

2017

Social Panorama of Latin America





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2017

Social Panorama of Latin America







Alicia Bárcena

Executive Secretary

Mario Cimoli Deputy Executive Secretary a.i.

Laís Abramo Chief, Social Development Division

Pascual Gerstenfeld

Chief, Statistics Division

Paulo Saad Chief, Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC

María Nieves Rico

Chief, Division for Gender Affairs

Ricardo Pérez

Chief, Publications and Web Services Division

Social Panorama of Latin America is prepared each year by the Social Development Division and the Statistics Division of the Economic Commission for Latin America and the Caribbean (ECLAC), under the supervision of Laís Abramo and Pascual Gerstenfeld, respectively, and with participation by the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, directed by Paulo Saad, and the ECLAC Division for Gender Affairs, directed by María Nieves Rico. The 2017 edition was coordinated by Laís Abramo, who also worked on the preparation of the text together with Alberto Arenas de Mesa, Ernesto Espíndola, Álvaro Fuentes, Xavier Mancero, Flavia Marco Navarro, Enrique Peláez, María Nieves Rico, Claudia Robles, Paulo Saad and Lucía Scuro. Elisa Araneda, Bernardo Atuesta, Vivian Milosavljevic, Karen Phillips and Pablo Villatoro prepared substantive inputs; while Haydee Alonzo, Elisa Araneda, Ernesto Espíndola, Fabiola Fernández, Nincen Figueroa, Álvaro Fuentes, Marco Galván, Sebastián García, Carlos Howes, Rocío Miranda, Jesisbé Mejía, Alynn Sánchez, Lucía Scuro and Iliana Vaca-Trigo worked on the statistical processing. Valuable contributions and comments relating to different sections of the document were received from Simone Cecchini, Marcos Chiliatto, Rodrigo Martínez, Beatriz Morales, Varinia Tromben and Pablo Yanes.

United Nations publication ISBN: 978-92-1-121979-1 (print) ISBN: 978-92-1-058617-7 (pdf) ISBN: 978-92-1-358078-3 (ePub) Sales No.: E.18.II.G.3 Distr.: General LC/PUB.2018/1-P Copyright © Naciones Unidas, 2018 All rights reserved Printed at United Nations, Santiago S.18-00001

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This publication should be cited as: Economic Commission for Latin America and the Caribbean (ECLAC), Social Panorama of Latin America, 2017 (LC/PUB.2018/1-P), Santiago, 2018.

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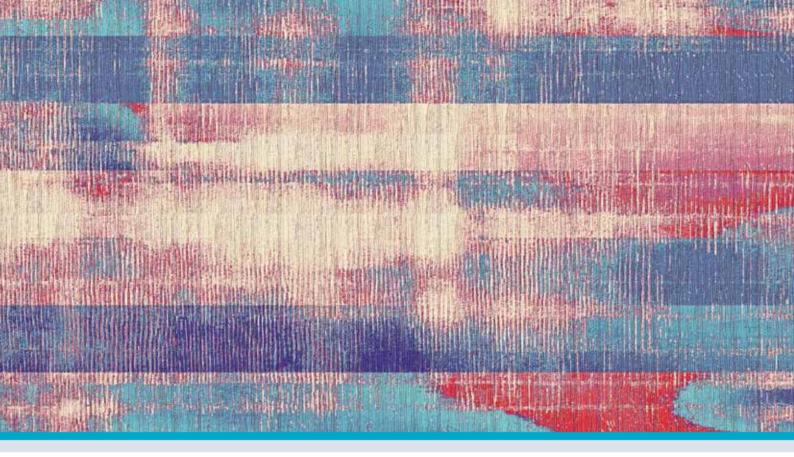
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Presentation

In this edition of *Social Panorama of Latin America*, ECLAC has addressed the questions posed by the countries of the region in three major areas: income inequality between individuals and households; the evolution of poverty and its determinants; and the effects of pension systems on equality and how these relate to labour market dynamics. The poverty analysis in this 2017 edition is based on a major update of the methodology used; this offers improved comparability between countries, which is an essential input for conducting an overall analysis of how poverty and its determinants have evolved. This effort has led to the creation of a new regional data series. The new statistical series using the national data will be made public by ECLAC in the first half of 2018 once the consultations with the respective countries have been concluded.

In this edition, as well as continuing the analysis of the dimensions of social inequality given in previous years, Commission presents a new study of the demographic context and labour market inequalities, and how these relate to the coverage and quality of pension benefits.

The premise is that pension systems are fundamental to the full exercise of citizenship rights and, in particular, to the guarantee of the right to social security and protection. The way they are designed and the level of the benefits they provide define the extent to which pension systems can help to reduce poverty and inequality and serve as a solidarity mechanism between and within generations by which risks of uncertain magnitude and occurrence can be collectively addressed, thereby supporting ageing with dignity.

The analysis of the demographic context is crucial to determine the contribution capacity of cohorts of working age and the potential demand for benefits by older cohorts. Demographic changes involve quantitative and qualitative shifts in the social organization and they must be borne in mind for planning social protection and security policies. The demographic dependency ratio is currently declining in the region, a characteristic of the demographic dividend period. This represents an opportunity to invest in production and increase social investment in health, education and poverty reduction. The end of the demographic dividend and the ageing process pose significant challenges for pension systems, from the perspectives of financial sustainability and benefits coverage and sufficiency. The ageing process is accelerating and has advanced much more rapidly in Latin America and the Caribbean than in the developed world. This means that governments in the region have less time —and therefore less margin for error— to make the necessary adjustments to meet the demands of an ageing population and promote an equitable and inclusive society for all ages.

Chapter I addresses income inequality between individuals and households on the basis of a new series of estimates and examines the interlinkages between the dynamics of the labour market and the coverage and benefits of pension systems. Income distribution inequality declined in the region in the past decade and a half thanks to income gains in households in the lower part of the distribution. However, this trend has slowed significantly in recent years and sources of information supplementary to household surveys indicate this inequality has not declined and that the share of the richest groups in total income may even have risen.

The second section of this chapter describes the positive relationship between labour market developments and increased affiliation to pension systems between 2002 and 2015, despite large disparities in this coverage along the axes of social inequality. Access to pensions for older persons increased in that period, a trend in which non-contributory pensions appear to have played an important role. However, the coverage is far from universal and suffers from considerable inequalities. Moreover, despite the increase in the average amounts of monthly pensions, inequality is evident once again in the pension amounts obtained. A large proportion of recipients of contributory pensions are in fact below the minimum wage.

Chapter II presents the updated regional estimates by ECLAC on poverty and extreme poverty, which show that, after falling for 12 years between 2002 and 2014, these indicators rose again in 2015 and 2016. Household income redistribution has been important in strengthening poverty reduction processes, particularly during periods of low economic growth. Labour income has helped to lift households out of poverty, a process in which pension systems and the transfers associated with poverty reduction policies have also played an important role.

Poverty and extreme poverty affect children, adolescents and young people more than other age groups, something that represents major risks for the development of individuals and the region. The growing feminization of poverty in the youth and adult population is also striking, as is the persistence of high poverty rates in rural areas. Analysis of the labour income of employed persons aged 15 and over, and the pensions received by those aged 65 and over underpins conclusions regarding the sufficiency of labour income as a generator of future pensions, and of pensions, as an indicator of the well-being of pensioners today and those of future generations.

Chapter III provides a framework for analysis of pension systems based on indicators of the coverage and sufficiency of benefits and their financial sustainability, and provides an overview of the reforms made to these systems in the region. This review includes the structural reforms that have led to new pension systems in Argentina, Chile and the Plurinational State of Bolivia between 2008 and 2010. It also outlines pension system reforms being discussed or implemented in 2016 and 2017, focusing on Brazil, Chile and El Salvador. There appears to be a trend towards a stronger State role, the development of solidarity schemes and the inclusion of the gender dimension in most of the processes under way. In particular, contributory coverage increased and non-contributory pensions expanded between 2000 and 2015.

Chapter IV argues that the design of the pension systems is essential to ensure women's economic empowerment at different stages of their lives. The sexual division of labour, which assigns unpaid domestic and care work to women, leaves them with more limited and discontinuous participation in the labour market. As a result, fewer women than men have access to a pension in their own right. The risk of not having a pension or having a pension that is insufficient to live on is worsened by the segmentation of labour markets, the occupational segregation of gender and informality. The wage gap between men and women in working life and breaks in women's contributions result in a gap between the benefit amounts that significantly lowers women's income in old age. Moreover, the majority of women work in sectors and jobs with lower pay and protection, such as domestic service. The structural and parametric reforms to pension systems between 1980 and the current decade are also reviewed, examining their main effects from the perspective of gender equality. It is concluded that stronger inter-gender solidarity is needed, including proposals for pension system design that mainstream the gender perspective and provide universal, comprehensive, efficient and sustainable coverage.

In short, this document illustrates the inequalities in the functioning of pension systems, which largely relate to the sexual division of labour, the structural inequalities in Latin American labour markets and other dimensions of the matrix of social inequality. The achievement of equality, understood as access, without discrimination, to adequate pension coverage with sufficient benefits, is still some way off. For that reason, the Latin American and Caribbean States need to consolidate pension systems with universal coverage, a strong solidarity-for-equality component. This goal is achievable by means of a social compact for sustainable development and equality, which should aim to: (i) expand coverage; (ii) improve the solidarity of the contributory component through rules for contributors that benefit those sectors with insufficient pensions (transfers financed from general revenues or through contributory solidarity); (iii) integrate contributory and non-contributory schemes (the latter under a universal rights rationale); (iv) maintain contribution incentives; and (v) ensure financial sustainability and mainstream the gender equality perspective in pension system composition.



Introduction

Pension systems in Latin America: normative bases and demographic challenges on the road to equality

- A. Pension systems as the basis for social citizenship
- B. Demographic context of the pension systems debate
- C. Consolidating universal, solidarity-based pension systems for equality

Bibliography

Pension systems in Latin America: normative bases and demographic challenges on the road to equality

In addition to analysing poverty and income inequality in the region, this edition of the *Social Panorama of Latin America* focuses on inequalities in the labour market and how they relate to the accessibility of social protection. Its main focus is on pension systems. It explores the coverage and sufficiency of their benefits as well as the inequalities that the design and implementation of such systems can reproduce and augment or, alternatively, reduce. Close attention is paid to the ability of pension systems to contribute to the fulfilment of the right to social security and social protection on the road towards equality in Latin America. The basic premise is that pension systems are essential for the full exercise of the rights of citizenship in that they provide mechanisms that protect incomes in the event of old age, invalidity or death. They therefore play an essential role in safeguarding people's well-being at times when their ability to earn incomes is curtailed, thereby protecting their social inclusion.

Pension system benefits help reduce poverty and inequality and, depending on their design, can serve to ensure basic solidarity within and between generations by providing a collective response to risks of uncertain repercussions and timing. This explains the topicality and importance of discussions about the design of the systems that provide those benefits and the resources needed to sustain and expand them, as well as about their impact on poverty and equality, including gender equality. This is particularly important at a time when the region is facing growing labour, demographic and economic challenges and when discussions regarding the probable redesign of those systems are under way in a number of countries. As this publication shows, such reforms can have a major positive impact in terms of reducing poverty and increasing equality and the population's well-being, for further progress along the path towards strengthened solidarity-based public systems; alternatively, their impact could be regressive if the new designs affect established rights or restrict access to benefits.

In keeping with the traditional posture of the Economic Commission for Latin America and the Caribbean (ECLAC), this document reviews pension systems in keeping with the rights-based approach, paying particular attention to the structuring axes of social inequality in the region. As a starting point for the discussion, the following sections describe the regulatory framework used for the analysis presented in the later chapters.

A. Pension systems as the basis for social citizenship

Social security is defined as the protection that a society provides its members through public measures intended to address economic and social deprivations that could affect income as a result of illness, maternity and paternity, work accidents or occupational illness, unemployment, disability, old age and death, as well as those related to medical assistance and support for families with children (ILO, 2001a). Pension systems are a component of social security systems, comprising those benefits that seek to mitigate drops in personal or family income caused by contingencies related to old age, invalidity

Pension systems are central to the exercise of citizenship, understood in terms of the rights inherent in being a member of a society, and to the development of welfare States. and death (ILO, 2014).¹ Pension systems are also a core element in social protection, understood in broad terms as those policies aimed at ensuring a level of well-being sufficient to sustain an adequate standard of living for personal development, to facilitate access to social services and to promote decent work, which include contributory and non-contributory components, the regulation of the labour market and care systems (Cecchini and Martínez, 2011).² Thus, pension systems are central to the exercise of citizenship, understood in terms of the rights inherent in being a member of a society, and to the development of welfare States.³

Pension systems are intended to ensure adequate means of subsistence in old age (insurance), to distribute consumption throughout the life cycle and to reduce poverty and inequality. They can also assist with other objectives related to economic development (Barr and Diamond, 2008) and fiscal sustainability. They use various instruments and designs to attain these goals in different ways. Pension systems comprise, first, contributory schemes,⁴ funded by contributions made by workers and —not infrequently— by employers and the State. These combine with compulsory public social insurance or other private models, including those that are occupational or voluntary in nature.⁵ Second, pension systems include non-contributory benefits, paid for by public funds and provided either universally or on a targeted basis, which complement contributory pensions or provide an old-age or disability pension to those excluded from the system (ILO, 2014). In the vast majority of the region's countries, the two models coexist and are more or less integrated.

A range of characteristics and options is available for the design of the contributory component of pension systems. On the one hand, a distinction is made between systems based on defined benefits and those based on defined contributions. In the former, benefits are calculated on the basis of a fixed replacement rate determined by the number of years contributions were made and the worker's salary and age at the time of retirement; in the latter, there is no explicit commitment regarding the replacement rate of the pension to be received, and the parameter kept stable (although it can also be modified) is the contribution rate (Barr and Diamond, 2008; ECLAC, 2006; Filgueira and Manzi, 2017). On the other hand, the financial regime varies: it can be a pay-as-you-go (PAYG) scheme, based on a contract between generations in which

The terminology used for pension systems and their benefits varies from country to country. The literature generally uses "pension systems" to refer to an array of economic benefits associated with the risks of old age, disability and death. In some countries, however, the term "pensions" refers specifically to those benefits financed by the State from its general revenues for segments of the population in situations of poverty or vulnerability, or to widows' or survivors' pensions, while "retirement pensions" are those wholly or partly funded by contributions made by the workers themselves, which are frequently supplemented by contributions from their employers and the State. "Social insurance systems" refer to official functions designed to protect individuals from various contingencies that curtail their earning abilities, or to social insurance in the widest sense (Cifuentes, Arellano and Walker, 2013), covering, in addition to the risks covered by pension systems, such risks as disease, other health-related situations and unemployment. In practice, social security and social insurance are generally used as synonyms, although social security is broader in that it includes non-contributory programmes, payments and transfers.

² Thus, social protection policies address risks faced by the entire population, including those covered by the pension system and those arising from other structural problems such as poverty and inequality (Cecchini and others, 2015). According to this broader perspective, social security is included in the notion of social protection that encompasses the mandatory and non-mandatory systems (ILO, 2001b).

 ³ Social insurance against risks arising from old age, disability and death was first introduced in Germany in the late nineteenth century (1883-1889) under Otto von Bismarck (Mesa-Lago, 2008) and it stands at the heart of the development of the welfare State.
 ⁴ Their benefits include those arising from a primary right, which are given to those who made the contributions (old-age or

disability pensions), and those derived from a secondary right, which are given to those who made the contributions (our age of disability pensions), and those derived from a secondary right, such as survivors' pensions.

⁵ Occupational pensions are those made available through employment or a professional relationship between the beneficiary and the entity that establishes the plan. They can be created by employers or by collective bodies, such as industrial or professional associations (OECD, 2005).

the current contributions of active workers fund the pensions of retirees,⁶ or it can be fully funded, based on funds accumulated and invested in individual savings accounts, with accruals of interest.⁷ Likewise, systems can be administered publicly, privately or through a mixed model (Mesa-Lago, 2008; Uthoff, 2017). Different types of system are created through combinations of these options. In general terms, a distinction is made between public systems, which are characterized by contributions and benefits that are established in law, pay-as-you-go funding (or partial collective funding) and public management, and private systems, which use legally determined contributions, non-defined benefits, a fully funded financial regime and private or multiple management (Mesa-Lago, 2008). Combined and coexisting options are frequently found in different countries (Filgueira and Manzi, 2017; OECD, 2016), together with the implementation of mixed systems that include a fully funded and a pay-as-you-go component (see chapter III for an overview of the pension system models in place in Latin America).

