of the 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.

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

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 that use 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.[22]

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 this is what the methodology calls for.

It is worth noting that by considering only the observed earnings 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 earnings gap in Latin America and the Caribbean, such as those by Hoyos and Ñopo (2010) and Ñopo (2012).

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[22] 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

Table 3 presents the results of the Blinder-Oaxaca decomposition estimation. In this table, it can be seen that over the 22 years in which the calculation was made, the gender earnings gap in hourly earnings ranged from 1% (2021) to 35% (1986)[23], showing a pattern of reduction in the total earnings gap over time, as can be seen in Figure 4.

In all periods, the explanatory variables seem to be contributing to the reduction of the gap, indicating that they have a significant effect on it. Meanwhile, the unexplained part would be responsible for the unfavorable gap towards women.

Table 4 shows the decomposition of the gap explained by the different aggregated explanatory variables. The gap explained by education is negative and statistically significant in almost all periods. This suggests that the higher average education level of women compared to men (as shown in Table A1) is contributing to the reduction of the total earnings gap. Similarly, occupations in which women have a higher representation also reduce the total earnings gap.

On the other hand, the low proportion of self-employed women workers (as shown in the Tables A1) generates a significant increase in the earnings gap.

Finally, the region of residence of workers, both men and women, has a negative and statistically significant effect on the gap. This suggests that the higher proportion of women workers in urban areas and regions with greater economic dynamism (as shown in Table A1) is contributing to the reduction of gender earnings inequalities.

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[23] Calculated as $diferencia/yhora_{mujer}$, the explained gap is calculated as $diferencia_{explicada}/yhora_{mujer}$, while the unexplained gap is calculated as $diferencia_{no\ explicada}/yhora_{mujer}$.

Table 3: Blinder-Oaxaca Decomposition

Hourly Earnings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Differential											
Estimation for Men	0.631***	1.113***	1.794***	1.382***	1.520***	1.487***	1.567***	1.787***	1.799***	1.875***	2.060***
	(0.0156)	(0.0561)	(0.132)	(0.0468)	(0.0477)	(0.0322)	(0.0263)	(0.0380)	(0.0269)	(0.0413)	(0.0378)
Estimation for Women	0.467***	0.893***	1.104***	1.320***	1.367***	1.344***	1.463***	1.568***	1.604***	1.662***	1.925***
	(0.0155)	(0.0344)	(0.0337)	(0.0990)	(0.0381)	(0.0288)	(0.0308)	(0.0389)	(0.0317)	(0.0334)	(0.0501)
Difference	0.164***	0.221***	0.689***	0.0624	0.153*	0.143***	0.104*	0.219***	0.195***	0.213***	0.136*
	(0.0220)	(0.0658)	(0.136)	(0.109)	(0.0611)	(0.0432)	(0.0405)	(0.0544)	(0.0415)	(0.0531)	(0.0627)
Decomposition											
Explained	-0.0215	-0.0962*	0.0880	-0.167***	-0.209***	-0.157***	-0.195***	-0.124***	-0.168***	-0.287***	-0.258***
	(0.0139)	(0.0452)	(0.0987)	(0.0472)	(0.0336)	(0.0351)	(0.0292)	(0.0355)	(0.0280)	(0.0399)	(0.0502)
Unexplained	0.185***	0.317***	0.601***	0.229*	0.361***	0.300***	0.299***	0.343***	0.363***	0.500***	0.394***
	(0.0258)	(0.0934)	(0.113)	(0.103)	(0.0758)	(0.0601)	(0.0498)	(0.0583)	(0.0447)	(0.0699)	(0.0881)
Decomposition (as a percentage of hourly labor earnings for women)											
Total	35%	25%	62%	5%	11%	11%	7%	14%	12%	13%	7%
Explained	-5%	-11%	8%	-13%	-15%	-12%	-13%	-8%	-10%	-17%	-13%
Unexplained	40%	35%	54%	17%	26%	22%	20%	22%	23%	30%	20%
Observations	23587	19228	9561	27437	28840	27300	27788	26698	27127	26879	28261

t-Statistic in parentheses

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

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Differential											
Estimation for Men	2.167***	2.414***	2.667***	2.831***	2.987***	2.879***	2.910***	2.885***	2.799***	2.636***	2.585***
	(0.0276)	(0.0523)	(0.0443)	(0.0356)	(0.0480)	(0.0355)	(0.0347)	(0.0427)	(0.0365)	(0.0804)	(0.0570)
Estimation for Women	1.982***	2.225***	2.436***	2.513***	2.613***	2.787***	2.690***	2.776***	2.719***	2.495***	2.551***
	(0.0372)	(0.0349)	(0.0451)	(0.0350)	(0.0337)	(0.145)	(0.0369)	(0.0740)	(0.0599)	(0.0745)	(0.0595)
Difference	0.185***	0.189**	0.231***	0.318***	0.374***	0.0915	0.220***	0.109	0.0801	0.142	0.0346
	(0.0463)	(0.0628)	(0.0632)	(0.0499)	(0.0587)	(0.150)	(0.0507)	(0.0854)	(0.0702)	(0.110)	(0.0824)
Decomposition											
Explained	-0.262***	-0.368***	-0.285***	-0.252***	-0.306***	-0.210	-0.276***	-0.337***	-0.315***	-0.332***	-0.274***
	(0.0313)	-0.0473	(0.0441)	(0.0379)	(0.0401)	(0.121)	(0.0356)	(0.0464)	(0.0440)	(0.0748)	(0.0659)
Unexplained	0.447***	0.557***	0.516***	0.570***	0.680***	0.301	0.496***	0.446***	0.396***	0.473***	0.309***
	(0.0462)	(0.0841)	(0.0738)	(0.0563)	(0.0615)	(0.252)	(0.0574)	(0.100)	(0.0779)	(0.113)	(0.0923)
Decomposition (as a percentage of hourly labor earnings for women)											
Total	9%	8%	9%	13%	14%	3%	8%	4%	3%	6%	1%
Explained	-13%	-17%	-12%	-10%	-12%	-8%	-10%	-12%	-12%	-13%	-11%
Unexplained	23%	25%	21%	23%	26%	11%	18%	16%	15%	19%	12%
Observations	24405	25320	27959	40820	39308	40156	40203	22184	21793	10961	11659

t-Statistic in parentheses

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

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

Se utilizaron solamente personas con ocupación e ingreso y ponderaciones de peso probabilísticos.