Various international instruments define social security as a human right (ILO, 2001a), and pensions are included in that definition; this forms the basis of the international regulatory framework for pension systems. Article 22 of the Universal Declaration of Human Rights (United Nations, 1948) enshrines the right of all persons to social security and its benefits. Article 25.1 establishes the universal right to an adequate standard of living and states that every person has "the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control". Likewise, article 9 of the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966) reaffirms the States parties' commitment to the right of all persons to social security, including social insurance, while article 11 establishes the right of all persons to an adequate standard of living for themselves and their families. These two instruments establish a broad foundation for the right to social security and social protection and for the development of their benefits.⁸

General Comment 19 of the Committee on Economic, Social and Cultural Rights underscores the need to establish social security benefits within the maximum available resources, and for them to be of adequate amounts and duration. It further notes that States should regularly review their benefits and ensure a reasonable relationship between earnings, paid contributions and the amount of the relevant benefit (United Nations, 2008).⁹ General Comment 19 also stresses that special attention should be given to those individuals and groups who have traditionally faced difficulties in exercising this right, thus recognizing the inequalities that exist in its enjoyment.

⁶ Pay-as-you-go schemes can be based on collective partial capitalization, in which reserves accumulate for future contingencies and the premiums can be either fixed from the outset, with a constant contribution rate (general average premium), or staggered, with balance periods of 10 to 15 years after which the premium is adjusted (see Uthoff, 2017). In contrast, PAYG models based on individual accounts and notional funding or notional defined-contribution pensions are those funded by a PAYG system but in which workers' contributions are credited to individual accounts so that the benefits reflect the contributions made, which are updated according to an official interest rate, and with the pension being calculated according to life expectancy upon retirement (ECLAC, 2006; Barr and Diamond, 2008). Such systems are currently in place in China, Italy, Poland and Sweden (Filgueira and Manzi, 2017).

As noted in chapter III, some countries have now incorporated —or seek to incorporate— PAYG mechanisms in systems where fully funded schemes were used; this is the case with the solidarity guarantee account in El Salvador (to be managed by pension fund administrators) and the collective savings fund proposed in Chile (administered by the State).

⁸ That mandate is also contained in other universal instruments applicable to specific groups. The Convention on the Rights of the Child provides that States parties must recognize the right of every child to benefit from social security, including social insurance (article 26). As examined in chapter IV, the Convention on the Elimination of All Forms of Discrimination against Women requires States parties to take all necessary measures to eliminate discrimination against women to ensure the right to social security (article 11.1e), with a specific indication that the instruction applies to rural areas (article 14.2).

⁹ General Comment 19 also states that all persons should be covered by the social security system; that the qualifying conditions for benefits must be reasonable, proportionate and transparent; that the costs and charges of contributions must be affordable; that beneficiaries must be able to participate in the system's administration and have information about its functioning; and that physical access to social security services should be guaranteed (United Nations, 2008).

Several International Labour Organization (ILO) instruments are of particular relevance for the design of pension systems: the Social Security (Minimum Standards) Convention of 1952 (No. 102), the Invalidity, Old-Age and Survivors' Benefits Convention of 1967 (No. 128) and the Invalidity, Old-Age and Survivors' Benefits Recommendation of 1967 (No. 131) (ILO, 1952, 1967a and 1967b). These instruments establish a minimum standard for the protection persons are to receive through social security, including old-age, disability and survivors' benefits. ILO Conventions Nos. 102 and 128 establish income security by means of regular payments to persons who have reached the specified age, subject to the fulfilment of certain conditions: a minimum period of contributions, employment or residence in the country.¹⁰ Those benefits may include contributory or non-contributory pensions at a guaranteed minimum level or as a proportion of average wages (ILO, 2014). Invalidity benefits, as stated in ILO Convention No. 102, cover contingencies arising from the "inability to engage in any gainful activity, to an extent prescribed, which inability is likely to be permanent or persists after the exhaustion of sickness benefit" (article 54)¹¹ and their provision is guaranteed for persons who have met predetermined conditions that include past contributions or a minimum duration of employment or residence in the country. Finally, Convention No. 102 states that survivors' benefits are intended to cover the loss of support suffered by spouses or children as the result of a breadwinner's death (article 60), subject to prescribed rules that also include a minimum period of contributions, employment or residence. According to Convention No. 102, all these benefits must be sufficient to maintain a family in health and decency (article 67.c) and their amounts must be reviewable to reflect changes in the cost of living (article 66.8).

The scope of these standards has recently been expanded by the International Labour Organization's Social Protection Floors Recommendation of 2012 (No. 202) (ILO, 2012), which establishes the need to grant basic income security, at a nationally defined minimum level, to all persons of active age who are unable to earn sufficient income for reasons of disability, sickness, unemployment, maternity and old age (article 5). In line with the universal and egalitarian spirit of Recommendation No. 202, target 1.3 of the Sustainable Development Goals also calls for countries to implement "appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable".

Pension system benefits are also provided for in such regional instruments as the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, also known as the Protocol of San Salvador (OAS, 1988), and, more recently, the Inter-American Convention on Protecting the Human Rights of Older Persons (OAS, 2015).

The guarantee of a pension as part of the right to social security is implemented unequally in Latin America's national constitutions. While some countries explicitly recognize the right to old-age, disability and survivors' benefits in accordance with the principles of equality, universality and solidarity and specify the responsibility of the State in their provision and regulation,¹² in other cases the focus is primarily on the characteristics of the institutional framework or the conditions in which those benefits are granted. Particularly notable is the approach adopted in the 1988 Federal Constitution of Brazil, whereby coverage for invalidity, death and old age is determined to be an element in social security and is identified as a recognized social right (article 6). Brazil's Constitution also refers to social assistance as part of the rights covered by actions in the area of social security (article 194). It further states that society as a whole is to participate in the funding of social security and emphasizes the central role played by

¹⁰ These Conventions stipulate that the prescribed age shall not exceed 65 years or such higher age as may be fixed by the competent authority with due regard to the working ability of elderly persons in the country concerned (see Convention No. 102, article 26.2).
¹¹ Recommendation No. 121 also states that a basefit chould be granted in the owner of partial displicity.

¹¹ Recommendation No. 131 also states that a benefit should be granted in the event of partial disability.

¹² For example, article 45.IV of the 2009 Constitution of the Plurinational State of Bolivia provides as follows: "The State guarantees the right to universal, solidarity-based and equitable retirement."

the State through tax revenues, in conjunction with the contributions of employers and employees.¹³ It also establishes a specific budget for social security, thereby ensuring the resources required to guarantee that right, and it stipulates that no benefit should be lower than the minimum wage,¹⁴ a mandate also included in the Constitution of Colombia (article 48)¹⁵ and the Constitution of the Bolivarian Republic of Venezuela.¹⁶ In Brazil, social security coverage is also guaranteed for rural workers. Of the region's countries, only Ecuador and the Bolivarian Republic of Venezuela recognize domestic and unpaid care work in their constitutional provisions governing social security.

To summarize, the international, regional and national regulations governing pensions provide a minimum regulatory baseline for analysing and making proposals regarding the functioning of those systems in the region's countries, within the framework of the right to social security and protection and from a human rights perspective. Those instruments emphasize the progressive nature of benefits, together with the growing importance of non-contributory mechanisms in achieving universal coverage. Pension systems therefore constitute a key aspect of citizenship, with the State playing an inalienable role in safeguarding their enforcement. They must be seen as essential components in any project for development and, in particular, in one that focuses on equality as the strategic goal of sustainable development. Their absence or weakness, in contrast, exacerbates poverty and vulnerability and must be analysed as a source of multiple inequalities, as will be explained in this document.

B. Demographic context of the pension systems debate

A number of contextual issues affect the ability of pension systems to operate in accordance with the rights-based approach and to meet their objectives. They include issues related to people's ability to make contributions to social security over their working lives, labour market conditions, the operating rules set by different system designs and individual countries' revenue-raising capacities. In particular, the demographic context in which a system operates is fundamental in determining the ability of active cohorts to contribute and the benefits demanded by those at the passive stage. The following sections identify the key milestones and challenges for the region's pension systems arising from that context.

1. The ageing of the region's population according to updated estimates and projections for 2017

Demographic change implies quantitative and qualitative shifts in the organization of societies, and it must be taken into account in planning social security and social protection policies (ECLAC, 2016a). In particular, demographic transitions accentuate the urgency of questions arising from the current situation of the equation of State, market

The international, regional and national regulations governing pensions provide a minimum regulatory baseline for analysing and making proposals regarding the functioning of those systems in the region's countries, within the framework of the right to social security and protection and from a human rights perspective.

¹³ Article 195 of the 1988 Constitution further states that lotteries and imports of goods and services from abroad are other sources for funding social security.

¹⁴ Article 201 (section 2) states: "No benefit that replaces the contribution salary or labour earnings of the insured shall have a monthly value lower than the minimum wage." This also applies to the guaranteed minimum monthly income granted as part of the social assistance system to persons with disabilities and older persons who have no means of subsistence (article 203).

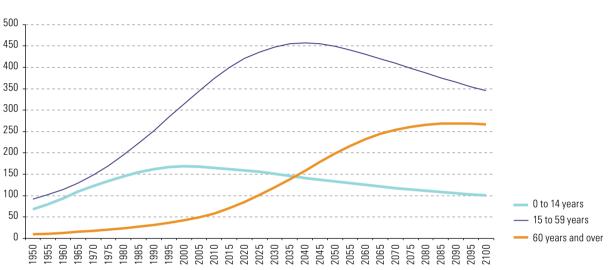
¹⁵ In 2005, article 48 of the Constitution of Colombia was amended to include the stipulation that no pension may be lower than the current monthly legal minimum wage, except in those cases established by law in which lower benefits are granted to economically disadvantaged people who do not meet the pension entitlement rules.

¹⁶ Article 80 provides that the pensions and retirement benefits awarded through the social security system may not be less than the urban minimum wage.

In the region, people aged 60 or over will for the first time outnumber children and adolescents under the age of 15 sometime around 2036, and their numbers will continue to rise until 2080. and family and highlight the need for a strong public response to address old and new requirements arising from changes in the population's age distribution (ECLAC, 2011a).

The steady ageing of the population manifests itself in increased numbers of older persons and a decrease in the proportion of children in the population. In the region, people aged 60 or over will for the first time outnumber children and adolescents under the age of 15 sometime around 2036, and their numbers will continue to rise until 2080 (United Nations, 2017) (see figure 1). The region has gone from a young population structure in 1950 to a population that is currently ageing and will continue to do so rapidly over the coming decades.

Figure 1



Latin America and the Caribbean: population by broad age groups, 1950-2100 (*Millions*)

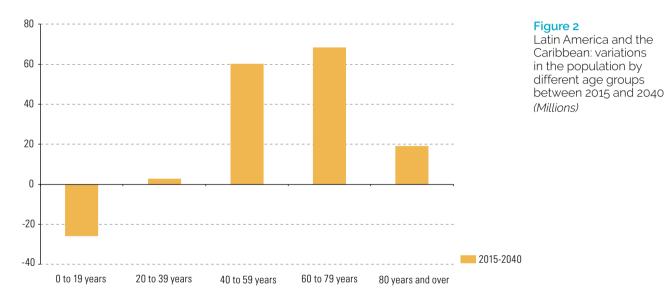
This drop in the child population implies a certain decline in the demand for education, care and health services for mothers and children in some of the region's countries, because there is a large contingent of potentially active-age people (15 to 59 years), while older adults (76 million in 2017) still account for a relatively moderate share of the total population. In 2060, that number will have tripled and, by the end of the twenty-first century, will have risen to 266 million. The context therefore demands a more proactive and engaged State, to prevent the repercussions of rapid population ageing on social protection systems and, particularly, on pension systems.

Since 1970, the proportion of children and adolescents under the age of 15 in the population has been shrinking: their numbers fell from 40% of the total population in 1950 to approximately 25% in 2017, and the figure is expected to decrease to 19% in 2040 and to drop below 15% by 2100. In absolute terms, the under-15 age group peaked in 2000 (at 169 million) and has been declining since then. At the same time, changes in the share of the population aged 15 to 59 are increasingly important because this is, in theory, the working-age group. In 1950, members of that age group accounted for about 54% of the region's total population, and that share increased steadily to reach a peak of 63% in 2017, after which it will begin a gradual decline.¹⁷ It is estimated that people between the ages of 15 and 59 will account for 60% of the region's population in 2040 and that, by 2100, the figure will have dropped to 49%. In absolute terms, the number of working-age young people and adults will peak at 457 million in 2040, after

¹⁷ A demographic dividend is said to occur at times when the proportion of the population of potentially active age is on the rise.

which it will begin to shrink. The result of this is a rise in the relative share of people aged 60 and over: from just 5.6% of the region's total population in 1950 to 12% per cent in 2017, with forecasts indicating they will account for 21% of the population in 2040 and almost 37% in 2100, with a peak in absolute numbers of 269 million in 2090.

It is estimated that between 2015 and 2040, the region's population aged over 60 will increase by almost 87 million people, while the numbers of those aged 20 to 59 will rise by nearly 63 million. In contrast, those aged under 20 will number 26 million fewer in 2040 than in 2015 (see figure 2). In relative terms, older persons will report exceptionally high growth rates. The population aged over 60 in Latin America and the Caribbean is expected to grow by 3.4% per annum between 2015 and 2040: a much faster rate of growth than the 0.5% annual expansion forecast for those aged 20 to 59, while those aged under 20 will decrease by 0.5% a year.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, "World Population Prospects: The 2017 Revision", 2017 [online] https://esa.un.org/unpd/wpp/.

2. Dissimilar ageing dynamics in different countries

Within the region, there are significant differences in the progress of the demographic transition from one country to the next. Table 1 shows how the ageing index in the region's countries can be expected to evolve up to the end of the century, ordered by estimated 2017 values.¹⁸

The first group, comprising those countries where the ageing process is currently at a more advanced stage (where the ageing index stands at 90 or more), is led by Martinique and also includes Guadeloupe, the United States Virgin Islands, Cuba, Curaçao, Puerto Rico, Barbados, Aruba and Uruguay: all Caribbean nations, with one exception. Cuba is particularly notable in that after 2040, it will be the most aged country in the region, with an ageing index of above 240. In 2070, Cuba will be overtaken by Jamaica (which is not a member of the first group), where forecasts indicate an ageing index of close to 380 by the end of the century.

¹⁸ The ageing index expresses the relationship between the number of older persons and the number of children and young people. It is obtained by calculating the ratio between the number of persons aged 60 and over and the number of those aged under 15, multiplied by 100.

Table 1

Latin America and the Caribbean (selected countries, territories and overseas departments):

evolution of the ageing index, 2017-2100

(People aged 60 or over per 100 people aged under 15)

	2017	2030	2050	2070	2090	2100
Martinique	145	228	243	255	283	293
Guadeloupe	127	203	215	249	292	296
United States Virgin Islands	126	181	198	259	345	374
Cuba	125	207	282	281	286	290
Curaçao	122	163	179	205	236	247
Puerto Rico	114	172	271	348	352	340
Barbados	110	156	181	194	212	220
Aruba	110	167	174	203	227	232
Uruguay	93	115	166	217	250	260
Chile	79	127	203	255	276	281
Trinidad and Tobago	73	117	175	195	206	212
Saint Lucia	73	130	251	336	335	323
Bahamas	66	109	174	212	234	242
Costa Rica	63	114	206	276	295	298
Argentina	62	78	123	172	214	231
Jamaica	60	90	186	288	356	380
Brazil	58	104	201	272	291	292
Colombia	50	95	175	240	265	269
Saint Vincent and the Grenadines	49	93	158	227	274	289
Antigua and Barbuda	45	91	141	187	224	236
El Salvador	42	63	125	223	289	304
Panama	41	67	117	169	220	241
Grenada	40	63	143	227	282	305
Suriname	39	66	106	153	195	211
Peru	38	63	123	190	244	262
Mexico	38	66	146	226	275	285
Ecuador	37	59	111	176	233	255
Venezuela (Bolivarian Republic of)	36	63	114	174	225	242
Dominican Republic	35	58	109	177	239	260
Paraguay	32	47	90	149	196	216
Bolivia (Plurinational State of)	30	41	76	129	181	205
Guyana	30	48	73	129	170	187
Nicaragua	29	54	134	231	289	302
French Guiana	25	44	68	102	145	169
Haiti	22	33	67	113	151	167
Honduras	22	39	96	177	233	250
Belize	20	33	72	127	172	190
Guatemala	20	29	68	136	199	224
Region total	47	79	149	216	255	266

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, "World Population Prospects: The 2017 Revision", 2017 [online] https://esa.un.org/unpd/wpp/.

The second group comprises those countries with ageing indices of between 50 and 90 in 2017: Chile, Trinidad and Tobago, Saint Lucia, the Bahamas, Costa Rica, Argentina, Jamaica and Brazil. Most of these countries are to face an accelerated process of ageing over the coming years. Except for Argentina and Jamaica, they will all have ageing indices in excess of 100 by 2030.

A third group of countries with more moderate ageing rates (ageing indices of between 35 and 50 in 2017) comprises Colombia, Saint Vincent and the Grenadines, Antigua and Barbuda, El Salvador, Panama, Grenada, Suriname, Peru, Mexico, Ecuador and the Bolivarian Republic of Venezuela. In 2030, Colombia, Saint Vincent and the

Grenadines and Antigua and Barbuda will report ageing indices of over 90, while in 2050, all this group's countries will have indices of more than 100.

The fourth group comprises those countries where the ageing process is still incipient (ageing indices of 35 and under in 2017): the Dominican Republic, Paraguay, the Plurinational State of Bolivia, Guyana, Nicaragua, French Guiana, Haiti, Honduras, Belize and Guatemala. Notable in this group are Nicaragua and the Dominican Republic, where the speed of the ageing process will produce indices of over 100 by 2050. In 2070, all the countries in this group will have ageing indices of more than 100, with Nicaragua already reporting an index of over 200 that same year.

3. Deeper, faster ageing in the region than in the developed countries

The process of ageing in Latin America and the Caribbean has progressed at a significantly faster pace than in the developed world (Huenchuan, 2013). This means that the region's governments have less time and, therefore, a narrower margin of error for making the adjustments needed to meet the demands of an ageing population and to promote an equitable and inclusive society for people of all ages. The demographic transition process started much earlier in the countries of Europe, and the shift from high to low levels of fertility and mortality occurred much more slowly there than in Latin America and the Caribbean: in other words, Europe's population aged more gradually.¹⁹ In the middle of the twentieth century, about 12% of Europe's population was over 60 years of age: that was more than twice the figure in Latin America and the Caribbean, where older adults accounted for 5.6% of the population. In Latin America and the Caribbean, the decline in fertility became apparent after 1950, which led to a gradual narrowing of the base of the population pyramid. In 2017, Europe's older persons represented almost 25% of the population, a proportion 2.1 times higher than in Latin America and the Caribbean. In 2040, that ratio will have dropped to 1.5 (32.4% compared to 21.4%). By 2050, older persons in Latin America and the Caribbean will account for 26% of the population. This means that by the middle of this century, our region could be at the same stage in the ageing process currently faced by the developed countries.

The ageing process also follows distinct patterns among individuals belonging to indigenous peoples and persons of African descent. In the case of indigenous peoples, the available sources of data ---of which little use has been made for analysing the situation of older persons— provide evidence of social inequality as determined by the life cycle. For example, since the structural factors of material poverty and exclusion affecting indigenous peoples tend to increase the cumulative risks to their health and actual harm suffered, and given that this is compounded by their greater exposure to environmental degradation and the impact of major development projects, it is reasonable to assume that elderly indigenous persons may be more disadvantaged in terms of well-being than their non-indigenous peers (ECLAC, 2016a). Although scant data are available on people of African descent, they have a higher prevalence of chronic diseases (such as diabetes and hypertension) than non-Afrodescendants, which indicates more disadvantageous standards of living. It should also be noted that the relative numbers of older persons at the national level mask territorial differences within countries, including between urban and rural areas. This is largely due to the marked unevenness in the demographic transition between urban and rural areas, which has translated into more pronounced ageing in the former, which is often offset by the tendency of young people to migrate to the cities from the countryside (ECLAC, 2012). In addition, the The process of ageing in Latin America and the Caribbean has progressed at a significantly faster pace than in the developed world.

¹⁹ For example, it took several decades for the proportion of persons aged 65 and over to double from 7% to 14% in Europe, with the process taking as much as 115 years in France. In countries of Latin America and the Caribbean such as Brazil, Chile, Colombia and the Plurinational State of Bolivia, that change will occur over the space of just two decades.

high level of informal employment among indigenous peoples, Afrodescendants and dwellers of rural areas means that in the design of pension systems, especially those linked to contributory pensions, special consideration has to be given to the inequalities found among those populations.

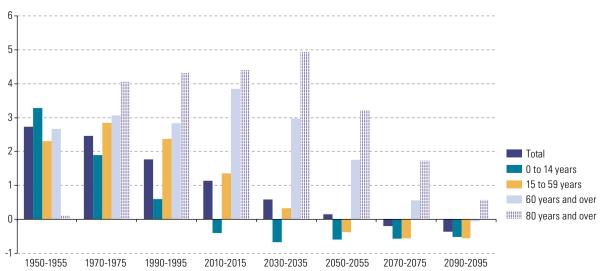
4. Older adults will get older

Thanks to progress in the fields of medicine and health, today's life expectancy rates were unimaginable only a few decades ago (ECLAC, 2011b). Over the past 75 years, the region's average lifespan has risen by 24.4 years. Life expectancy at birth in Latin America and the Caribbean increased from 51.3 years in first half of the 1950s to 75.7 years for both sexes in the five-year period from 2015 to 2020. Although this gain in life expectancy was chiefly on account of reduced child mortality, increased longevity was also a factor. Life expectancy at age 60, for example, rose by 7.1 years in Latin America and the Caribbean between 1950-1955 and 2015-2020. The region currently has an average life expectancy at 60 that is similar to the levels seen in developed countries (20.6 years for men and 23.9 for women, according to estimates for 2015-2020).

As a result of the region's sharp fall in fertility and increased longevity, the over-80 age group is currently expanding by 4% a year and is forecast to record the highest growth rate of any age cohort between 1950 and 2100. As a result of the region's sharp fall in fertility and increased longevity, the over-80 age group is currently expanding by 4% a year and is forecast to record the highest growth rate of any age cohort between 1950 and 2100 (figure 3). Moreover, it is the only age group that is expected to report positive growth through the end of the twenty-first century. Should the actual survival rates of older persons outstrip the forecasts, the expansion of this age group could be even more pronounced. Consequently, the relative weight of the over-80 age group among older adults as a whole will continue to rise, which means that the older adult population will get older. In relative terms, the proportion of people aged 80 and over within the general population has been growing steadily: in 1950, only 0.4% of the population in Latin America and the Caribbean was of a very advanced age; by 2017, however, their relative weight had risen more than fourfold to reach 1.8% This share will continue to increase rapidly to reach 5.6% by the middle of the twenty-first century and, in 2075, more than one person in every 10 will be aged over 80, when they will even outnumber children under the age of 15.

Figure 3

Latin America and the Caribbean: average annual population growth rates by age groups, 1950-2090 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, "World Population Prospects: The 2017 Revision", 2017 [online] https://esa.un.org/unpd/wpp/. Issues related to the living conditions of the very elderly and their enjoyment of rights have risen in importance in our region and will continue to do; this is because of a range of factors, including the particular vulnerability of this age group's members. Because the risk of disability or of becoming functionally dependent increases sharply after the age of 80, particularly if a social support network is not available (Abellán García and others, 2007), the numbers of dependent older persons, less able to participate in economic activities and facing greater barriers to social integration, will increase significantly (Chackiel, 2000).

Ultimately, the expansion of the population aged 80 and over will generate major economic and social challenges in most countries, as it will place greater pressure on the pension system, raise health care costs and increase the demands for long-term care and special residential arrangements for this older segment of the population.

In Latin America and the Caribbean, it is women who are chiefly responsible for meeting the care needs of very elderly adults. In addition, it is frequently older adults (aged 60 and over) who provide their very elderly parents (aged 80 or over) with care and attention as well as assistance with money and upkeep. So, if States fail to provide adequate public services and benefits, it will fall to families, and women family-members in particular, to meet those demands on a personal basis, often at the expense of their own participation in the labour market, well-being or personal fulfilment (Huenchuan, 2013).

As a result, strategies to address the consequences of population ageing must take account of the demands and new needs of other social groups. The priority of national policy responses to ageing should therefore be on consolidating integrated care policies or systems, ensuring universal guaranteed access to health care and, essentially, developing specific policies to ensure older persons universal access to social protection, with consideration given to redesigning pension systems to allow this age group access to economic security. Within those policies, mechanisms must also be developed to strengthen the financial sustainability of pension systems through fiscal policies that take into account the effects of population ageing.

5. Feminization of the older adult population as the population ageing process progresses

In Latin America and the Caribbean, excess male mortality, which means that women enjoy higher life expectancies, has increased from between three and four years in 1950-1955 to a current level of more than seven years. The result of this trend is the ongoing feminization of the ageing population. As can be seen in figure 4, differences in mortality rates by sex mean a greater presence of women in older age groups.

Women's lower rates of economic participation —the result of the unequal distribution of labour— are one of the causes of their more limited financial autonomy and their increased vulnerability in old age. As will be seen in chapter IV, although some progress has been made, there is still discrimination in the Latin American labour market: work of equal value does not receive equal pay; informal work tends to employ more women than men; women generally perform most of the unpaid care and domestic work; they have greater pension shortfalls because of their periods of motherhood and the time they spend on unpaid care work (Aguirre and Scuro, 2010), they are more excluded than men from pension systems and can be more dependent on widows' and non-contributory pensions. In addition, the different ageing patterns of the sexes lead to longer periods of widowhood for women, partly due to the large number of marriages between younger women and older men.²⁰ This also increases their years

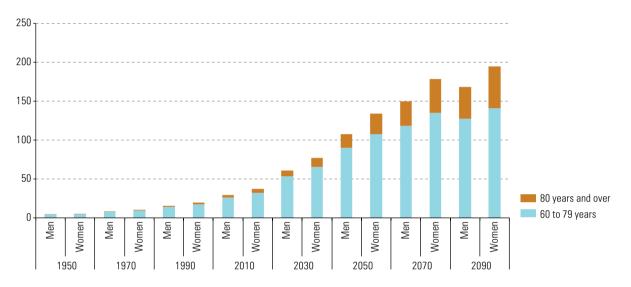
²⁰ According to data processed by the Latin American and Caribbean Demographic Centre (CELADE) from population censuses conducted during the 2010 round in Argentina, Brazil, Costa Rica, Honduras, Panama, the Plurinational State of Bolivia and Uruguay. The percentage of widows after the age of 60 is twice that of widowers and, in some cases, widows outnumber widowers by a factor of three.

of widowhood. It is not surprising, then, that there is a greater prevalence of older women without their own income than older men in the same situation.

Higher rates of widowhood among women, coupled with their more restricted economic participation and the lower coverage of contributory social protection that they consequently enjoy, mean that many older women —who, on average, live longer than men— subsist close to or below the poverty line, creating a highly vulnerable group that demands particular attention in policymaking and in pension systems.

Figure 4

Latin America and the Caribbean: persons aged 60 and over by age and sex, 1950-2090 (*Millions*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, "World Population Prospects: The 2017 Revision", 2017 [online] https://esa.un.org/unpd/wpp/.

On average, the dependency ratio in Latin America and the Caribbean will reach its minimum level around 2020, with 58 potentially "dependent" persons (ages 0 to 14 years and 60 years and over) for every hundred people of potentially active age (15 to 59 years).

6. The dependency ratio and its challenges for pension systems

The region's dependency ratio is currently decreasing, which is a characteristic of the demographic dividend period.²¹ This offers an opportunity to create productive investments or to increase social spending for fighting poverty and investing in children and youth, thereby improving their access to education, employment and health services; it could also help in getting a head start on the reforms necessary to address the impending increase in the number of older adults (ECLAC, 2008). On average, the dependency ratio in Latin America and the Caribbean will reach its minimum level around 2020, with 58 potentially "dependent" persons (ages 0 to 14 years and 60 years and over) for every hundred people of potentially active age (15 to 59 years) (see figure 5).

The total dependency ratio has two components: the under-15 burden (child/ youth dependency ratio) and the over-60 burden (old-age dependency ratio). As can be seen in figure 5, the main reason for the declining dependency ratio is the sharp drop in under-15 dependency, while the subsequent increase is due to the rapid rise of the over-60 burden. Obviously, the same dependency ratio value on either side of the lowest point refers to scenarios with very different underlying causes. Before the

²¹ Dependency ratio = (number of persons aged 0 to 14 years + persons aged 60 or over) / (number of persons aged 15 to 59 years) × 100.

low point is reached, the values show that requirements are anchored in the young population; after the minimum point, in contrast, they are anchored in the population of older persons. In 2040, the old-age burden will exceed the child/youth dependency ratio for the first time.

Figure 5

120 100 80 60 2020 **4**0 2040 20 Total Under-15 dependency ratio Over-60 dependency ratio Λ 995 980 985 990

Latin America and the Caribbean: total dependency ratio of the population aged 0 to 14 years and 60 years and over, 1950-2100 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of United Nations, "World Population Prospects: The 2017 Revision", 2017 [online] https://esa.un.org/unpd/wpp/.

Note: Dependency ratio = (number of persons aged 0 to 14 years + persons aged 60 or over) / (number of persons aged 15 to 59 years) × 100. Under-15 dependency ratio = (number of persons aged 0 to 14 years) / (number of persons aged 15 to 59 years) × 100. Over-60 dependency ratio = (number of persons aged 60 and over) / (number of persons aged 15 to 59 years) × 100.

This demographic change is occurring in a regional context characterized by persistent inequality (ECLAC, 2016a), and that inequality takes the shape of the non-fulfilment of various aspects of human rights. The demographic context for policymaking indicates that the region could benefit now, and for some time into the future, from the potential benefits of the demographic dividend. This is a splendid opportunity to make progress with equality. At the same time, the next stage is approaching: the period of the demographic challenge, when ageing will fuel fiscal pressures.

7. Changes to promote equality for all ages

Slower growth in the number of children and adolescents, together with the steadily rising number of older persons, will have a direct impact on intergenerational and intragenerational equality and solidarity, which are core values of society (United Nations, 2010). Therefore, not only should countries devise specific strategies for addressing the challenges of population ageing; they should also consider the existing demands and new needs of other social groups.

"Strictly demographic" solutions to delay the ageing of the population are not viable, both because they are not in keeping with the rights-based approach (in the case of policies to raise the birth rate) and because their effects are not sustainable in the medium and long terms. The key is in long-term planning and the development of public policies to interpret demographic processes, for the adoption of a long-term perspective. This would stand in contrast to the short-term views that, because of the time frames within which governments are expected to achieve results, normally prevail in the public administration. Population ageing requires special attention because of its implications for society as a whole (population ageing) and for individuals (individual ageing). The region has a limited amount of time in which to pursue the changes that can deliver an egalitarian and inclusive society for all age groups. In light of the growing need for elderly care, the reduced numbers of unpaid care workers as a result of the growing incorporation of women into the labour market and the persistence of an unequal distribution of care work in the home between the sexes (ECLAC, 2011c), these adjustments imply redefining the roles to be played by the State, the private sector and families, especially as regards the care of older persons. National policymakers must take into account the asymmetrical aspects of population ageing, such as its rising feminization and the more unfavourable conditions faced by women, indigenous people and persons of African descent.

In particular, the trends outlined above set a number of challenges for pension systems. The financial sustainability of contributory pension systems will be affected by these demographic changes and by the drop in the ratio of contributors to beneficiaries, especially in public pay-as-you-go systems. If the proportion of older persons increases, the pressure on the funding of pay-as-you-go systems will increase. Thus, greater longevity requires actuarial assessments to guide parametric changes (Uthoff, 2017) and activate fiscal policies with the aim of protecting the insured. In fully funded pension systems, greater longevity means lower pensions and the adjustment is automatic. The solution could be individual (more savings), collective (group savings), fiscal (contributions from public funds) or based on a combination of those options. In addition, the high rates of informality that characterize Latin American labour markets threaten system funding and bring additional pressure to bear on the public coffers, which will in any event already be challenged by a rising population of older persons, often lacking the resources required to meet their growing needs for care, health services and pensions, which will demand rising non-contributory payments. Thus, in addition to developing policies, interventions and measures to promote the formalization of businesses and employment, in order to increase the contributory base of pension systems, this array of changes will have to be assessed to redefine pension system paradigms in a way that will ensure the right of access to social security as enshrined in the various instruments identified in the first section, including the Inter-American Convention on Protecting the Human Rights of Older Persons.

The challenges of ageing must be seen from a broader perspective that takes account of its impact on individuals, families, the private sector and the State. Otherwise, an approach limited solely to the sustainability of government programmes will run the risk of producing policies that propose "resolving" the challenges of ageing by transferring the government's burden to individuals and families.