Table 4, Components of Explained Difference in Blinder-Oaxaca*

(Hourly Earnings)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Explained Difference	-0.0215	-0.0962*	0.0880	-0.167***	-0.209***	-0.157***	-0.195***	-0.124***	-0.168***	-0.287***	-0.258***
Education	-0.0260***	-0.0668***	-0.0152	-0.117***	-0.0907***	-0.0613***	-0.111***	-0.0960***	-0.126***	-0.147***	-0.138***
Experience	-0.00288	0.00277	-0.0199	0.0108	-0.00881	-0.00743	-0.0146*	-0.0234*	-0.00404	0.000204	-0.0319**
Personal and Family Characteristics	0.0175***	0.00630	0.0498	0.0129	0.0153*	0.0327***	0.0379***	0.0701***	0.0528***	0.0238*	0.0654***
Self-Employment	0.000117	-0.0197	0.00514	-0.0170*	0.00229	-0.00259	-0.00672	0.00712	0.0101*	0.0178**	0.0196***
Economic Activity	0.0519***	0.00615	0.354	-0.0991	0.0155	-0.0250	0.0394	0.0908	0.0463	0.000822	0.0393
Occupation	-0.0560***	-0.00710	-0.267	0.0891	-0.112	-0.0548*	-0.116***	-0.139*	-0.108*	-0.136***	-0.163**
Region	-0.00166	-0.00797	-0.0180	-0.0344***	-0.0206***	-0.0240***	-0.0163***	-0.0169**	-0.0219***	-0.0358***	-0.0259**
Formality	-0.00134	0.00162	-0.000708	0.00103	-0.00261	-0.00346	0.000727	-0.00303	-0.00369	-0.00552	-0.0115**
Area	-0.00310*	-0.0114	0	-0.0139***	-0.00727**	-0.0107***	-0.00815**	-0.0136*	-0.0138	-0.00432	-0.0123*

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Explained Difference	-0.262***	-0.368***	-0.285***	-0.252***	-0.306***	-0.210	-0.276***	-0.337***	-0.315***	-0.332***	-0.274***
Education	-0.112***	-0.157***	-0.156***	-0.112***	-0.171***	-0.153***	-0.163***	-0.166***	-0.145***	-0.160***	-0.144***
Experience	-0.0125	-0.00604	-0.0192*	-0.00655	-0.00779	-0.000676	-0.00519	-0.0143**	-0.0172*	-0.0148	-0.0223
Personal and Family Characteristics	0.0625***	0.0502*	0.0632***	0.0486***	0.0453***	0.0321	0.0415***	0.0459*	0.0270	0.0680	0.0267
Self-Employment	0.0111**	0.0117	0.0239***	0.0322***	0.0390***	0.0182*	0.0261***	0.0292***	0.0221**	0.0497**	0.0375**
Economic Activity	-0.0331	0.0319	0.0955	0.0526	0.155*	0.113	0.00121	0.0470	0.0613	-0.0996	0.0399
Occupation	-0.157**	-0.244*	-0.242**	-0.211***	-0.336***	-0.160*	-0.138***	-0.254**	-0.202***	-0.158*	-0.202**
Region	0.0101	-0.0220**	-0.0240***	-0.0451***	-0.0197**	-0.0331**	-0.0254***	n.d.	-0.0278***	-0.00552	-0.0221*
Formality	-0.0102*	-0.0116*	-0.0132***	-0.000572	-0.00898	-0.0110	0.00548	-0.00789	-0.0210**	-0.00941	0.0159
Area	-0.0212***	-0.0211*	-0.0140**	-0.00959*	-0.00194	-0.0151*	-0.0184***	-0.0172***	-0.0132**	-0.00210	-0.00456

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

Source: Own elaboration based on Ecuador's harmonized national employment surveys by the IDB.

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

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

Figure 4: Total earnings gap estimated through the Blinder-Oaxaca decomposition
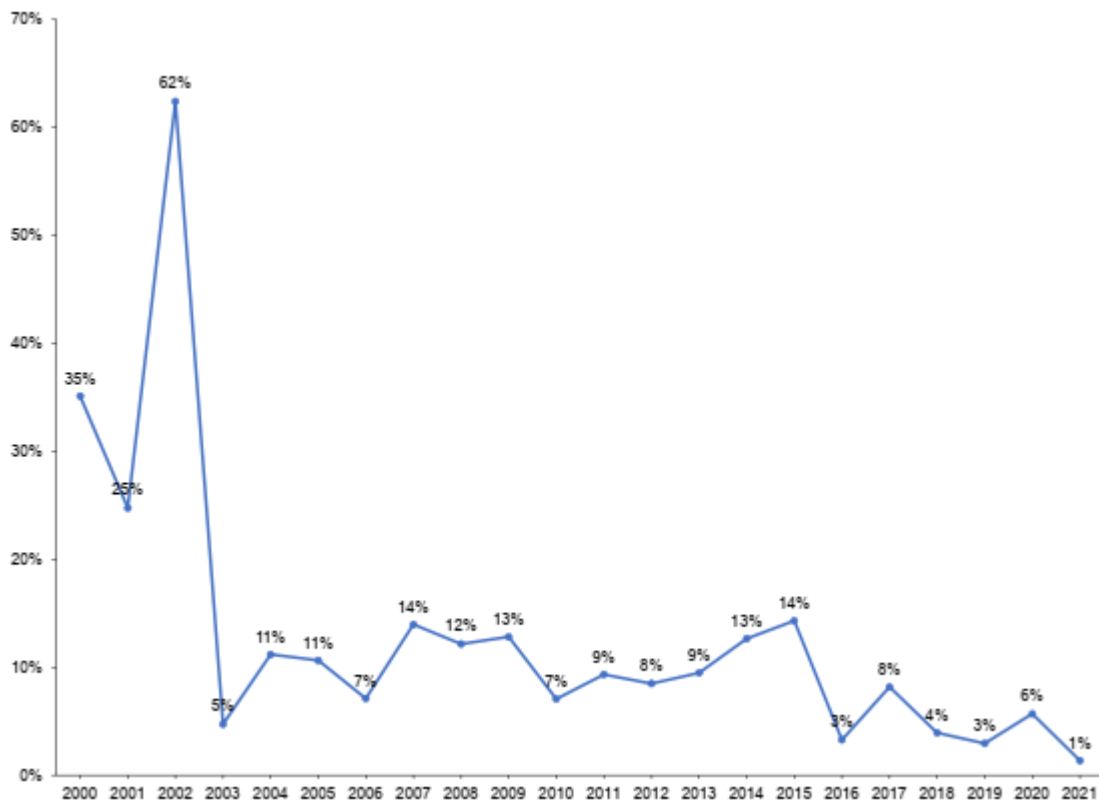
Source: Author's own elaboration based on employment surveys from Ecuador harmonized by the IDB.

*Only individuals with occupation and income were used.

It is important to note that the year 2002 stands out as an outlier in Figure 4. As mentioned earlier, in this year, the ENEMDU was conducted only at the urban level, compromising its comparability with other years. Excluding this year, there is a gradual decrease in the earnings gap in most years.

Table 5 presents the results of the Ñopo decomposition. These results indicate the presence of a gender earnings gap in all the periods analyzed, ranging from 1% to 35%. Similar to the Blinder-Oaxaca model, the explanatory variables seem to be contributing to the reduction of the gap, and the gap is due to factors not explained by the analyzed variables. However, two particular effects, the "Maid effect" and the "CEO effect," are also mentioned. Additionally, the "CEO effect" appears to be contributing to the reduction of the gap, at least from 2009 onwards.

It is relevant to highlight that there are small differences between the Blinder-Oaxaca and Ñopo estimates, primarily related to the structure of the models used, following common practices found in the international literature.

The common support for different years, both for men and women, is not less than 31% in women and 21% in men in any case. However, in most cases, the common support exceeds these values. This common support is similar to that in models applied to countries in Latin America and the Caribbean in previous studies by Hoyos and Ñopo (2010) and Ñopo (2012), which use similar control variables to those

presented in this study. As in the Blinder-Oaxaca model, there is a decreasing trend over time in the total gap, but this is not reflected in the unexplained gap, which remains constant over time.

Table 5: Ñopo Decomposition

Hourly Earnings

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
(Total)	35%	24%	62%	5%	11%	11%	7%	14%	12%	13%	7%
(Unexplained)	36%	23%	42%	11%	25%	34%	20%	17%	21%	42%	23%
(CEO Effect)	-10%	0%	7%	-10%	-3%	-4%	-2%	0%	3%	7%	13%
(Maid Effect)	22%	15%	19%	15%	11%	3%	5%	6%	3%	-13%	-12%
(Explained)	-14%	-14%	-6%	-11%	-22%	-22%	-16%	-8%	-15%	-24%	-17%
% Men	45%	40%	35%	41%	42%	35%	33%	30%	30%	27%	28%
% Women	61%	54%	53%	58%	57%	48%	45%	42%	42%	40%	41%
Standard Error	4%	7%	11%	3%	4%	5%	4%	4%	3%	7%	6%

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
(Total)	9%	8%	9%	13%	14%	3%	8%	4%	3%	6%	1%
(Unexplained)	24%	10%	24%	25%	27%	26%	28%	18%	20%	15%	16%
(CEO Effect)	9%	10%	9%	11%	11%	2%	9%	2%	10%	19%	16%
(Maid Effect)	-10%	-1%	-12%	-9%	-7%	-10%	-7%	0%	-10%	-9%	-13%
(Explained)	-13%	-10%	-12%	-13%	-17%	-14%	-21%	-16%	-18%	-19%	-18%
% Men	27%	29%	28%	29%	29%	29%	31%	64%	27%	21%	21%
% Women	42%	42%	41%	45%	46%	45%	45%	76%	41%	31%	31%
Standard Error	3%	3%	3%	2%	3%	2%	2%	3%	4%	4%	4%

Source: Own elaboration based on the harmonized national employment surveys in Ecuador by the IDB.

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

In Figure 5, the evolution of the gender earnings gap estimated using the Ñopo decomposition is also presented. It can be observed that the unexplained gap (yellow bar) remained high for most of the years and does not show a clear downward trend in recent years.

On the other hand, for 2021, the component explained by the variables used in the model would be helping to narrow the gap by 18%, while the unexplained component would be causing a gap of 16%. The latter is the difference in women's earnings, which is due to other unobservable factors, as mentioned earlier, which may be related to biases and discrimination. Altogether, without the higher level of education, a good labor profile, and the CEO effect, the gap would be 31% larger in 2021.[24]

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[24] The 31% corresponds to the inverse of the sum of the explained gap (-18%) and the CEO effect (-13%).

Figure 5: Total earnings gap estimated through the Blinder-Oaxaca and Ñopo decomposition
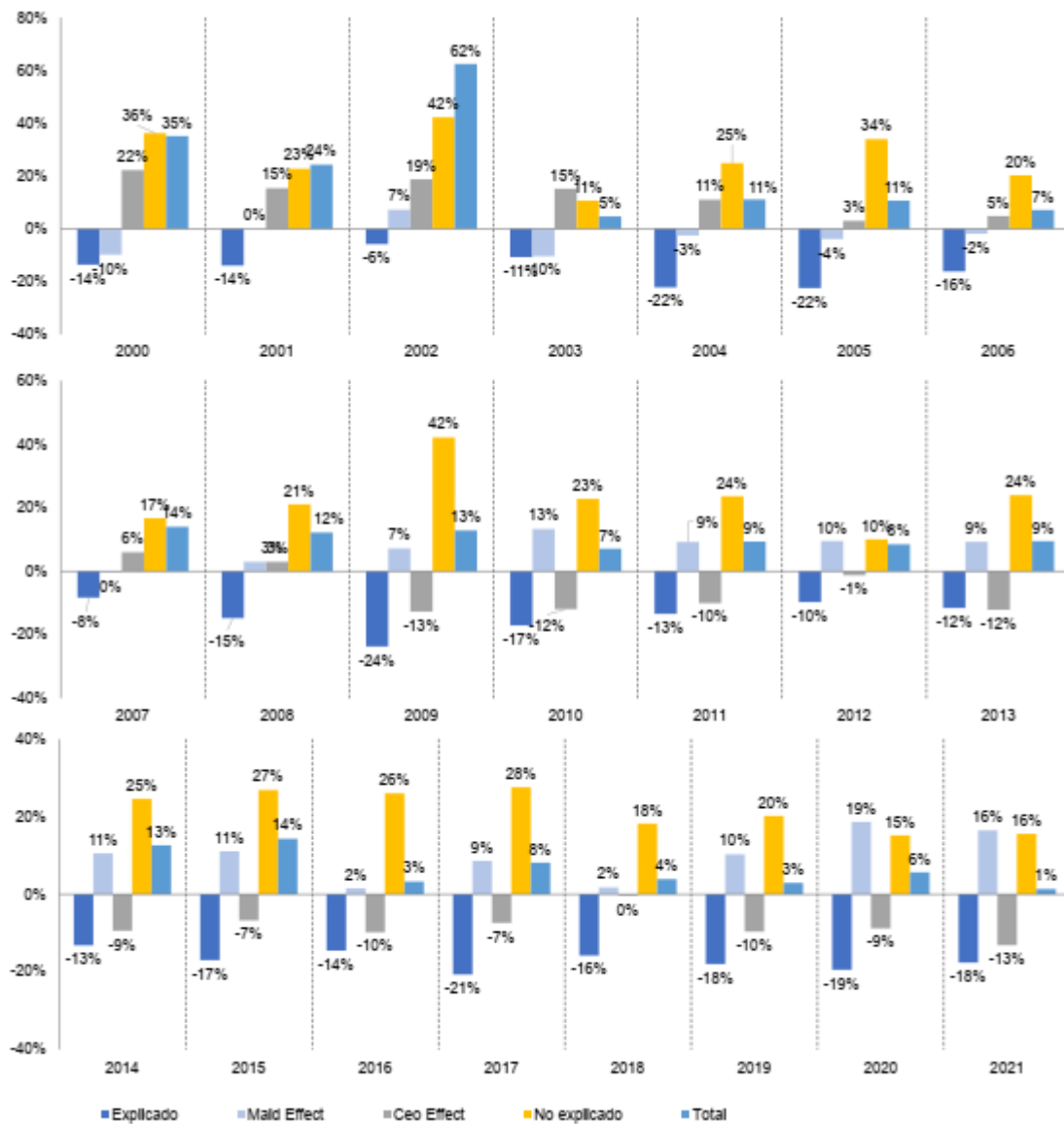
Source: Own elaboration based on Ecuador's employment surveys harmonized by the IDB.

*Only individuals with occupation and income were used.

In Figure 6, the gender earnings gaps found using both methodologies are compared for the years 2000, 2010, 2019, and 2021. These years were selected to maintain intervals of time as consistent as possible and to try to provide a picture before and after 2020, the year when the COVID-19 crisis erupted. The graph includes both the explained and unexplained components.