One of the best ways to adopt this long-term perspective is for governments to develop tools for examining the economic and fiscal impact of population change, striving to maximize the benefits that can be granted in order to ensure the exercise of citizenship rights while at the same time working to provide the additional resources needed, to increase the sources of financing at a time of rising demands and to maintain fiscal and economic responsibility. While many governments routinely issue forecasts on the sustainability of their public pension systems, they rarely include assessments of the impact on the system's redistributive character and, consequently, of the implications for inequality. The challenges of ageing must be seen from a broader perspective that takes account of its impact on individuals, families, the private sector and the State. Otherwise, an approach limited solely to the sustainability of government programmes will run the risk of producing policies that propose "resolving" the challenges of ageing by transferring the government's burden to individuals and families (CELADE, 2014).

C. Consolidating universal, solidarity-based pension systems for equality

In light of the demographic situation described above, and also taking into consideration the various labour and fiscal problems facing pension systems that are addressed in this publication (see chapters I and III), can States make progress with the objective of attaining universal coverage and equality as established in the normative framework? If so, what tools will they use?

As noted in the first section, equality —understood as discrimination-free access to adequate pension coverage and benefits for all members of society— is enshrined in international instruments and their objectives. However, on account of the multiple inequalities that exist in access to pensions in the region, which are largely due to the sexual division of work and the structural inequalities that characterize Latin American labour markets (see chapters I, II and IV), equality is still a distant goal. Other problems that must be addressed to achieve equality arise from a number of factors: the demographic situation described above; a labour market with a major shortfall in productive employment and decent work and a low ability to ensure individuals full employment throughout their working lives and access to social protection; and the way in which their pension systems are designed. This last factor can generate significant challenges for achieving equality. In the case of pay-as-you-go systems, these include their financial sustainability and the risks of exclusion arising from the demands of contributions. In fully funded pension systems, the challenges include their erosion of the principle of solidarity by directly correlating benefits with contributions, which would replicate the inequalities of the labour market and fail to provide mechanisms for redistributing contributions and risk between generations, between people with unequal abilities to contribute and between men and women. The situation is further compounded by the new challenges in providing social protection arising from imminent changes in the world of work brought about by constant technological progress, new forms of employment and hiring that are more flexible (and often more unprotected) and the need to move towards an environmentally sustainable economy (ECLAC, 2017).

In this context, the situation in Latin America is still one of limited and fragmented pension system coverage, low and uneven benefits —especially from a gender perspective— and sustainability concerns (ECLAC, 2006 and 2013). These factors contribute significantly to the persistence of poverty in old age and to unequal access to social protection (see chapters I and II), and dealing with them, as part of a basic assessment of pension systems, has promoted substantive reform processes in the region and continues to do so today (see chapters III and IV).

Historically, ECLAC has maintained that the measures to be adopted must embrace the principles of universality, solidarity and efficiency (ECLAC, 2000 and 2006). These, in turn, combine with the conventional principles of social security set by the international normative framework that also include the principles of social dialogue, uniform treatment, gender equity, sufficiency of benefits, social participation in management and financial sustainability (Mesa-Lago and Bertranou, 2015). Universality is aimed at ensuring the protection and ownership of rights that the reforms should safeguard, in that social security and protection is a right of citizenship and must provide coverage against a range of contingencies. Solidarity is the idea that all individuals contribute according to their capacity and receive benefits according to their needs. It is a fundamental pillar for ensuring equality, universal insurance coverage and efficiency in the allocation of resources, funding and provision (Sojo, 2017) and preventing exclusions that could have a greater impact on women, society's most vulnerable groups and those afflicted by multiple manifestations of inequality and exclusion. Solidarity can be implemented in a cross-cutting way within systems' contributory and non-contributory components, and it can be extended between generations, within them and between men and women. Efficiency entails safeguarding the best possible results in terms of coverage and quality with limited resources (ECLAC, 2000).

With these principles as a framework, and considering the role played by universal social protection in national strategies and policies for meeting the 2030 Agenda for Sustainable Development (ECLAC, 2016b) and, most especially, as regards its core objective of ending poverty in all its forms everywhere and leaving no one behind, ensuring equality in pension systems demands reasserting and strengthening the guiding principle of solidarity where it has declined or been eliminated. In practice, as stated in chapter III, the reforms to the region's pension systems should aim at: (i) expanding coverage, (ii) enhancing the solidarity of the contributory component through solidarity-based rules for contributors in order to benefit those sectors with insufficient pensions (transfers funded by general revenue or through contributory solidarity), (iii) integrating the contributory and non-contributory models (the latter, in accordance with the logic of universal rights), (iv) maintaining incentives for contributions, and (v) ensuring financial sustainability. There is a particular need for explicit measures that address gender inequalities, promoting solidarity between men and women and eradicating overtly discriminatory measures such as sex-differentiated mortality tables. Furthermore, inequalities of an ethnic or racial nature and those that exist between urban and rural areas must be considered in thorough detail and addressed through mechanisms that explicitly work for their eradication.

As shown in chapters III and IV, the region's recent and ongoing reforms are for the most part aligned with the proposed direction, with a trend towards strengthening solidarity-based mechanisms in contributory and non-contributory systems, incorporating gender-aware measures and enhancing the involvement of the State or of the public administration and public finance in pension systems. The work still to be done, however, remains substantial. In addition to addressing concerns about the sufficiency of pensions and extending coverage through both contributory and non-contributory schemes, the tasks to be undertaken include adopting measures to bring on board workers with the capacity to save who are currently outside the system, such as self-employed workers (ECLAC, 2006 and 2016c; Gontero and Weller, 2017) by promoting such mechanisms as compulsory contributions, microinsurance and single-tax systems.²²

This edition of the Social Panorama of Latin America suggests that the consolidation in Latin America and the Caribbean of pension systems with universal coverage and a strong solidaritybased component for equality should not be considered an illusory goal but rather a possible and necessary objective within a social compact for sustainable development and equality based on a progressive approach.

To summarize, this edition of the *Social Panorama of Latin America* suggests that the consolidation in Latin America and the Caribbean of pension systems with universal coverage and a strong solidarity-based component for equality should not be considered an illusory goal but rather a possible and necessary objective within a social compact for sustainable development and equality based on a progressive approach. In that undertaking it must be borne in mind that pension system designs and reforms are not neutral for the goal of equality and that they can reduce or expand the various dimensions of inequality. Similarly, it is imperative to address the indicators that reflect the progress made with the sufficiency of the benefits delivered in order to safeguard adequate incomes when contingencies arise, while at all times remembering that pension systems are a core part of social security and social protection systems and are grounded on those rights.

²² For an overview of those mechanisms, see ILO (2001b) and, with specific reference to the Latin American countries, ECLAC (2016c) and Gontero and Weller (2017).

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CHAPTER

Inequality in income, in the labour market and in access to pensions

Introduction

- A. Recent trends in income inequality
- B. Inequalities in the labour market and in pension system affiliation
- C. Inequalities in coverage and sufficiency of pensions in Latin America
- D. Conclusions and policy recommendations
- Bibliography
- Annex I.A1

Introduction

The most decisive aspect of society that produces, exacerbates or mitigates inequalities is the world of work, which is critical to social inclusion. It is there that most household income in Latin America and the Caribbean is generated, along with the inherent inequalities in its distribution.¹ Work is the master key to equality, and one of the pillars of the expansion of citizenship (ECLAC, 2010, 2012, 2014). It is also one of the main policy areas involving efforts to overcome the structural inequalities characteristic of the region. Persistent inequality in income distribution, in opportunities and methods of entry into the labour market and in job quality, as well as the prevalence of informal labour and lack of social protection for large contingents of workers, in addition to clear gaps in terms of gender, ethnicity and race, reflect, to a great extent, a highly heterogeneous and undiversified production structure (ECLAC, 2016a).

Inequalities with respect to entry into the labour market affect people at different stages of their life cycle. Premature and unprotected entry into the world of work negatively conditions an individual's educational and career path. The quality of young people's and adults' initial work experience is central to their well-being and productive participation in society and to the exercise of their rights. Meanwhile, the end of working life fully reveals the impact of the lack of decent work in various dimensions. In the most extreme cases, this impact is manifested in exclusion from the pension system or in insufficient benefits.

This chapter of Social Panorama for Latin America addresses two areas that are closely linked. On one hand, it presents the conventional analysis of income inequality among people and households, which is one of the dimensions of the social inequality matrix in Latin America (ECLAC, 2016b), based on a new series of estimates for the countries of the region.² On the other hand, it describes some of the dimensions of inequality in the labour market and the impact on the pension system, especially in terms of coverage and sufficiency. This chapter also emphasizes the role of a pension system's design in eliminating inequalities deriving from the labour market and creating virtuous circles of social protection that lead to broader coverage, sufficient benefits and the financial sustainability of these systems.

A. Recent trends in income inequality³

In Latin America, unequal income distribution has decreased since the early 2000s, thanks to more rapid growth in the income of persons in the lowest income quintiles than that of the rest of the population. However, the pace of decline in inequality has slowed, revealing similar levels in 2016 to those seen in 2014. The stagnation in processes to eliminate the concentration of income and complementary data indicating that inequality among persons and households is stronger and more rigid than that generally measured, point to an urgent need for redistributive policies to ensure greater equality.

Inequality is one of the notable features of Latin American societies, and overcoming it is a key challenge for sustainable development (ECLAC, 2017a). The levels of inequality in the countries of the region are among some of the highest in the world, including

¹ Around 2013, labour income accounted for 80% of total household income, 74% of the incomes of households in situations of poverty and 64% of the incomes of households in situations of extreme poverty (ECLAC, 2016a).

² Unequal distribution of personal and household income is just one expression of socioeconomic inequality. Social Panorama in Latin America, 2016 (ECLAC, 2017a) addressed in detail the functional distribution of income and the unequal distribution of physical and financial assets, which provide a complementary and valuable perspective of this analysis.

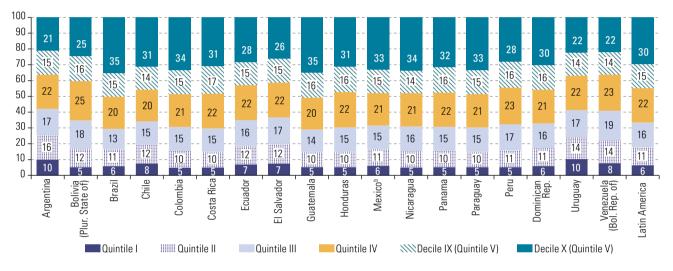
³ The values of the inequality indicators presented in this edition of Social Panorama of Latin America correspond to an updated series and differ from those presented in previous editions of this publication (see chapter II for details).

when figures are adjusted for differences in measurement based on income and consumption (Alvaredo and Gasparini, 2015).

One of the clearest expressions of income inequality is the wide gap between those with the lowest and highest incomes. According to the most recent household survey data (corresponding to 2016 for most of the countries under analysis), the income of the wealthiest quintile (quintile V) accounted for about 45% of total household income, while that of the poorest quintile (quintile I) was barely 6%.⁴ There are even income gaps within quintile V, as people in decile X —which accounts for 30% of total income on average— receive double the income of those in decile IX. Moreover, the income of the richest 10% of the population is roughly equivalent to the income of the first three quintiles, which include 60% of the population (see figure I.1).

Figure I.1

Latin America (18 countries): share of total income, by income quintile, around 2016^a (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Household quintiles organized by per capita income. Data refer to 2016, except in the cases of Brazil and the Plurinational State of Bolivia, which refer to 2015, and the Bolivarian Republic of Venezuela, Guatemala and Nicaragua, which refer to 2014.

^b The 2016 figures for Mexico were estimated based on the 2016 statistical model for the continuation of the social conditions module of the national household income and expenditure survey, prepared by the National Institute of Statistics and Geography (INEGI) to mitigate the lack of comparability of the 2016 survey with the 2008-2014 series (see [online] http://www.beta.inegi.org.mx/proyectos/investigacion/eash/2016/).

According to the same data source, the income gap between the richest and the poorest has narrowed since the early 2000s. Between 2002 and 2012, the average share of quintile I in total income rose from 4.8% to 6.2%, while that of quintile V fell from 50.7% to 45.0%. As a result, the share of the highest income quintile weakened from 10.7 times that of the lowest income quintile to 7.2 times. Inequality continued to decrease, albeit only slightly, between 2012 and 2016. In 2016, the share of quintile V in total income (44.2%) was 6.8 times that of quintile I (6.5%) (see figure I.2).

⁴ The data used to measure distributive inequality comes from household surveys carried out by the countries of the region to measure income, and may be employment, multipurpose, or income and expenditure surveys. The surveys, compiled and harmonized regularly by ECLAC, are part of the Household Survey Data Bank (BADEHOG).

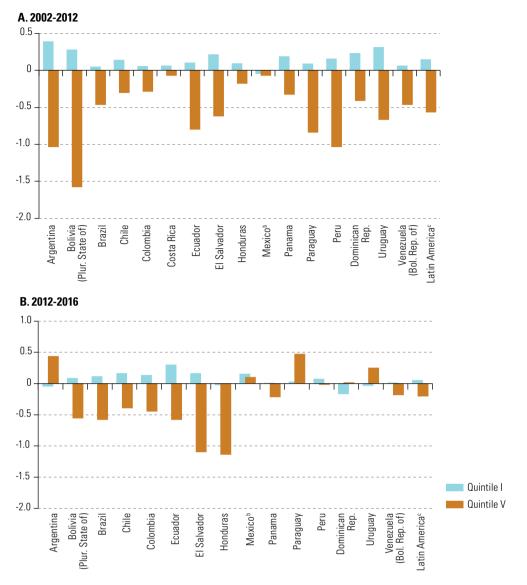


Figure I.2

Latin America (16 countries): change in share of total income of quintiles I and V, 2002-2012 and 2012-2016^a (Percentage points per year)

The income gap between the richest and the poorest has narrowed since the early 2000s. Between 2002 and 2012, the average share of quintile I in total income rose from 4.8% to 6.2%, while that of quintile V fell from 50.7% to 45.0%.

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a 2002 data refer to that year except in Ecuador, El Salvador, Honduras, Nicaragua and Panama (2001) and in Argentina and Chile (2003). 2016 data refer to that year except in the Bolivarian Republic of Venezuela (2014) and in Brazil, Chile and the Plurinational State of Bolivia (2015). Guatemala and Nicaragua are not included owing to a lack of data around 2012. Costa Rica is excluded from the 2008-2016 period owing to lack of comparability in the income series before and after 2010.

^b The 2016 figures for Mexico were estimated based on the 2016 statistical model for the continuation of the social conditions module of the national household income and expenditure survey, prepared by the National Institute of Statistics and Geography (INEGI) to mitigate the lack of comparability of the 2016 survey with the 2008-2014 series.

^c Corresponds to the change in simple average of the share of total income for each quintile.

According to most recent data, the Gini coefficient, which ranges from 0 (complete equality) to 1 (complete inequality), is 0.467 for Latin America.⁵ This indicator varies considerably from one country to the next, with values higher than 0.500 in Brazil, Colombia, Guatemala, Mexico and Panama, and lower than 0.400 in Argentina, the Bolivarian Republic of Venezuela and Uruguay (see figure 1.3).

⁵ Average of 18 countries on the basis of 2016 data, except for Brazil, Chile and the Plurinational State of Bolivia (2015) and the Bolivarian Republic of Venezuela, Guatemala and Nicaragua (2014).

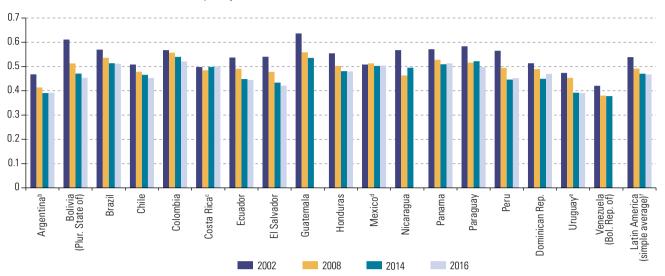


Figure I.3

Latin America (18 countries): Gini inequality index, 2002-2016ª

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a The Gini index is calculated on the basis of income equal to zero.

^b Urban total.

^c Figures are not comparable with previous years.

^d 2016 figures are estimated on the basis of the 2016 statistical model for the continuation of the social conditions module of the national household income and expenditure survey.

^e 2002 figures correspond to urban areas.

^f Average calculated on the basis of the most recently available data for each of the 18 countries.