It is important to note that both methodologies are consistent in showing that in all the years analyzed, there is an unexplained earnings gap unfavorable to women. On the other hand, the explanatory variables seem to be contributing to reducing the gap. This suggests that over time, although women have made improvements

in various aspects that influence their incomes, an unexplained gap that cannot be accounted for by differences in these observable variables persists.

Figure 6. Total earnings gap estimated through the Blinder-Oaxaca (BO) and Ñopo decompositions*
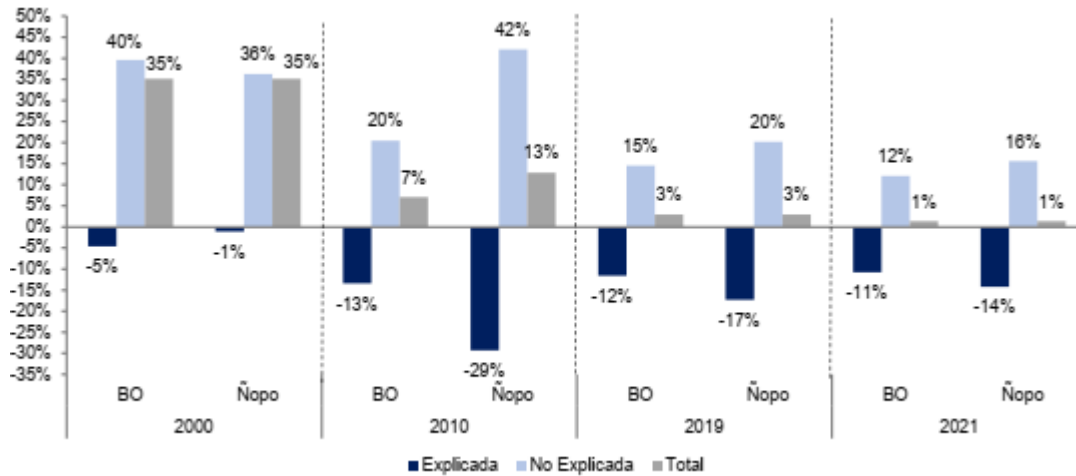
Source: Own elaboration based on harmonized employment surveys for Ecuador by the IDB.

*Only individuals with occupation and income were used.

Note: For Ñopo's methodology, the explained component data is calculated as the sum of the explained component, the CEO Effect, and the Maid Effect.

Figure 7 presents the evolution of the unexplained gender earnings gap for the same selected periods as in Figure 6. This graph includes confidence intervals for 1.96 standard deviations above and below the estimator. This graph shows that both methodologies indicate a statistically significant unexplained earnings gap for the different years analyzed, and this gap is statistically the same for both methodologies at the 95% level of statistical significance.

Figure 7. Unexplained earnings Gap Estimated Through Blinder-Oaxaca and Ñopo's Decompositions
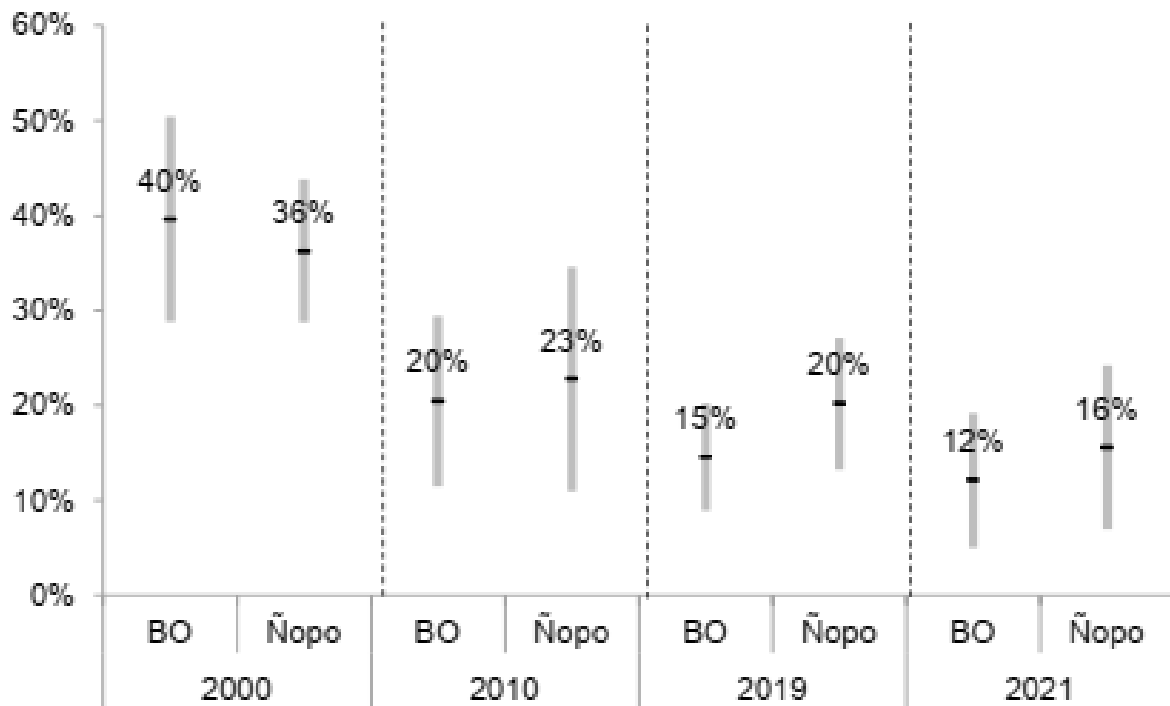
Source: Own elaboration based on harmonized Ecuadorian labor surveys by the IDB.

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

Additionally, the Ñopo decomposition allows for breaking down the income gap for different categories of the explanatory variables. Figure 8 presents the earnings gap, both total and unexplained, by formality status. There is a clear distinction in the total gap between individuals working in the formal and informal sectors. A high gap is observed between the earnings of people in the informal sector, while in the formal sector, the gap is smaller, and even in favor of women. On the other hand, the unexplained gap is statistically significant in both sectors.

Figure 8. Earnings Gap Estimated through the Ñopo Decomposition by Formality

Total Gap   Unexplained Gap

Source: Own elaboration based on harmonized employment surveys in Ecuador by the IDB.

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

The situation of the gap in the informal sector may be due to the non-application of labor laws regulating labor relations in that sector and prevailing business practices. This is relevant considering that labor informality in Ecuador is around 30% in general (see Table A1).

Figure 9 presents the earnings gap, both total and unexplained, broken down by urban and rural areas. There is a clear difference in the total gap between people working in urban and rural areas. A higher earnings gap is observed in rural areas.

Furthermore, it is evident that there is an unexplained gap in both areas. Confidence intervals are included in this graph using 1.96 standard deviations above and below the estimator, i.e., at a 95% significance level. Since the sample is smaller in rural areas, the confidence intervals are wider. However, starting from 2009, this gap is not statistically significant in rural areas.

Figure 9: Earnings Gap Estimated through the Ñopo Decomposition by Zone
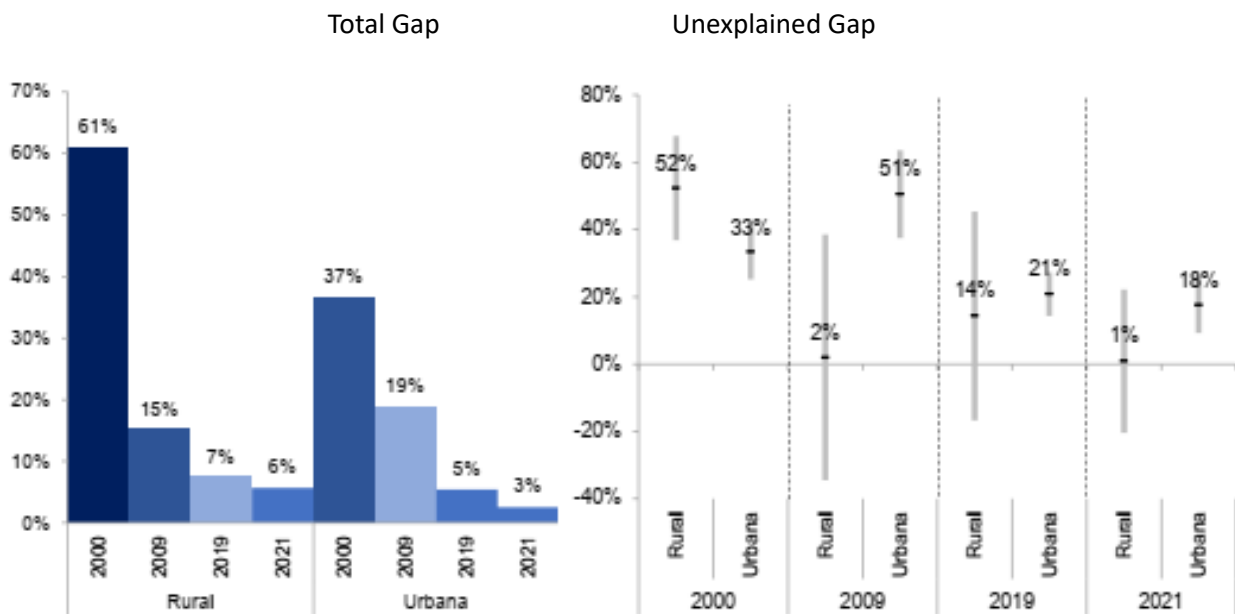
Total Gap   Unexplained Gap

Source: Own elaboration based on harmonized employment surveys in Ecuador by the IDB.
Note: The bars represent the unexplained component at a 95% confidence level.

Figure 10 shows the earnings gap, both total and unexplained, by self-employment status. There is a distinction in the total gap between individuals who work as self-employed. There is a higher gap among self-employed workers, while for the rest, the gap has decreased and is even negative in 2019 and 2021. In both groups, the unexplained gap is statistically significant.

Figure 10: Earnings gap estimated through Ñopo's decomposition by self-employment status

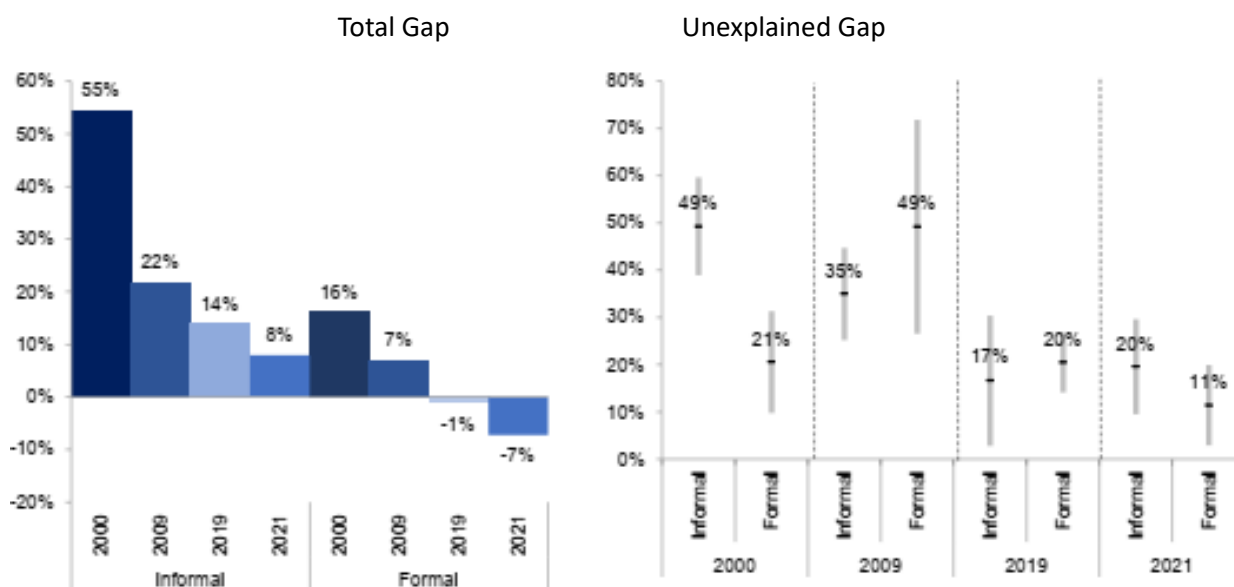Total Gap   Unexplained Gap

Source: Own elaboration based on harmonized employment surveys in Ecuador by the IDB.
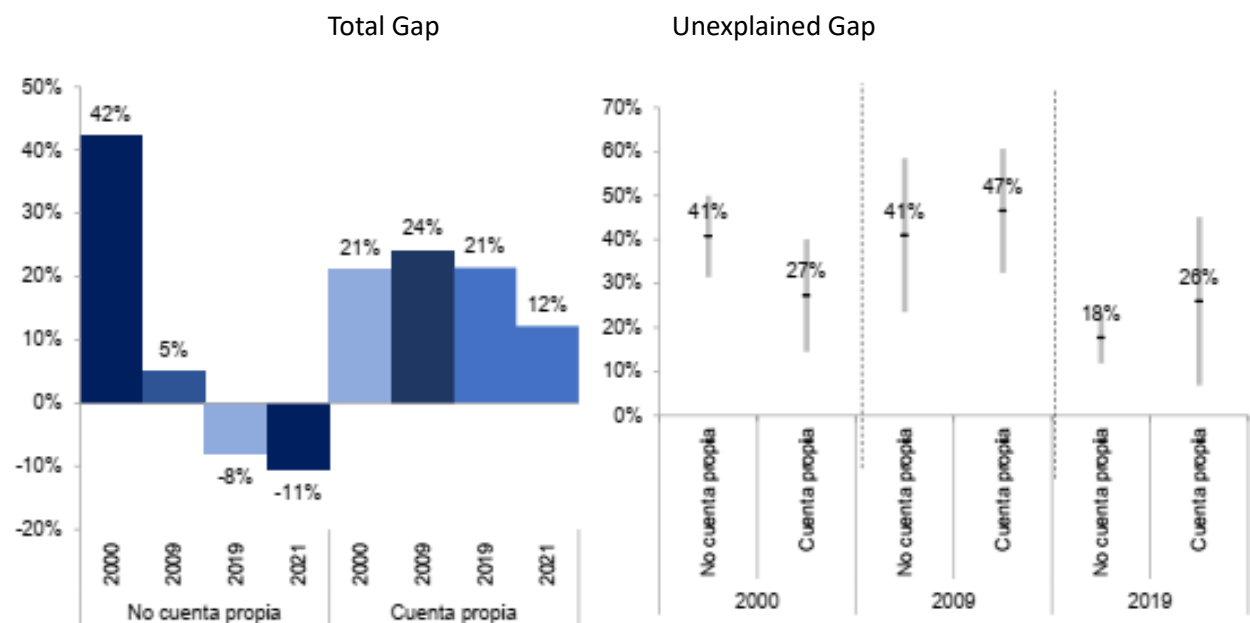Note: The bars represent the unexplained component at a 95% confidence level.