The Gini index and other types of inequality indices also reflect differences in the reduction of income inequality over the past 14 years. The simple average for the region fell by 1.5% per year between 2002 and 2008, and by 0.7% per year between 2008 and 2014. Average inequality decreased by barely 0.4% per year between 2014 and 2016.

A similar result is obtained from an analysis of changes in inequality in each country. Between 2002 and 2008, 14 countries saw a decline of 1% or more per year in the Gini index. The largest decreases in inequality were recorded in Argentina, the Bolivarian Republic of Venezuela, El Salvador, Guatemala, Nicaragua, Paraguay, Peru and the Plurinational State of Bolivia. The Theil and Atkinson inequality indices also decreased considerably in these countries. None of the countries analysed recorded significant increases in inequality in that period (see table I.1 and table I.A1.1 of the annex).

Between 2008 and 2014, just seven countries posted declines of more than 1% per year in inequality levels (Argentina, Dominican Republic, Ecuador, El Salvador, Peru, Plurinational State of Bolivia and Uruguay), while only Nicaragua posted an increase of a similar magnitude. In the most recent sub-period (2014-2016), the number of countries which saw declines of at least 1% per year in the Gini index decreased to five (Colombia, Chile, El Salvador, Paraguay and the Plurinational State of Bolivia). Meanwhile, the Bolivarian Republic of Venezuela and the Dominican Republic posted increases in their inequality indicators.

Table I.1

Latin America (18 countries): changes in the Gini, Theil and Atkinson indices, 2002-2016^a (Annual percentages)

		2002-2008			2008-2014			2014-2016	
	Gini ^b	Theil	Atkinson (ɛ=1.5)	Gini	Theil	Atkinson (ɛ=1.5)	Gini	Theil	Atkinson (ε=1.5)
Argentina	-2.4	-3.3	-2.6	-1.0	-1.6	-2.0	0.2	1.6	0.7
Bolivia (Plurinational State of)	-2.9	-6.4	-4.4	-1.4	-3.3	-1.8	-3.7	-10.2	-0.7
Brazil	-1.0	-2.0	-1.2	-0.7	-1.4	-0.8	-0.5	-1.2	0.5
Chile	-1.0	-1.9	-1.6	-0.7	-1.6	-1.5	-1.4	-1.9	-2.0
Colombia	-0.3	-1.0	-0.2	-0.6	-1.4	-1.0	-1.8	-3.2	-2.5
Costa Rica ^c	-0.4	-1.5	-1.3				0.2	-0.1	-0.3
Dominican Republic	-0.8	-0.7	-1.8	-1.4	-4.5	-1.7	2.3	6.7	4.0
Ecuador	-1.3	-4.4	-1.6	-1.5	-2.6	-2.4	-0.4	-1.1	0.6
El Salvador	-1.5	-2.9	-1.8	-1.9	-4.2	-3.2	-1.5	-4.4	-2.3
Guatemala	-2.2	-6.0	-3.8	-0.5	1.1	-0.8			
Honduras	-1.2	-2.2	-2.0	-0.9	-3.1	-1.6	-0.1	0.6	3.3
Mexico ^d	0.2	1.5	0.6	-0.4	-0.8	-0.8	0.2	-3.8	-3.1
Nicaragua	-2.5	-3.6	-3.0	1.3	5.0	1.6			
Panama	-1.1	-2.3	-2.5	-0.6	-1.6	-0.6	0.4	0.6	0.1
Paraguay	-2.0	-3.0	-2.9	0.2	0.1	0.1	-2.4	-3.9	-2.0
Peru	-2.2	-5.8	-2.5	-1.7	-3.3	-2.7	0.6	1.2	0.8
Uruguay	-0.7	-0.5	-2.0	-2.4	-5.6	-3.6	-0.1	-0.3	-0.6
Venezuela (Bolivarian Republic of)	-1.7	-4.0	-2.9	-0.1	-0.5	0.0			
Latin America (simple average)	-1.5	-3.1	-2.3	-0.7	-1.3	-1.1	-0.4	-0.9	-0.2
Countries with change of < -1%	13	15	16	7	12	10	5	8	5
Countries with change of > 1%	0	1	0	1	2	1	1	3	2

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Indicator values are available in annex I.A1 of this chapter. The years examined are as follows: Argentina (2003, 2008, 2014, 2016), Bolivarian Republic of Venezuela (2002, 2008, 2014, 2015), Brazil (2002, 2008, 2014, 2015), Chile (2003, 2009, 2013, 2015), Colombia (2002, 2009, 2014, 2016), Costa Rica (2002, 2008, 2014, 2016), Dominican Republic (2002, 2008, 2014, 2016), Ecuador (2001, 2008, 2014, 2016), El Salvador (2001, 2009, 2014, 2016), Guatemala (2000, 2006, 2014), Honduras (2001, 2009, 2014, 2016), Mexico (2002, 2008, 2014, 2016), Nicaragua (2001, 2009, 2014), Panama (2001, 2008, 2014, 2016), Paraguay (2002, 2008, 2014, 2016), Peru (2002, 2008, 2014, 2016), Pe

^b The Gini index is calculated on the basis of income equal to zero. In order to reduce the impact of the highest and lowest values, the Theil and Atkinson indices exclude values close to zero and the three highest levels of per capita income.

^c There is no comparison for 2008-2014 given the difference in measurement of income before and after 2010.

^d The 2016 figures for Mexico were estimated based on the 2016 statistical model for the continuation of the social conditions module of the national household income and expenditure survey, prepared by the National Institute of Statistics and Geography (INEGI) to mitigate the lack of comparability of the 2016 survey with the 2008-2014 series.

1. Complementary inequality data sources

Measurement of income distribution inequality based exclusively on household survey data underestimates the magnitude of this phenomenon. These surveys tend not to adequately measure very high income households, owing either to problems with coverage or to a lack of responses, which is called "truncation" in the specialized literature. As a result, household surveys are better suited to measuring labour income and transfers than property income, which they only partially cover.

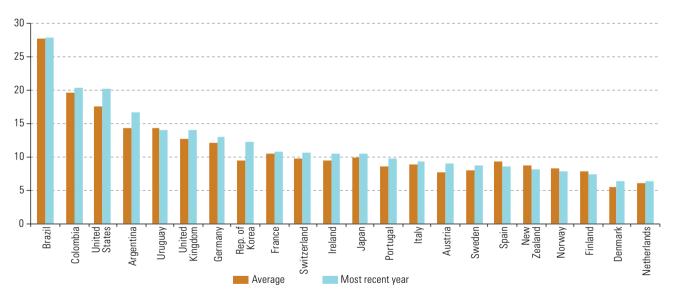
In response, empirical research has been carried out using information from tax records and national accounts to measure income distribution inequality. The initial inequality analyses based on tax data were carried out in developed countries The wealthiest 1% of the population accounts for a larger share of total income in Latin American countries than in developed countries in other regions of the world, which is confirmed when using both the simple average for the entire series and the measurement of the most recent year. (Piketty, 2003; Atkinson and Piketty, 2007 and 2010). In Latin America, these types of measurement are still few and far between, but are growing in number.

Distributive studies based on tax records and national accounts involve a wide range of methodological approaches, which complicates comparisons between and even within countries. The following approaches have been used in this research: (i) measurement based exclusively on records, where the indicator normally used is the wealthiest 1% or 10% of the population's share of total income; (ii) a combination of records and surveys to produce concise measurements, for example the adjusted Gini index (Alvaredo, 2011); and (iii) modification of survey micro-data based on tax records and national accounts. The first approach is also the most frequently used (Jenkins, 2016).

The most comparable estimates of inequality based exclusively on tax records are compiled by the World Wealth and Income Database (WID.world) which, for the time being, includes only four countries in the region (Argentina, Brazil, Colombia and Uruguay).⁶ The data reveal that the wealthiest 1% of the population accounts for a larger share of total income in Latin American countries than in developed countries in other regions of the world, which is confirmed when using both the simple average for the entire series and the measurement of the most recent year. Among the 22 countries analysed, the richest 1% of the population accounts for the largest share of total income in Brazil, and this is supported by both indicators (see figure I.4).

Figure I.4

Share of the wealthiest 1% in total income, most recent year available and historical average^a (*Percentages of total taxable income*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of World Wealth and Income Database [online] http://wid.world/data. ^a Simple averages were obtained on the basis of data ranging from 1990 to 2015, according to availability in each country. The most recent year corresponds to: Brazil, 2015; Colombia, 2010; United States, 2014; Argentina, 2004; Uruguay, 2012; United Kingdom, 2015; Germany, 2011; Republic of Korea, 2012; France, 2014; Switzerland, 2010; Ireland, 2009; Japan, 2010; Portugal, 2005; Italy, 2009; Austria, 2014; Sweden, 2013; Spain, 2012; New Zealand, 2014; Norway, 2011; Finland, 2009; Denmark, 2010; Netherlands, 2012.

As can be expected, estimating inequality partially or completely on the basis of tax records or national accounts is usually much more accurate than measurements based on household surveys. For example, in Brazil, the richest 1% of the population's share of total income rose from 11% based on the national household survey (PNAD)

⁶ The World Wealth and Income Database (WID.world) involves the combined efforts of an international network of researchers. See [online] http://wid.world.

to 24% according to survey data adjusted to include tax information (Morgan, 2017). In Chile, this percentage climbed from 15% according to the national socioeconomic survey (CASEN) to 21% on the basis of tax data (López, Figueroa and Gutiérrez, 2013). In Colombia, the corresponding figure increased from 14% on the basis of the comprehensive survey of households (GEIH) to 20% according to tax data (Alvaredo and Londoño, 2013). In Mexico, the share of the richest 1% increased from around 9% according to the national household income and expenditure survey (ENIGH) to 25% according to Castillo (2015), on the basis of survey data adjusted to include national account data. In Uruguay, this figure grew from 9% in the continuous household survey to 14% according to tax records (Burdín, Esponda and Vigorito, 2015).⁷

In addition to higher levels of income inequality, some of the studies mentioned point to trends that contradict those revealed in household surveys. Even when these measurements are not definitive, the results underscore the fact that equal income distribution is a long way off in the region, and that it is imperative to carry out more comprehensive measurements of income inequality.

The complementary sources used to measure income inequality also have their limits. Among other restrictions, tax data are strongly conditioned by the considerable size of the informal economy in the region, are sensitive to changes in tax legislation, and may refer to concepts of earnings and tax units that differ from one country to the next, which reduces their comparability (ECLAC, 2017a). Meanwhile, national account data on household income and expenditure, which refer to income amounts and not to the way in which income is distributed, tend to be affected by the lack of basic statistics to compile them. With respect to data availability, the number of Latin American countries that publish information on the distribution of taxable income which could be used in studies of this nature is still limited. Household income and expenditure accounts are available in fewer than half of the countries of the region and their publication tends to be delayed by several years.⁸

The results obtained by combining various sources to measure inequality are highly sensitive to the assumptions adopted. For example, Cortés and Vargas (2017) show how the level and even trend in inequality estimates change under different scenarios of truncation and under-reporting in household surveys for different years.

Despite these limitations, the possibility of combining tax and national account data with household surveys can contribute significantly to the study of income inequality and to generating more accurate estimates of magnitude and trends. Hence, it is very important for the region to facilitate access to tax records and other complementary sources of data on household income, and to improve the quality and periodicity of household income and expenditure accounts. This would not only allow more complete measurements of income distribution, but would also deepen the analysis of the magnitude of under-reporting and truncation in household surveys.

Lastly, the large gaps in income distribution grow even wider when the focus is narrowed to wealth distribution. Inequality in the possession of material goods (property, buildings, land) and financial goods (assets, deposits, promissory notes) is more deeply rooted and rigid than income inequality (ECLAC, 2017a). For example, the wealthiest 1% of adults held 36% of national wealth in Mexico (ECLAC, 2017a), and 48% in Brazil (OXFAM Brazil, 2017), which are considerably higher than the levels indicated by studies on income distribution.

Estimating inequality partially or completely on the basis of tax records or national accounts is usually much more accurate than measurements based on household surveys. For example, in Brazil, the richest 1% of the population's share of total income rose from 11% based on the national household survey (PNAD) to 24% according to survey data adjusted to include tax information.

⁷ Estimates correspond to 2015 for Brazil; 2009 for Chile, where data from the national socioeconomic survey (CASEN) are combined with those from the internal revenue service, applying an adjustment for tax evasion and excluding retained earnings; and 2011 for Uruguay, based on total income included in tax records, to which the estimated income for the unregistered population is added. Estimates for Mexico, which correspond to 2012, attribute the differences between national accounts and household surveys to the wealthiest population segment.

⁸ These are some of the reasons that have led ECLAC to discontinue the practice of adjusting income in order to produce regular statistics on poverty and income inequality, as indicated in chapter II.

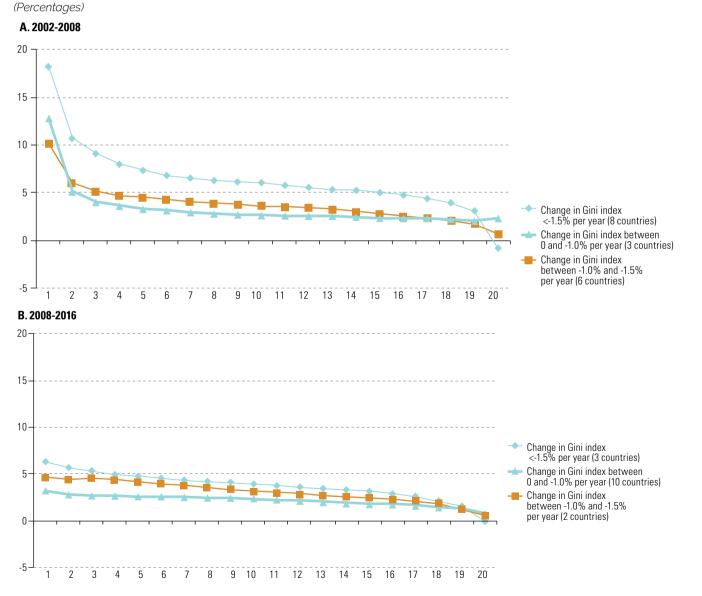
2. Variation of income over time

The first target of Sustainable Development Goal 10, to reduce inequality within and among countries, aims to progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average. The reduction of income inequality in the past few years has been consistent with this target, according to the data provided by household surveys.

Between 2002 and 2016, the annual increase in income for the lowest income deciles exceeded that of the highest, both for countries with appreciable declines in their Gini index and for those with smaller changes (see figure 1.5).

Figure I.5

Latin America (18 countries): income growth by percentile, according to groups of countries where inequality declined, 2002-2008 and 2008-2016^a



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG). ^a The countries are grouped according to the pace of decline in inequality in each subperiod. As may be expected, the difference between growth in the lowest and highest income deciles was more marked in countries with the largest inequality index declines. These countries also recorded the highest real income growth rates for the lowest income deciles, compared with the other countries in figure 1.5, for both 2002-2008 and 2008-2016.

Figure I.5 shows the slowdown in inequality reduction between 2002-2008 and 2008-2016. The 2008-2016 period reflects more similar rates of growth for the lowest and highest deciles, although growth remains higher for the former.

In some cases, the decrease in inequality stems not only from stronger growth in the lowest incomes, but also from zero growth, or even a decline, in the incomes of the wealthiest households.

3. Final comments

The wide gaps in the distribution of economic resources are one of the main manifestations of structural inequality in the region, which is visible in a number of dimensions. In the past 15 years, Latin America has made progress in reducing income gaps thanks to stronger growth in income among households in the lowest income quintiles. Nonetheless, two elements must be addressed urgently. First, the declining trend in inequality has slowed considerably in the region as a whole in recent years. Second, taking into account sources of information that complement household surveys, the wealthiest segments' share of total income has grown, and in some countries, may not have diminished at all. Hence, there is an urgent need for initiatives to give new impetus to income distribution and to build fairer and more just societies.

B. Inequalities in the labour market and in pension system affiliation

Since the beginning of the past decade, various labour market indicators have shown considerable improvement, including lower unemployment and employment in low-productivity sectors, stronger participation of women in the labour market and higher labour income. As wage employment and employment formalization increased, the number and percentage of workers contributing to pension systems grew, reflecting an increase from 38.3% in 2002 to 50.3% in 2015. Nonetheless, a large percentage of workers still lacks protection.

The structure and dynamics of the Latin American labour market have a significant impact on the living conditions of people and families, during their active lives and in their retirement. Inequality with respect to entry into the labour market and access to employment —which is manifested, for example, in wage employment opportunities, formalization of work contracts, steadier career paths, collective bargaining of wages and other working conditions, and especially in monthly income— also indicate unequal capacity to contribute to pension systems and, at the end of an individual's working life, to access sufficient pension benefits.

The following pages will focus on labour market characteristics and inequalities that affect access to contributory pension systems, and that are later manifested in older persons' access to decent pensions.⁹

⁹ See Social Panorama of Latin America 2015 (ECLAC, 2016c) for a previous analysis of labour market inequalities, which affect the segments of the population living in poverty or vulnerable to poverty, in particular.

1. Labour market: employment trends and increase in wage employment

ECLAC (2016a) outlines the importance of complementarity between contributory and non-contributory social protection, and in addition to recognizing the role played by contributory financing, highlights the need for more convergence and less stratification of the benefits paid in the social protection domains, where both contributory and non-contributory resources are present (Sojo, 2017; ECLAC, 2016a). With a view to improving social protection coverage and quality, particularly with respect to pensions, the labour market dynamic in the countries of the region must be taken into account, as the historical development of social protection is linked to this dynamic and to the corresponding institutional framework, which includes the specificities of labour legislation and the capacity to monitor compliance with rules, regulations on working conditions and dismissals, collective bargaining, training and education policies and minimum wages, for example (ECLAC, 2013a).

The Latin American labour market recorded positive trends between 2002 and 2014, thanks in particular to a decline in unemployment and increases in women's participation in the labour market, formalization of contracts and labour income, which, along with the implementation of strategies to extend the coverage of social security systems in some countries, encouraged the expansion of the contributory base of pension systems (see figure 1.6).

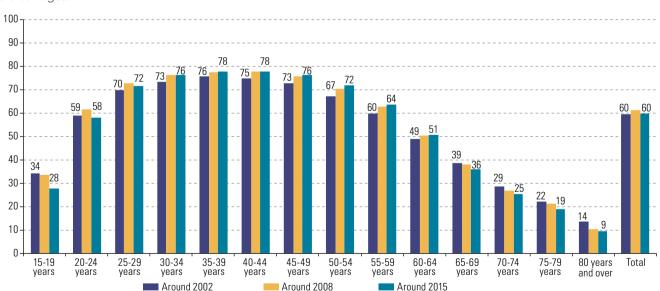


Figure I.6

income.

The Latin American

labour market recorded positive trends between

2002 and 2014. thanks

in unemployment

in the labour market,

contracts and labour

and increases in women's participation

formalization of

in particular to a decline

Latin America (17 countries^a): employment rate by age group, around 2002, 2008 and 2015 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG). ^a Weighted average of the following countries: Argentina (urban areas), the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Dominican Republic,

Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas).

The average employment rate (17 countries) rose by 1.6 percentage points in 2002-2008, owing mainly to the increase in women's participation and to a sharp decline in unemployment during a period of sustained economic growth in most countries of the region. As shown in figure 1.6, between 2008 and 2015 the overall employment rate decreased (by 1.5 percentage points) owing both to a slight increase in unemployment

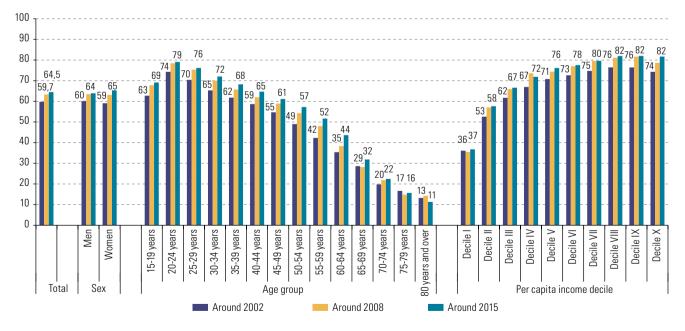
in 2015 and to a decline in participation rates, mainly of young people aged 15-24 and persons of retirement age (65 years or older). The decrease in labour participation among young people, especially those younger than 20, stemmed from the gradual increase in access to secondary and post-secondary education and from higher school retention rates, particularly at the senior level of secondary school,¹⁰ and from efforts made by various countries to reduce child and adolescent labour.¹¹ Meanwhile, the decline in participation and employment rates among older persons is closely linked to the increase in pension coverage, as will be explained later. Trends are positive in both cases as they are related to the expansion of rights and social protection, both among adolescents and young people and among older persons. Nonetheless, owing to population ageing in the region, the percentage of persons aged 65 or over edged up from 4.3% of the employed labour force to 4.8% (roughly 12 million workers).

The increase in women's labour market participation involved a 32.9% jump in the number of employed women between 2002 and 2015 (compared with a rise of 22.2% for their male counterparts), raising their share of the total employed population from 39.4% to 41.4%. This rise was also accompanied by an increase in wage employment among women, from 59.4% of the total employed female population in 2002 to 63.1% in 2008 and to 65.3% in 2015. This, along with the increase in wage employment among men, albeit smaller, meant that the percentage of wage earners among the total employed population climbed from 59.7% to 64.5% at the regional level over the period (see figure 1.7).

The percentage of wage earners among the total employed population climbed from 59.7% to 64.5% at the regional level between 2002 and 2015.

Figure I.7

Latin America (17 countries^a): percentage of wage earners among total employed population by sex, age group and household per capita income decile, around 2002, 2008 and 2015 *(Percentages)*



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Weighted average of the following countries: Argentina (urban areas), the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas).

¹⁰ Corresponding to the last two or three years of secondary school, depending on the country.

According to the most recent International Labour Organization (ILO) estimates, child and adolescent labour (between 5 and 17 years) decreased from 10.8% in 2008 to 7.3% in 2016 in the region (ILO, 2017).

The rise in the percentage of wage earners among the total employed population was systematic in almost all age groups (except among workers aged 75 years or over), including the youngest workers. This trend was stronger among workers aged 40-64 years, and similar among workers from all per capita income deciles, with the exception of those in decile I, of whom only roughly 37% were wage earners in 2015. However, there are marked differences in wage employment rates among workers with different income levels, ranging from roughly one in three workers in decile I, to two in three in decile III, and to four in five (about 80% of the total) in decile VII and upwards. Wage earners represented more than 70% of the total employed population in countries such as Argentina, Chile, Costa Rica, Mexico and Uruguay, but less than 50% in Colombia, Honduras, Peru and the Plurinational State of Bolivia around 2015.

The relationship between wage earners and employers is generally regulated by the labour laws of each country and as a result this group tends to enjoy higher levels of contract formalization and social benefits. However, the mere fact that there is a high percentage of wage earners does not necessarily mean that pension systems have a broader contributory base, as this depends, first of all, on the formalization rate of these workers.¹² Other factors also play a role, such as the contribution requirements enshrined in labour laws, the capacity for effective oversight and the level of compliance with rules, incentives for non-wage earners to contribute to pension systems and social security system designs, as discussed in chapter III.

2. Labour income

The level of labour income is closely linked to each worker's opportunities to receive a sufficient pension in order to maintain their quality of life after retirement. As discussed in chapter III, this may be partly achieved thanks to solidarity mechanisms that improve the low replacement rates of income received during the working life of a considerable number of workers. When these levels are low, they reduce the chances of self-employed workers affiliating to pension systems and of informal wage earners demanding compliance with labour laws given the limited amounts received by workers with very low wages. This affects the level of contributory financing of social security systems.

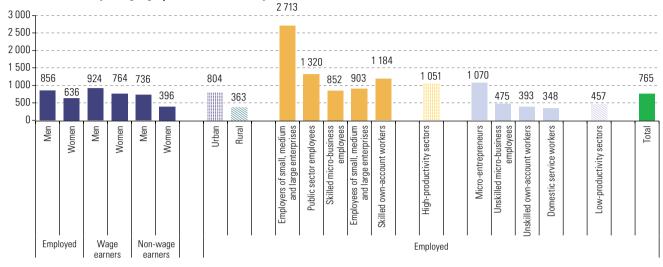
Similarly, the levels and steadiness of labour income over the course of an individual's working life are strongly affected by the different structuring axes of social inequality in Latin America (socioeconomic status, gender, race and ethnicity, and area of residence). Using as a point of comparison average regional labour income —expressed in 2010 dollars at purchasing power parity (PPP) (US\$ 764 per month)— there are considerable inequalities on the basis of workers' gender. Men earn almost 12% more than the average while women earn 17% less. Among wage earners, the income of men is 21% higher than the regional average, while that of women is more or less in line. Meanwhile, among non-wage earners men's income is 4% lower than the regional average compared with 48% lower for their female counterparts (roughly US\$ 400 per month at PPP). There are also significant differences between the income of workers living in urban areas and in rural areas (see figure I.8A).

According to Social Panorama of Latin America 2015, 42.8% of wage earners did not have formal work contracts around 2013. According to the 2016 Labour Overview of Latin America and the Caribbean (ILO, 2016), this percentage remained the same until 2015, at least.

Figure I.8

Latin America (17 countries): labour income by sex, geographical area, entry into the labour market and age group, around 2015 (2010 dollars, at purchasing power parity)







B. Labour income by age cohort, and among wage earners and non-wage earners

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG). ^a The comparison between urban and rural areas does not include Argentina or the Bolivarian Republic of Venezuela.

Other major differences are linked to the nature of entry into the labour market: the monthly income of workers in medium- and high-productivity sectors (employers and employees of small, medium and large enterprises; public sector employees; professional micro-business employees and skilled own-account workers) is more than twice that of workers in low-productivity sectors (micro-entrepreneurs, unskilled micro-business employees, domestic service workers and unskilled own-account workers, who make up the largest share of this group), who represent roughly 48% of the employed labour force. The category receiving the lowest monthly income is domestic service workers —95% of whom are women (ECLAC, 2013b)— whose income is slightly lower than that of unskilled self-employed workers. The monthly income of own-account workers is relatively similar to that of public sector workers.

Labour income levels are clearly the highest among workers aged 50-54 years, and then decline gradually, by 4.7% on average for those aged 55-59 years and by 13.7% among workers aged 60-64 years. Another worrying aspect is the trend in income over the course of an individual's working life. Although it is not possible to monitor the working life and the trend in labour income of each member of the active labour force on the basis of household surveys, an analysis of labour income levels in different age cohorts gives a good indication. As shown in figure I.8.B, and as may be expected, labour income (wages, income from independent work or employers' earnings) increases as workers gain more experience. Nonetheless, labour income levels are clearly the highest among workers aged 50-54 years, and then decline gradually, by 4.7% on average for those aged 55-59 years and by 13.7% among workers aged 60-64 years. The decline in income is smaller among wage earners than among self-employed workers.

Monthly labour income levels are fundamental not only to the well-being of workers during their working life, but also condition the amount these workers receive as pensions once they retire. If these levels are low, pensions will also be (and some workers may even be ineligible to receive them), which is why it is imperative to broaden solidarity mechanisms, either integrated into contributory schemes or with complementary non-contributory schemes, depending on the country (see chapter III). There is also a need for policies that incentivize contributions to social security systems throughout an individual's working life, given that a large proportion of Latin American workers are currently excluded from this social protection mechanism, as will be discussed later on.

3. Pension system affiliation and contributions

At the regional level, the percentage of workers affiliated to or contributing to pension systems climbed from 38.0% to 50.3% between 2002 and 2015. Among wage earners, this figure jumped from 53.9% to 64.7%, an increase of almost 11 percentage points representing 40 million additional workers. By contrast, although the affiliation of non-wage earners (in 14 countries in the region) rose by slightly more than 8 percentage points, it was less than 18% around 2015. Although access to pension systems among non-wage earners is limited throughout the region, the situation is slightly more favourable in some countries as explicit efforts have been made to include this type of worker in contributory social protection systems (ECLAC, 2016a and 2017a). Notable examples are Uruguay, where 42.9% of non-wage earners contribute to the pension system, followed by Costa Rica (39.2%) and Brazil (30.6%). Brazil also stands out for posting the strongest increase in this indicator over the period, almost doubling the number of non-wage-earning contributors to the system since 2002 (16.4%) (see table I.2).

Given non-wage earners' limited access to pension systems in the region, wage earners make up the lion's share of those affiliated or contributing to these systems (82.9%). Considering that slightly more than 2% of workers affiliated to pension systems are 65 years or older, this raises the question of whether these workers have delayed retirement in their own self-interest (and in agreement with their employers if they are wage earners) or whether they have had to do so to avoid the problem of insufficient income upon their retirement.

Table I.2

Latin America (17 countries): pension system affiliation or contributions^a of workers, around 2002, 2008 and 2015 (*Percentages*)

		Wage earners as		Aff	iliated wor	kers aged 1	5 or over amon	I g		Affiliated wage earners as a	Affiliated workers aged 15-64 as a percentage of total		
		a percentage of workers	Total	Men	Women	Wage earners	Non-wage earners	Urban	Rural	percentage of total affiliated workers	Employed	Economically active population	
Argentina	2003	74.1	53.6	58.0	48.1	53.6		53.6					
(urban)	2008	76.6	65.8	69.2	61.4	65.8		65.8					
	2014	76.4	68.9	70.3	67.2	68.9		68.9					
Bolivia (Plurinational	2002	32.2	9.8	11.1	8.1	27.4	1.4	15.2	2.3	90.0	10.2	9.8	
State of) ^b	2008	38.7	13.1	14.7	11.1	30.9	1.8	17.8	5.5	91.2	13.5	13.1	
	2015	38.3	18.0	19.7	15.7	40.8	4.0	24.1	6.8	86.7	18.9	18.2	
Brazil	2002	62.7	46.8	47.4	45.9	64.9	16.4	53.4	16.6	87.0	47.9	43.5	
	2008	66.2	53.3	54.3	51.9	70.9	18.7	59.5	24.2	88.1	54.7	50.7	
	2015	67.2	62.5	61.3	64.0	78.0	30.6	68.2	31.7	83.8	63.9	57.6	
Chile	2003	74.5	63.0	64.5	60.5	76.6	23.4	65.2	46.6	90.6	63.9	57.6	
	2009	75.9	62.8	64.9	59.4	73.7	28.4	64.3	50.6	89.1	63.7	56.6	
	2015	77.5	67.8	68.4	66.9	81.3	21.1	69.2	56.7	92.9	70.7	64.7	
Colombia	1999 ^b	53.0	25.0	22.3	29.7	41.5	6.5	33.9	10.4	88.0	25.7	21.3	
	2009	47.2	30.3	29.5	31.6	55.5	7.8	36.2	9.9	86.5	31.5	27.6	
	2015	48.8	35.5	35.6	35.3	62.3	9.8	41.6	12.7	85.6	37.1	33.7	
Costa Rica	2004	68.7	60.6	62.8	56.3	74.5	30.1	65.4	52.7	84.5	61.5	57.5	
	2008	72.9	64.6	68.0	58.9	75.6	34.9	68.2	58.7	85.3	65.6	62.3	
	2015	76.0	66.0	69.8	60.1	74.5	39.2	68.8	57.7	85.8	67.6	61.7	
Dominican Republic ^b	2005	52.8	42.5	42.5	42.4	42.5		44.6	36.5		42.6	34.8	
nehnning	2008	53.0	64.0	68.2	58.8	64.0		67.0	52.4		64.3	61.0	
	2015	57.6	70.7	75.3	65.7	70.7		72.7	59.8		70.8	66.3	
Ecuador ^b	2001	51.3	25.3	25.8	24.5	35.9	14.1	28.3	20.1	72.8	25.4	23.2	
	2008	55.6	28.8	29.2	28.1	40.5	14.1	32.2	22.0	78.1	29.0	27.6	
	2015	56.2	45.8	46.8	44.3	63.0	23.8	49.3	38.5	77.2	46.3	44.3	
El Salvador ^b	2001	57.7	29.5	28.9	30.4	48.7	3.2	39.4	12.5	95.5	30.6	28.5	
	2009	56.9	28.8	29.3	28.1	48.1	3.3	37.1	11.8	95.0	29.9	27.6	
	2015	59.7	33.6	34.9	31.9	50.7	8.9	42.6	16.4	89.3	34.9	32.5	
Guatemala ^b	2002	47.0	34.7	32.5	39.9	34.7		50.3	19.0				
	2006	51.4	38.8	36.5	43.9	38.8		46.6	25.6				
	2014	65.6	37.9	35.6	42.2	37.9		48.6	30.1				
Honduras	2006	47.9	18.9	15.5	25.5	38.6	0.8	31.8	6.6	97.8	19.8	19.1	
	2009	46.6	17.5	14.8	22.4	36.8	0.7	30.1	6.2	98.1	18.4	17.8	
	2015	47.5	18.3	16.5	21.2	37.8	0.6	27.3	7.8	98.2	19.2	18.2	
Mexico ^c	2002	65.7	27.5	27.4	27.6	41.4	0.7	33.5	7.8	98.9	28.5	27.7	
	2008	73.3	33.1	33.0	33.2	44.5	1.6	38.9	10.3	98.6	34.2	32.4	
	2014	73.9	32.9	33.6	31.8	44.0	1.6	38.7	12.0	98.8	34.2	32.4	