Conclusions

As general conclusions of the study, it can be observed that the total earnings gap between men and women in Ecuador has decreased during the analyzed period. However, this reduction is mainly due to observable factors. Unobservable factors continue to be unfavorable towards women, suggesting that the gender gap could be related to potential issues related to regulations, biases, or discrimination, and other factors that need further study.

This gap is more pronounced in the informal sector, in rural areas, and among self-employed workers. There is heterogeneity in the gap among different occupations, but in most of them, the gap is statistically significant. The main variables contributing to closing the gender gap in Ecuador are education, experience, and occupations where women are more present in the labor market. On the other hand, personal and family characteristics such as age, marital status, and the presence of minors in the household contribute to generating an earnings gap unfavorable towards women. Additionally, the low proportion of female self-employed workers increases the total gap, while geographic location in urban areas and regions with high economic dynamism helps reduce the gap.

These conclusions align with previous research on the gender earnings gap in Ecuador. It confirms that the unexplained gap is the one generating the earnings gap, as found in the work of Pérez and Torresano (2015) and Linthon-Delgado, Méndez-Heras, and Cornejo-Marcos (2022). It also indicates that if the human capital endowments of the analyzed population are considered, women would be expected to have higher incomes.

In line with Linthon-Delgado and Méndez-Heras (2022), Alvarado (2012), and Gallardo and Ñopo (2009), it is found that the unobservable factor is the main cause of the unfavorable earnings gap towards women. This underscores the importance of identifying possible factors that have not been studied so far and that may be affecting women's income and promoting responsive policies. On the other hand, similar to Constante Rodríguez (2019) and ILO (2019b), it is observed that the gap is more pronounced in the informal sector.

Finally, in line with authors like Canelas and Salazar (2014) and ILO (2019a), education is a relevant factor that has helped reduce the gap, thanks to the increase in the proportion of women who have completed their secondary education. Similar to Constante (2019) and Pérez and Torresano (2015), the unexplained gap persists and is primarily present among low-income workers, self-employed or informal workers.

This document contributes to diagnosing the evolution of the gender earnings gap year by year in Ecuador from 2000 to 2021. The conclusions presented here are relevant as they provide evidence-based information that can inform policymakers in making informed decisions.

These conclusions can be further complemented in future analyses by examining the earnings gap in more depth and granularity for groups of individuals with different specific characteristics. Additionally, further research should focus on the

consequences of the pandemic on the gender earnings gap in Ecuador, as the study only includes data up to 2021.

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Table A1. Distribution of Characteristics of the Income-Earning Employed Population by Year and Gender, Men (m) and Women (w)

	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	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	8.7	8.6	8.3	8.2	9.7	9.5	8.3	8.2	8.4	8.3	8.6	8.4	9.0	8.8	9.0	8.8	9.1	8.9	9.2	9.1	9.3	9.2
None	17%	18%	44%	45%	32%	32%	44%	45%	44%	44%	40%	41%	14%	18%	16%	18%	15%	17%	14%	17%	14%	16%
Primaria	52%	49%	23%	22%	26%	25%	23%	21%	23%	22%	26%	24%	51%	47%	49%	46%	49%	46%	49%	45%	48%	45%
Secondary	24%	27%	25%	27%	31%	34%	26%	28%	26%	28%	26%	28%	26%	26%	26%	27%	27%	27%	28%	29%	29%	29%
Tertiary	7%	6%	7%	6%	11%	9%	7%	6%	7%	7%	8%	6%	9%	9%	9%	9%	10%	9%	9%	9%	9%	10%
Years of Experience	19.5	19.3	19.4	19.6	18.4	18.7	19.8	20.5	20.2	20.8	19.9	20.5	19.5	20.5	19.8	20.6	20.0	20.7	20.1	20.9	20.1	21.3
15-25	35%	35%	36%	35%	35%	33%	36%	33%	35%	32%	35%	33%	35%	32%	34%	31%	34%	31%	35%	32%	35%	30%
26-35	21%	22%	22%	23%	22%	23%	21%	22%	21%	22%	20%	22%	20%	21%	21%	22%	20%	21%	19%	19%	19%	19%
36-45	20%	20%	20%	20%	21%	22%	19%	20%	19%	21%	20%	21%	19%	21%	19%	20%	18%	20%	18%	20%	18%	20%
46-55	15%	14%	13%	13%	14%	14%	14%	15%	15%	15%	15%	15%	16%	16%	15%	16%	16%	16%	16%	17%	16%	17%
56-65	9%	9%	9%	8%	8%	8%	10%	10%	10%	11%	10%	9%	10%	10%	11%	11%	11%	11%	12%	12%	13%	13%
Married	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	54%	56%	53%	55%	55%	56%	54%	54%	52%	53%	51%	53%
Children under 6 years old in the household	41%	44%	40%	43%	38%	41%	39%	43%	38%	42%	36%	40%	36%	40%	35%	39%	34%	37%	33%	37%	31%	36%
Agriculture, hunting, forestry, and fishing	29%	11%	31%	24%	10%	4%	32%	22%	32%	25%	32%	24%	30%	23%	30%	21%	30%	20%	31%	21%	30%	19%
Mining and quarrying	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%
Manufacturing industry	14%	14%	14%	13%	16%	12%	12%	11%	12%	11%	12%	10%	12%	10%	12%	11%	12%	11%	12%	10%	12%	10%
Electricity, gas, and water	1%	0%	1%	0%	1%	0%	0%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%
Construction	11%	1%	9%	1%	11%	1%	10%	0%	10%	0%	10%	0%	11%	1%	11%	0%	11%	1%	11%	1%	11%	1%
Trade, restaurants, and hotels	20%	30%	21%	29%	28%	35%	20%	31%	20%	30%	21%	31%	21%	32%	21%	33%	20%	32%	20%	33%	19%	33%
Transport and storage	8%	1%	8%	1%	10%	2%	7%	1%	8%	1%	8%	2%	8%	2%	8%	2%	8%	2%	9%	2%	9%	2%
Financial establishments, insurance, and real estate	4%	4%	4%	3%	7%	4%	5%	4%	5%	4%	5%	4%	5%	4%	5%	4%	5%	5%	5%	5%	6%	5%
Social and community services	13%	38%	12%	28%	17%	41%	12%	31%	12%	28%	11%	29%	11%	28%	11%	28%	11%	30%	11%	29%	12%	30%
Azuay	5%	6%	5%	6%	4%	4%	5%	6%	5%	5%	4%	5%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Bolívar	1%	1%	1%	2%	0%	0%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cañar	2%	3%	2%	3%	1%	1%	1%	2%	1%	2%	1%	2%	1%	2%	1%	2%	1%	2%	2%	1%	1%	2%
Carchi	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Cotopaxi	2%	1%	1%	2%	1%	1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Chimborazo	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
El Oro	5%	5%	5%	5%	5%	5%	4%	4%	5%	4%	5%	4%	5%	4%	4%	4%	4%	5%	5%	5%	5%	4%
Esmeraldas	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Guayas	31%	30%	30%	29%	35%	35%	29%	28%	29%	27%	28%	27%	28%	27%	28%	27%	28%	27%	22%	22%	25%	24%
Imbabura	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Loja	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Los Ríos	6%	6%	7%	6%	4%	4%	6%	5%	6%	5%	6%	5%	6%	5%	6%	5%	6%	5%	6%	5%	6%	5%
Manabí	7%	8%	8%	7%	8%	8%	10%	9%	9%	9%	10%	9%	10%	9%	10%	9%	10%	9%	10%	9%	10%	9%
Pichincha	21%	21%	21%	21%	26%	25%	21%	21%	21%	22%	21%	21%	21%	21%	21%	21%	20%	21%	17%	18%	18%	19%
Tungurahua	3%	3%	2%	3%	3%	3%	4%	4%	3%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Santo Domingo de los Tsáchilas	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.	4%	4%	2%	2%
Santa Elena	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.	5%	4%	2%	2%
Amazonia	4%	3%	4%	4%	2%	2%	4%	4%	4%	4%	5%	4%	5%	4%	5%	4%	4%	4%	5%	4%	5%	4%
Zonas no delimitadas	n.d.	n.d.	n.d.	n.d.	0%	0%	0%	0%	1%	1%	1%	0%	1%	0%	1%	1%	1%	1%	1%	0%	0%	0%
Urban	69%	70%	67%	68%	n.d.	n.d.	68%	69%	69%	70%	68%	70%	68%	70%	68%	70%	68%	70%	68%	70%	67%	70%
Formal	24%	28%	22%	17%	24%	17%	22%	17%	22%	17%	23%	17%	22%	17%	24%	19%	26%	19%	27%	21%	29%	23%
Self-employed	25%	14%	23%	16%	22%	15%	22%	15%	21%	17%	22%	16%	21%	16%	21%	16%	20%	15%	21%	15%	22%	15%

Table A1 (Continued)

	2011 H	2011 M	2012 H	2012 M	2013 H	2013 M	2014 H	2014 M	2015 H	2015 M	2016 H	2016 M	2017 H	2017 M	2018 H	2018 M	2019 H	2019 M	2020 H	2020 M	2021 H	2021 M
Years of Education	9.5	9.4	9.6	9.5	9.6	9.5	9.6	9.6	9.8	9.9	9.8	9.9	9.9	10.0	9.9	9.9	9.9	9.9	10.0	10.1	10.2	10.4
None	12%	15%	12%	14%	12%	13%	11%	12%	10%	11%	10%	11%	9%	11%	9%	11%	9%	10%	8%	9%	7%	8%
Primaria	47%	45%	46%	43%	47%	44%	48%	47%	46%	44%	46%	44%	45%	42%	45%	43%	45%	43%	45%	41%	43%	40%
Secondary	32%	31%	33%	32%	32%	31%	33%	32%	34%	34%	35%	34%	36%	34%	35%	34%	36%	34%	37%	36%	39%	39%
Tertiary	9%	10%	10%	11%	10%	11%	9%	10%	10%	12%	10%	12%	10%	13%	10%	13%	10%	13%	10%	13%	11%	13%
Years of Experience	20.6	21.2	20.5	21.7	19.7	20.7	19.4	19.9	19.1	19.4	19.2	19.6	19.3	19.6	19.7	20.5	19.9	20.8	19.7	20.6	19.6	20.5
15-25	32%	30%	32%	29%	33%	29%	32%	30%	32%	30%	32%	30%	32%	30%	32%	29%	32%	28%	33%	28%	32%	28%
26-35	20%	20%	20%	19%	20%	22%	22%	23%	23%	24%	23%	23%	22%	24%	20%	21%	20%	21%	20%	22%	19%	21%
36-45	18%	20%	17%	19%	19%	20%	20%	21%	20%	20%	20%	20%	20%	20%	20%	21%	20%	21%	19%	20%	19%	20%
46-55	17%	17%	17%	18%	16%	17%	15%	16%	15%	15%	15%	16%	15%	16%	16%	16%	16%	17%	16%	17%	15%	17%
56-65	13%	14%	14%	15%	12%	12%	10%	10%	10%	10%	10%	11%	11%	11%	12%	12%	12%	13%	13%	13%	13%	13%
Married	54%	54%	51%	52%	54%	55%	57%	56%	58%	57%	57%	57%	57%	57%	53%	55%	53%	54%	52%	53%	53%	54%
Children under 6 years old in the household	31%	34%	29%	32%	31%	35%	38%	43%	37%	41%	37%	41%	37%	41%	30%	35%	31%	34%	31%	36%	31%	36%
Agriculture, hunting, forestry, and fishing	30%	18%	29%	18%	26%	18%	25%	19%	26%	20%	26%	22%	26%	22%	28%	24%	30%	25%	33%	27%	33%	27%
Mining and quarrying	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%
Manufacturing industry	11%	10%	12%	11%	12%	11%	12%	10%	12%	9%	13%	10%	12%	11%	12%	10%	11%	9%	10%	8%	13%	9%
Electricity, gas, and water	1%	0%	1%	0%	1%	1%	1%	1%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%	1%	0%
Construction	10%	1%	10%	1%	13%	1%	12%	0%	12%	1%	12%	1%	12%	1%	11%	1%	10%	1%	9%	0%	9%	1%
Trade, restaurants, and hotels	20%	36%	19%	35%	18%	32%	19%	33%	19%	34%	19%	34%	20%	34%	19%	31%	19%	31%	20%	34%	19%	34%
Transport and storage	9%	2%	10%	2%	9%	2%	10%	2%	10%	2%	10%	2%	10%	2%	10%	2%	10%	2%	9%	2%	10%	1%
Financial establishments, insurance, and real estate	6%	6%	7%	6%	6%	6%	6%	5%	6%	5%	6%	5%	6%	6%	6%	6%	6%	6%	5%	7%	4%	6%
Social and community services	12%	27%	12%	27%	13%	29%	13%	29%	13%	28%	13%	27%	13%	25%	12%	25%	12%	26%	11%	22%	10%	22%
Azuay	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	n.d.	n.d.	5%	5%	4%	4%	3%	4%
Bolívar	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	n.d.	n.d.	1%	1%	1%	1%	1%	1%
Cañar	1%	2%	1%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	n.d.	n.d.	1%	2%	2%	2%	1%	1%
Carchi	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	n.d.	n.d.	1%	1%	1%	1%	1%	1%
Cotopaxi	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	n.d.	n.d.	3%	3%	2%	3%	1%	2%
Chimborazo	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	n.d.	n.d.	3%	4%	2%	2%	2%	2%
El Oro	5%	4%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	n.d.	n.d.	4%	4%	4%	4%	4%	4%
Esmeraldas	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	5%	5%	n.d.	n.d.	6%	6%	4%	4%	4%	5%
Guayas	26%	25%	25%	25%	26%	26%	25%	26%	26%	25%	26%	25%	24%	23%	n.d.	n.d.	25%	25%	26%	26%	31%	29%
Imbabura	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	n.d.	n.d.	2%	2%	2%	2%	3%	3%
Loja	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	n.d.	n.d.	3%	3%	2%	2%	3%	3%
Los Ríos	6%	5%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	n.d.	n.d.	5%	5%	6%	6%	4%	4%
Manabí	10%	10%	10%	9%	9%	9%	10%	9%	9%	9%	9%	9%	9%	8%	n.d.	n.d.	7%	7%	8%	7%	7%	8%
Pichincha	18%	19%	18%	18%	19%	19%	19%	19%	19%	19%	19%	19%	17%	17%	n.d.	n.d.	18%	19%	15%	16%	15%	15%
Tungurahua	4%	4%	4%	4%	4%	4%	3%	3%	3%	4%	3%	3%	4%	4%	n.d.	n.d.	3%	3%	3%	3%	2%	2%
Santo Domingo de los Tsáchilas	2%	2%	2%	2%	3%	2%	3%	2%	3%	3%	3%	3%	3%	3%	n.d.	n.d.	4%	4%	3%	3%	3%	3%
Santa Elena	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	n.d.	n.d.	3%	3%	4%	4%	3%	3%
Amazonia	5%	4%	5%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	n.d.	n.d.	6%	5%	10%	9%	11%	10%
Zonas no delimitadas	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	n.d.	n.d.	0%	0%	n.d.	n.d.	n.d.	n.d.
Urban	68%	70%	68%	70%	69%	71%	69%	71%	70%	71%	70%	71%	70%	71%	70%	71%	70%	71%	69%	71%	69%	71%
Formal	35%	25%	38%	30%	41%	31%	44%	32%	43%	34%	41%	33%	40%	34%	38%	35%	36%	33%	31%	28%	31%	27%
Self-employed	24%	16%	23%	15%	21%	15%	21%	17%	21%	16%	24%	18%	23%	19%	25%	18%	26%	18%	26%	19%	25%	21%