Table I.2 (concluded)

		Wage earners as		Affiliated workers aged 15 or over among							aged	ted workers 15-64 as a tage of total
		a percentage of workers	Total	Men	Women	Wage earners	Non-wage earners	Urban	Rural	percentage of total affiliated workers	Employed	Economically active population
Panama ^d	2001	62.7	54.1	48.4	66.2	75.4	18.3	68.7	28.5	87.4	54.5	48.0
	2008	65.7	48.9	48.0	50.4	70.8	7.0	60.7	25.7	95.2	51.1	48.1
	2015	66.0	52.7	50.6	55.9	76.1	7.3	63.7	27.2	95.3	55.0	52.1
Paraguay	2002 ^b	42.4	12.4	11.8	13.5	27.7	1.2	18.4	5.4	94.8	12.8	11.4
	2008	51.3	8.9	10.5	6.3	17.2	0.2	13.0	3.0	99.1	9.2	8.7
	2015	56.3	22.2	21.7	22.9	38.8	0.7	29.7	10.1	98.5	23.0	21.7
Peru ^b	2002	40.3	13.3	15.3	10.6	29.0	2.6	19.1	3.4	87.9	13.6	12.8
	2008	44.6	26.6	32.9	19.0	44.3	12.4	34.7	6.6	74.4	26.7	25.4
	2015	47.7	33.4	39.5	26.1	53.5	15.1	41.4	9.6	76.4	34.1	32.9
Uruguay	2002	70.0	63.0	63.0	63.1	76.6	31.5	63.0		85.1	63.8	52.8
(urban)	2008	71.5	67.2	67.9	66.3	79.8	35.6	67.2		84.9	69.0	63.5
	2015	73.7	76.0	75.2	77.0	88.5	41.0	76.0		85.8	77.6	71.4
Uruguay (national)	2008	70.1	67.4	68.1	66.5	79.8	38.4	67.2	69.8	83.0	69.3	64.0
(national)	2015	72.5	75.9	75.1	76.8	88.4	42.9	76.0	73.5	84.4	77.5	71.6
Venezuela (Deliverien	2002	55.0	61.0	57.5	66.8	61.0						
(Bolivarian Republic of) ^c	2008	58.4	66.1	63.1	70.5	66.1						
	2014	58.6	72.6	68.7	77.9	72.6						
Simple average ^e	2002	55.5	36.0	35.5	37.2	49.1	9.1	40.5	19.2	90.4	33.0	29.9
avelaye	2008	59.2	42.3	43.2	41.3	54.3	12.8	43.3	22.3	89.5	38.2	35.5
	2015	61.5	47.9	48.4	47.4	61.1	14.6	49.0	26.9	88.8	44.8	41.7
Latin America ^e	2002	59.7	38.0	37.9	38.2	53.9	9.0	43.9	13.5	84.8	37.0	33.8
	2008	63.3	44.7	45.4	43.7	59.7	12.4	49.1	18.1	84.5	43.4	40.3
	2015	64.5	50.3	50.2	50.5	64.7	17.9	54.7	22.2	82.9	49.3	45.5

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Unless otherwise specified, the data refer to contributions to the pension system.

^b The data refer to affiliation to the pension system.

^c The measurement indicates whether the worker receives social benefits as part of their job, particularly access to the pension system. It is understood as contributions to the pension system.

^d The worker is asked whether they are directly affiliated to the social security system. In 2001 the question did not specify direct or indirect affiliation. This indicator never separates access to pensions from access to health benefits, which is usually slightly higher, and can thus lead to the overestimation of access to pension systems (see Social Panorama of Latin America 2013, which shows the differences in countries where the distinction can be made).

^e In Argentina, the Bolivarian Republic of Venezuela (except in 2014, which is not included in the table), and the Dominican Republic, only wage earners are included in the measurement of affiliation and contributions to the pension system. As a result, this indicator only includes 13 countries. The average for urban and rural areas also excludes Uruguay. Considering only members of the active labour force (15-64 years), significant progress has been made in broadening the contributory base of pension systems: the percentage of affiliated workers climbed by 12 percentage points between 2002 and 2015 (from 37.0% to 49.3%), while the coverage of active participants (workers affiliated or contributing to pension systems as a percentage of the economically active population aged 15-64 years¹³), rose from 33.8% to 45.5% (13 countries).¹⁴

Nonetheless, this progress has not been equal for all workers, not just according to the distinction between wage earners and non-wage earners, but also on the basis of the main structuring axes of social inequality in Latin America highlighted by ECLAC (2016b, 2017a and 2017b).

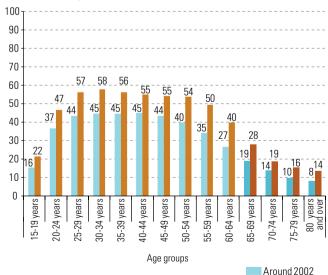
First, despite the improvement between 2002 and 2015, unequal access to pension systems as affiliated or contributing workers remains a problem for the youngest workers, and is even more concerning in terms of future access to decent pensions among workers closer to retirement age. Figure I.9.A shows a decline in the percentage of workers affiliated or contributing to pension systems among those aged 50 or over. Part of this decline stems from a proportion of persons who may have already retired owing to special pension rules allowing early retirement (for example, workers in the police and armed forces) and to legal differences in retirement age or pension eligibility requirements in the different countries.¹⁵The decline may also be related to the growing trend among older persons to become self-employed workers —either owing to entrepreneurship opportunities thanks to their greater knowledge of productive activities, but mainly because it is tougher for them to find new jobs equivalent to their old ones after being dismissed (ECLAC, 2009). As shown previously, pension system affiliation is significantly lower among non-wage earners than among wage earners.

Despite the improvement between 2002 and 2015, unequal access to pension systems as affiliated or contributing workers remains a problem for the youngest workers, and is even more concerning in terms of future access to decent pensions among workers closer to retirement age.

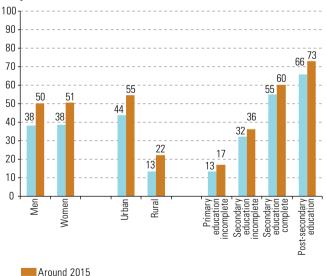
Figure I.9

Latin America (17 countries): affiliation of workers^a in pension systems by age group, sex, area of residence, level of education, per capita income decile and entry into the labour market, around 2002 and 2015 *(Percentages)*

A. By age group, 2002-2015



B. By sex, area of residence^b and level of education, 2002-2015

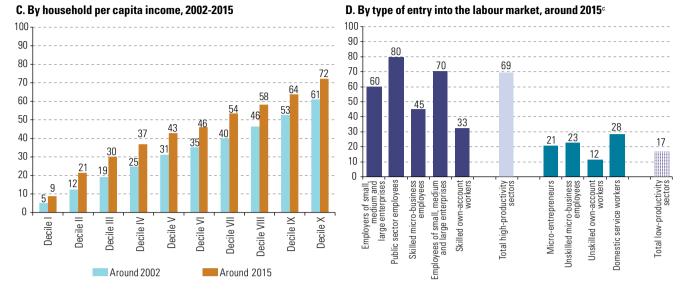


¹³ The improvement in coverage of active participants was greater between 2002 and 2008 (one percentage point per year in the region), and slightly less afterwards (0.7 percentage points per year).

¹⁴ It is important to take into account the limits of household surveys in the analysis of pension system contributions, as well as the differences when compared with the data from administrative records. One of the biggest limits is the fact that in 6 of the 17 countries under analysis, surveys provide data on affiliation to pension systems, not on the contributions made, in addition to the fact that wage earners may declare that they are contributing but the money being deducted by their employers may not necessarily be paid into the respective social protection systems (for more details see box 1.1).

¹⁵ See chapter III, and, for differences in legal retirement ages between women and men, see chapter IV.

Figure I.g (concluded)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Includes only workers from Argentina, the Bolivarian Republic of Venezuela, the Dominican Republic and Guatemala

^b The comparison between urban and rural areas does not include Argentina, the Bolivarian Republic of Venezuela or Uruguay.

^c Does not include Argentina, the Dominican Republic or Guatemala. In the Bolivarian Republic of Venezuela, data for 2014 on mandatory access to social security includes all workers.

> Meanwhile, affiliation among urban workers is 2.5 times that of rural workers (57% compared with 22%). Although the gap has narrowed (from 3.4 times in 2002), it remains extremely challenging to extend coverage among workers living in rural areas, who are mainly employed in seasonal agriculture or forestry activities.

> There are also significant differences in affiliation on the basis of workers' levels of education (see figure I.9B). The greatest improvement is reflected among workers with higher education (secondary and higher). Access to pension systems for workers with more than a secondary education (73% are affiliated or contributing) is more than twice the level seen among workers who have not completed secondary school, and is even higher ---by about 56 percentage points— compared with those who did not complete primary school (17%). The latter have seen the most limited improvement in the past 13 years.

> There are also other major differences between the various per capita income groups (see figure I.9.C). Affiliation among workers in the first three income deciles is lower than 30%, and lower than 10% among workers in decile I. Meanwhile, affiliation among workers in decile X is 72%.

> The strong trend of limited affiliation among low-income groups is in keeping with their weaker labour participation, higher rates of dependency, lower education levels and poorer quality of initial work experiences, which results in stark contrasts in labour income levels and trends, in addition to differences in access to contributory social protection mechanisms. Figure I.9.D shows various types of entry into the labour market, grouped according to workers in low-productivity sectors and workers in medium- and high-productivity sectors. The difference between the level of affiliation or contribution to pension systems among workers in low-productivity sectors and in other sectors is significant: 17% compared with 69%. Unskilled self-employed workers have the least access to contributory social protection. Among workers in low-productivity sectors, those employed in domestic services (mainly women) face less adverse conditions, owing to the efforts of the trade union organizations that represent them and by the public sector to regulate and formalize this activity (ECLAC, 2013b).

The difference between the level of affiliation or contribution to pension systems among workers in lowproductivity sectors and in other sectors is significant: 17% compared with 69%.

Lastly, private sector workers not employed by micro-businesses record much higher levels of pension system affiliation (70%), which reflect stronger regulations and better compliance with labour laws in larger companies. Only contributory protection for public sector workers is stronger. The regional average of public sector workers at all levels of government affiliated or contributing to pension systems is 79.7%. Although this group of workers benefits from the strongest protection, more than 20% of them work under contracts that do not provide for social security benefits (for example, temporary fee-based contracts, which are more common at the local government level).

The following section examines in detail the coverage of pensioners and pension levels (contributory and non-contributory, when the two can be distinguished).

Box I.1

Estimates of pension system affiliation and contributions based on household surveys and differences compared with administrative records

Household surveys, which are based on population samples and respondents' statements, only allow a rough estimate of pension system coverage of active participants —which indicates the percentage of the population that will receive a pension in future— and pensioners.

Pension system affiliation and contributions. The surveys used to measure pension system coverage are not only limited by factors such as levels of representativeness, estimate errors stemming from the samples and sub-samples chosen to analyse specific universes of people with certain characteristics, or response errors. There are also restrictions linked to the availability and characteristics of the questions used to build indicators on access to pension systems, and relating to the group of cases to which these indicators are applicable (all employed persons or just wage earners, as in Argentina, the Bolivarian Republic of Venezuela^a and Guatemala). With respect to workers' access to national pension systems, surveys in many countries include a direct question about whether workers are contributing to national pension systems, namely: Argentina, Brazil, Chile, Colombia (except in 1999), Costa Rica, Honduras, Paraguay (except in 2002) and Uruguay (except in 2002). In other cases the question posed is whether persons receive social benefits through their work (access to the pension system, social security or the right to retirement benefits), as is the case in the Bolivarian Republic of Venezuela, Mexico, Panama (the indicator on access to social security does not allow for distinction between pensions and health), and Uruguay (2002). Meanwhile, in the Dominican Republic, Ecuador, El Salvador, Guatemala, Peru and the Plurinational State of Bolivia, the indicator shows whether workers are affiliated to a pension system.

Affiliation indicates only the existence of administrative records confirming workers' registration in the pension system, and on its own does not prove that affiliated workers are paying into the scheme. Non-payment creates gaps which, depending on their size, may seriously compromise the access to and sufficiency of contributory pensions. The following table includes data on two countries for which both indicators can be calculated for 2015 (Chile and El Salvador). It shows the differences in coverage of active participants measured by affiliated and contributing workers, and by the percentage of workers having stated that they contribute to the system compared with the total having stated that they are affiliated to the system. According to the table, roughly 90% of affiliated wage earners contribute to the system, while this figure is much lower among non-wage earners, at 35.6% in Chile and 20.2% in El Salvador. Also, the percentage of contributors declines in older age groups in both countries. This comparison highlights the caution needed when considering pension system affiliation figures, as this broad concept of coverage does not reflect actual access to or quality of benefits (Sojo, 2017).

Chile and El Salvador: affiliation and contribution to pension systems among workers aged 15-49 years, coverage of active participants on the basis of both indicators, 2015

(Percentages)

	Total wor	kers aged		Workers	who are		Coverage of participants		
15-64 years	years	Wage	earners	Non-wag	je earners	Coverage of participants			
	Affiliated	Contributing	Affiliated	Contributing	Affiliated	Contributing	Affiliated/ EAP ^a	Contributing / EAP ^a	
Chile	88.3	71.9	93.8	83.8	66.1	23.5	80.6	65.7	
El Salvador	35.4	30.1	51.4	47.0	8.6	1.7	32.9	28.0	

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG). ^a Economically active population (employed and unemployed).

Box I.1 (concluded)

Evasion and avoidance of contributions. In some cases it is the employers of workers having stated that they contribute to the system who actually fail to make those payments, despite deducting the corresponding quantities from workers' wages. Employers use various strategies to avoid paying these contributions. For example, they may not formally register some or all of their employees, or may hire employees informally and fail to comply with labour laws. Moreover, even if they do formally register their workers, employers may decide to contribute less than the amount owed by under-reporting the wages actually paid to these workers (social security avoidance). In the worst cases, employers may also delay or simply not make the required payments for their registered employees, despite deducting the corresponding amount from their declared salaries and wages, thus defrauding the treasury. Meanwhile, self-employed workers may also fail to make the required social security contributions, either by under-reporting their income or by directly avoiding payment of contributions for social protection (Gómez Sabaini, Cetrángolo and Morán, 2014). On the basis of national accounts and of a methodology to determine the gap between the estimated amount and actual amount collected according to the parameters of each contributory system, Gómez Sabaini, Cetrángolo and Moran (2014) found that the shortfall represents 21.5% of the amount estimated for the overall economy (actual amount plus potential amount with zero avoidance) in Argentina (2007), which is equivalent to 0.89% of GDP; 30% in Colombia (2010), accounting for 1.67% of GDP; and 45.5% in Peru (2007), representing 1.63% of GDP. According to Arenas de Mesa and others (2012), roughly 5% of contributing wage earners are affected by this phenomenon in Chile (2009).

Administrative records and contributors. Bear in mind that survey sample groups and population frameworks based on census projections involve estimates of worker and contributor numbers that do not necessarily match the administrative record data compiled by the different national social security institutions. For example, in Chile (2015) the number of workers having stated in surveys that they are contributors is 6.3% lower than the figure included in administrative records, which points to a difference of almost 339,000 workers (Undersecretariat of Social Security of Chile, 2016). The corresponding figure is 30% higher —representing roughly 209,000 workers— in El Salvador (2015) compared with data from the Superintendency of the Financial System (at June 2016), and 14% lower in Uruguay, which is equivalent to about 204,000 workers (BPS, 2016).

Administrative records and pensioners. These differences between figures stemming from household surveys and from administrative records are also applicable to estimates of the number and percentage of pensioners, and even more so to income declared as pension benefits. This stems from the non-declaration or under-reporting of own income in surveys, among other factors. As regards non-contributory pensions, a recent study shows that for a universe of 11 social pension programmes in the region between 2010 and 2015, surveys reveal fewer transfers than administrative records do, but these discrepancies derive essentially from the failure of surveys to adequately capture the information and are not the result of respondents declaring smaller transfers than the levels contained in administrative records (which in many cases correspond to officially established fixed amounts) (Villatoro and Cecchini, 2017).