Fuente: Elaboración propia en base a las encuestas nacionales de empleo en Ecuador armonizadas por el BID.
n.d. No Disponible. Cuando los datos disponibles no son suficientes para calcular el porcentaje.
Se utilizan ponderaciones de peso probabilísticos.

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

	2000		2001		2002		2003		2004		2005		2006		2007		2008		2009		2010	
	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$
Professional and Technician	46%	1.0	46%	1.6	44%	1.9	49%	2.2	49%	2.3	48%	2.5	50%	2.7	48%	2.9	50%	2.9	51%	3.2	52%	3.3
Director or Senior Official	30%	2.5	26%	4.5	25%	3.2	35%	8.3	34%	3.8	35%	3.6	28%	3.9	37%	5.4	30%	5.6	33%	5.6	35%	6.0
Administrative and Intermediate Level	63%	0.7	62%	1.2	60%	1.3	59%	1.5	61%	1.5	60%	1.7	59%	1.9	59%	1.8	60%	1.9	59%	1.9	56%	2.2
Merchants and Salespersons	53%	0.4	55%	0.9	53%	0.9	56%	1.2	57%	1.3	55%	1.2	56%	1.4	59%	1.4	59%	1.3	61%	1.4	61%	1.4
In Services	61%	0.3	61%	0.5	58%	0.6	62%	0.8	62%	1.1	61%	0.9	60%	0.9	62%	1.0	64%	1.1	63%	1.1	62%	1.4
Agricultural Workers	26%	0.2	35%	0.5	20%	0.7	30%	0.6	36%	0.7	33%	0.7	34%	0.7	33%	0.7	31%	0.8	31%	0.8	29%	1.2
Non-Agricultural Laborers, Machinery Operators, and Transport Services	16%	0.3	18%	0.6	16%	0.9	15%	0.8	17%	1.0	15%	0.9	15%	1.1	16%	1.0	16%	1.0	15%	1.1	15%	1.3
FFAA	3%	0.2	n.d.	n.d.	4%	0.0	2%	1.6	11%	2.0	n.d.	n.d.	n.d.	n.d.	2%	4.0	n.d.	n.d.	1%	2.5	0%	4.2
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.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	17%	1.0	n.d.	n.d.
Total	51%	0.5	51%	0.9	51%	1.1	51%	1.3	51%	1.4	51%	1.3	51%	1.5	51%	1.6	52%	1.6	51%	1.7	51%	1.9

	2011		2012		2013		2014		2015		2016		2017		2018		2019		2020		2021	
	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$	(%)	US$
Professional and Technician	52%	3.7	52%	4.1	50%	4.5	50%	4.9	52%	4.6	52%	4.7	52%	4.9	51%	5.4	53%	4.9	55%	4.7	51%	4.9
Director or Senior Official	42%	5.6	40%	5.9	36%	7.6	36%	9.4	32%	7.7	37%	18.2	37%	8.7	39%	12.4	41%	11.6	40%	10.1	38%	10.1
Administrative and Intermediate Level	52%	2.3	53%	2.3	54%	2.9	54%	3.0	53%	3.1	53%	3.7	50%	3.2	54%	3.4	54%	3.2	56%	3.1	48%	3.7
Merchants and Salespersons	60%	1.5	62%	1.7	58%	1.7	61%	2.0	63%	2.1	63%	2.0	61%	2.2	61%	2.1	59%	2.1	60%	1.7	64%	2.0
In Services	58%	1.5	57%	1.7	60%	1.8	61%	1.9	60%	1.9	59%	2.1	59%	2.0	60%	2.0	61%	2.0	57%	1.9	63%	1.8
Agricultural Workers	29%	1.1	30%	1.1	31%	1.4	34%	1.4	34%	1.3	37%	1.4	38%	1.5	37%	1.4	38%	1.7	36%	1.5	36%	1.5
Non-Agricultural Laborers, Machinery Operators, and Transport Services	16%	1.3	16%	1.6	17%	1.6	17%	1.7	17%	1.7	18%	1.8	22%	2.0	20%	1.8	20%	1.7	19%	1.9	23%	1.9
FFAA	n.d.	n.d.	1%	3.4	1%	9.7	1%	8.6	3%	6.2	4%	6.3	1%	8.9	n.d.	n.d.	n.d.	n.d.	11%	5.1	n.d.	n.d.
Others	n.d.	n.d.	n.d.	n.d.	23%	2.3	24%	1.3	15%	2.1	15%	1.5	23%	3.4	23%	2.0	21%	2.2	17%	2.2	17%	0.5
Total	52%	2.0	51%	2.2	51%	2.4	52%	2.5	51%	2.6	51%	2.8	51%	2.7	51%	2.8	51%	2.7	51%	2.5	51%	2.6

Source: Own elaboration based on the harmonized national household surveys of Ecuador by the IDB (Inter-American Development Bank). Probabilistic weightings are used.