- Source: A. Arenas and others, "Análisis de la evasión y elusión en el pago de las cotizaciones previsionales y medidas de política pública para superar sus causas", Documentos de Trabajo, No. 8, Santiago, Direction of Pension Studies, Ministry of Labour and Social Security, 2012; J.C. Gómez Sabaini, O. Cetrángolo and D. Morán, "La evasión contributiva en la protección social de salud y pensiones; Un análisis para la Argentina, Colombia y el Perú", Políticas Sociales series, No. 208 (LC/L.3882), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), August 2014; A. Sojo, Protección social en América Latina: la desigualdad en el banquillo, Libros de la CEPAL, No. 43 (LC/PUB.2017/7-P), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2017; Undersecretariat for Social Security of Chile, Informe Estadístico Semestral de la Seguridad Social, Nº 5, Santiago, April 2016; ZummaRatings Clasificadora de Riesgo, Análisis y situación actual del Sistema de Pensiones en El Salvador, San Salvador, 2016; Social Security Bank of Uruguay (BPS), "Principales indicadores 2016" [online] http://www.bps.gub.uy/2692/principales-indicadores.html; P. Villatoro and S. Cecchini, "Discrepancias entre encuestas y registros: ¿Cuál es el alcance de las transferencias no contributivas en América Latina?", Estudios Estadísticos series, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), forthcoming.
- ^a In the Household Sample Survey conducted in the second half of 2014 in the Bolivarian Republic of Venezuela, the indicator on access to pension systems is available for all workers. However, in order to draw comparisons with previous periods, figures are only presented for wage earners.

C. Inequalities in coverage and sufficiency of pensions in Latin America

Between 2002 and 2015, the percentage of the Latin American population aged 65 years and over receiving some type of pension (contributory or non-contributory) climbed from 53.6% to 70.8%. Despite the considerable progress made, older persons in the region continue to face serious inequalities and gaps in access to pensions and in the sufficiency of the benefits they receive. This section provides an overview of pension receipts and corresponding trends over the years, and of the progress made thus far as well as the challenges that remain in terms of ensuring universal access and sufficient benefits for all citizens.

The principle of universality, which is a common thread in international regulatory social security instruments, calls for the expansion of pension coverage to the entire population, with no discrimination on the basis of sex, ethnicity, race, place of residence, socioeconomic status or even entry into the labour market, and thus, based on equality. This aspiration is expressed in human rights instruments for social protection, such as recommendation no. 202 on social protection floors of the International Labour Organization (ILO), and strengthened by the 2030 Agenda for Sustainable Development, particularly target 1.3 of the Sustainable Development Goals to "implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable." Despite the progress made in recent years, regional evidence shows that the achievement of this goal is a long way off and reflects considerable inequality in access to various benefits within pension systems.

1. Universal access to pensions in the region: still a long way off

Analysing coverage of pensioners in the region on the basis of household survey data reveals significant methodological restrictions owing to the limitations in fully identifying all those receiving pensions, particularly in countries where it is not possible to distinguish contributory and non-contributory benefit coverage (see box 1.2).¹⁶ For this reason, regional data should be considered with caution, as an indication of trends in this coverage. According to available household survey data, around 2015 70.8% of the Latin American population aged 65 and over received some type of contributory or non-contributory pension, with an increase in the trend over time. As shown in table 1.3, total pension coverage climbed by 17 percentage points between 2002 and 2015. As in the case of country data, this increase stemmed largely from the expansion of non-contributory pension systems.¹⁷ Despite this, the inability of almost one third of the regional population to access a pension is very worrying and is a warning about equality and the universality of this right.

¹⁶ Moreover, as indicated in box I.2, there may be significant differences between the data deriving from household surveys and that stemming from administrative records.

¹⁷ This increase is also discussed in chapter III, on the basis of data from administrative records.

Box I.2

Measurement of pension coverage and amounts on the basis of household surveys

Although the records of social protection and social security benefits —which include pensions, unemployment subsidies, family allowances, disability and illness subsidies, housing allowances, education subsidies and minimum income guarantees, for example (Camelo, 1998)— are included in the measurement of individual and household income in household surveys, the distinction of the transfers associated with each of these benefits is not a common practice. As regards pensions specifically, the push for disaggregated measurements stems from the growing need to shed light on coverage and the impact of various social protection programmes linked to the fight against poverty and vulnerability, and more recently, to efforts to universalize basic social protection floors based on non-contributory mechanisms. The following table shows the possible distinctions that can be made using the household surveys of 17 countries in the region according to type of pension. On one hand it indicates whether benefits are related to old age, disability or death -or survival - and, within these categories, whether they correspond to widowhood or orphanhood. On the other hand, it indicates whether they are contributory or non-contributory. It was not possible in all cases to determine whether the overall coverage of pensioners revealed by surveys referred only to contributory coverage or also to non-contributory coverage, and to make the distinction. In some cases, it is likely that non-contributory coverage is included in the overall coverage of pensioners along with contributory coverage, but could not be measured separately. In other cases, it is not known whether this type of coverage is included in the overall figure, which means that total coverage may be underestimated. In some countries, for one or more years, it was assumed that overall coverage was exclusively contributory, either owing to the absence of non-contributory pensions in the periods covered by the surveys or to the fact that the question used to measure the receipt of pensions did not include non-contributory pensions among the answer choices (Bolivarian Republic of Venezuela).^a

Country	Year		According t	o risks covered	i	According to	type of pension		
Country	Tear	Old age	Disability	Widowhood	Orphanhood	Contributory	Non-contributory ^b		
Argentina	2003			Х			Х		
	2008			Х			Х		
	2014			XX	Х				
Bolivia (Plurinational State of)	2002	Х	ХХ		Х	Х	Х		
	2008	Х	K X X		Х	Х	Х		
	2015	Х	Х	X X		Х	Х		
Brazil ^c	2002	Х		Х			Х		
	2008	Х		Х		Х			
	2015	Х		Х		Х			
Chile	2003	Х	Х	Х	Х	Х	Х		
	2009	Х	Х	Х	Х	Х	Х		
	2015	Х	Х	Х	Х	Х	Х		
Colombia	1999			Х	X Not applicable				
	2009			Х			Х		
	2015			Х			Х		
Costa Rica	2004			Х		Х			
	2008			Х	Х	Х			
	2015			Х		Х	Х		
Dominican Republic ^d	2005			Х		Х	Not implemented		
	2008			Х		Х	Not implemented		
	2015			Х		Х	Not implemented		
Ecuador	2001			Х		Х	Х		
	2008			Х		Х	Х		
	2015			Х		Х	Х		
El Salvador	2001			Х		Х	Not applicable		
	2009		Х		Х	Х			
	2015		Х		Х	Х			
Guatemala	2002			Х		X Not applicable			
	2006			Х		Х			
	2014			Х			Х		

Latin America (17 countries): types of pension transfers that can be distinguished^a in individual household surveys (beneficiaries and amounts)

Country	Veer		According to	risks covered	According to	type of pension	
Country	Year	Old age	Disability	Widowhood Orphanhood	Contributory	Non-contributory ^b	
Honduras ^e	2006		Х	Х	Х	Not applicable	
	2009		Х	Х	Х	Not applicable	
	2015		Х	Х	Х	Not applicable	
Mexico	2002			Х		Х	
	2008			Х	Х	Х	
	2014			Х	Х	Х	
Panama	2001			Х	Х	Not applicable	
	2008			Х	Х	Not applicable	
	2015	Х		Х	Х	Х	
Paraguay	2002			Х	Х	Not applicable	
	2008	Х		Х	Х	Not applicable	
	2015	Х		Х	XXX		
Peru	2002	Х		Х	Х	Not applicable	
	2008	Х		Х	Х	Not applicable	
	2015	Х		Х	Х	Х	
Uruguay	2002	Х		Х		Х	
	2008	Х		Х		Х	
	2015	Х		Х	Х		
Venezuela (Bolivarian Republic of)	2014		Х	Х	Х		

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a In surveys, the distinction between different transfers refers to explicit questions posed to respondents about different types of pensions. In many cases, the question generically mentions a list of different transfers that the respondent must include in one response, with a total amount for all of them. In the table, when the X is placed in one specific column this indicates that the transfer is measured explicitly, whereas when the X is placed in the centre of a group of columns this indicates that the measurement of the transfer is not distinguished by type or subtype, as applicable. In the countries where non-contributory transfers are not measured separately, it is not pointed out that they may be included in a more general measurement, as the questions do not specify the declaration of income from non-contributory pension transfers.

^b Surveys reveal non-contributory pensions in the following countries: Chile (Pensión Básica Solidaria), Costa Rica (Régimen no Contributivo de Pensiones), Ecuador (Bono de Desarrollo Humano), Mexico (Pensión para Adultos Mayores and other programmes for older adults), Panama (Programa Especial de Transferencia Económica a los Adultos Mayores "120 a los 65" and Programa Ángel Guardián), Paraguay (Pensión Alimentaria para Adultos Mayores en Situación de Pobreza), Peru (Programa Nacional de Asistencia Solidaria "Pensión 65") and the Plurinational State of Bolivia (Renta Universal de Vejez "Renta Dignidad").

^c The level of coverage of all pensions suggests that the continuous benefit programme (Benefício de Prestação Continuada), and especially the rural pension system (Previdência Rural), may be included in the declaration of pension income.

^d In 2013, the Dominican Republic approved the provision of solidarity pensions for old age, total and partial disability and survivor benefits for persons affiliated to a subsidized scheme which is part of the country's social security system (CNSS, 2015). However, this instrument has not been implemented yet.

^e Honduras established an old-age bonus (Bono Terecera Edad) as part of its family allowance programme (Programa de Asignación Familiar) between 1990 and 2009, and later on implemented another bonus (Bono a la Edad de Oro), both of which were distributed annually. The country currently provides a bonus for older persons, which covered 856 people in 2017 (CNSS/SEDIS/DIGAM, 2017).

Bear in mind that although some of these transfers, particularly non-contributory ones, are not measured specifically, this does not mean that countries' social protection systems do not have programmes that distribute them, and they may or may not be included in records of the main transfers (old-age pensions). Also, coverage of pensioners and total and partial pension amounts may be underestimated, owing either to non-declaration or to under-reporting of this income or to recipients receiving incorrect amounts. Villatoro and Cecchini (2017) estimate that between 2011 and 2015, surveys failed to detect, on average, 21.9% of social pension recipients identified in administrative records.

Source: H. Camelo, "El ingreso en las encuestas de hogares y en el Sistema de Cuentas Nacionales", paper presented at the second workshop of the Programme for the Improvement of Surveys and the Measurement of Living Conditions in Latin America and the Caribbean (MECOVI) on the measurement of income in household surveys, Buenos Aires, Economic Commission for Latin America and the Caribbean (ECLAC)/Institute of Statistics and Censuses (INDEC), 1998, National Council for Social Security/Ministry of Development and Social Inclusion/Directorate General of Older Persons (CNSS/SEDIS/DIGAM), "Informe de ejecución de logros relevantes. Evaluación de políticas y proyectos de adulto mayor", Santo Domingo, 2017 and P. Villatoro and S. Cecchini, "Discrepancias entre encuestas y registros: ¿Cuál es el alcance de las transferencias no contributivas en América Latina?", Estudios Estadísticos series, Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), forthcoming.

^a For more information on non-contributory pensions distributed in countries for different periods see the database of non-contributory social protection programmes in Latin America and the Caribbean, [online] http://dds.cepal.org/bpsnc/index-en.php.

Table I.3

Latin America (17 countries): total, contributory and non-contributory pensions received by persons aged 65 or over, by income quintile and area of residence, around 2002, 2008 and 2015 *(Percentages)*

			Туре о	f pension			Are resid	a of ence				
Countries	Years	Total ^a		New		Quintile	el		Quintile	V		
			Contributory ^b	Non- contributory ^c	Total	Contributory	Non- contributory	Total	Contributory	Non- contributory	Urban	Rural
Argentina (urban) ^e	2003	68.1			24.1			77.5			68.1	
(urban)	2008	89.1			60.1			89.6			89.1	
	2014	90.0			63.4			90.0			90.0	
Bolivia (Plurinational	2002	72.9	15.7	69.5	45.8	0.0	45.9	83.3	44.9	74.7	80.4	65.4
State of)	2008	93.0	20.7	92.4	82.7	0.0	83.3	96.6	47.6	95.1	97.0	89.1
	2015	96.4	20.4	96.0	94.1	0.8	94.1	95.3	44.5	94.8	96.1	96.7
Brazil ^e	2002	86.1			64.9			85.5			84.9	92.1
	2008	85.1			56.4			88.3			83.8	91.6
	2015	84.2			54.9			88.4			82.9	91.2
Chile	2003	77.3	63.7	14.4	68.9	36.4	33.4	75.0	72.9	2.4	76.2	82.8
	2009	84.6	59.2	26.8	68.2	32.7	36.2	82.5	74.6	9.9	83.9	88.6
	2015	87.1	59.7	27.8	83.7	39.6	44.3	81.6	72.6	9.5	86.5	90.5
Colombia ^e	1999	17.0	17.0		0.1	0.1		38.3	38.3		25.0	5.4
	2009	23.0			0.5			50.6			28.1	6.6
	2015	26.7			0.8			56.4			32.1	7.9
Costa Rica ^e	2004	41.2			17.0			61.8			49.4	25.8
	2008	57.5	40.1	17.5	38.1	16.3	22.1	59.8	57.0	2.9	58.1	56.4
	2015	66.8	47.0	19.7	51.8	12.5	39.3	72.5	69.6	2.9	67.8	63.5
Dominican Republic	2005	14.6	14.6		3.7	3.7		29.1	29.1		18.7	8.4
Поравле	2008	14.8	14.8		6.6	6.6		31.2	31.2		20.0	4.6
	2015	17.2	17.2		6.8	6.8		26.3	26.3		20.7	6.2
Ecuador	2001	33.8	17.4	17.8	26.1	6.0	21.0	42.1	33.4	9.4	40.0	25.2
	2008	40.7	18.3	22.9	39.4	1.8	37.7	46.4	42.9	3.5	38.1	44.6
	2015	62.8	25.9	38.8	56.3	4.0	53.9	67.3	56.6	11.5	59.6	68.3
El Salvador ^e	2001	14.5	14.5		4.3	4.3		29.9	29.9		19.6	6.0
	2009	16.4			1.4			35.4			22.7	3.9
	2015	16.4			2.3			38.4			23.1	3.9
Guatemala ^e	2002	11.7	11.7		2.9	2.9		16.5	16.5		21.5	5.6
	2006	15.4			2.6			33.8			22.0	8.2
	2014	19.3			4.4			28.4			26.7	13.9
Honduras	2006	6.5	6.5		1.0	1.0		17.4	17.4		12.1	1.5
	2009	6.6	6.6		0.0	0.0		18.6	18.6		12.4	1.8
	2015	9.6	9.6		0.9	0.9		25.0	25.0		15.3	1.8
Mexico ^e	2002	19.2			3.3			32.9			24.0	8.5
	2008	45.0	25.4	23.1	30.5	2.6	28.3	57.2	47.7	16.7	43.9	48.0
	2014	70.6	28.4	47.8	66.5	4.0	63.2	70.5	51.3	28.4	69.2	74.7

		Totala	Type of	f pension			Area of residence					
Countries	Years			Non- contributory ^c		Quintile I Quintile V						
			Contributory ^b		Total	Contributory	Non- contributory	Total	Contributory	Non- contributory	Urban	Rural
Panama	2001	41.5	41.5		3.5	3.5		72.0	72.0		56.5	17.7
	2008	46.4	46.4		4.0	4.0		78.5	78.5		61.9	21.1
	2015	78.6	45.6	33.0	54.0	12.7	41.3	83.6	76.7	6.9	79.1	77.6
Paraguay	2002	15.3	15.3		1.3	1.3		37.2	37.2		22.6	7.1
	2008	19.1	19.1		0.0	0.0		45.7	45.7		26.0	9.7
	2015	46.2	16.0	30.3	31.4	0.9	30.5	51.6	44.7	6.9	42.7	51.2
Peru	2002	26.4	26.4		2.7	2.7		50.2	50.2		37.9	5.0
1 GIU	2008	28.2	28.2		0.5	0.5		54.7	54.7		37.7	5.2
	2015	47.8	27.2	20.6	46.8	1.6	45.3	56.1	55.2	1.0	45.6	54.2
Uruguay (urban) ^e	2002	87.6			64.3			89.8			87.6	
(arban)	2008	85.3			69.1			86.7			85.3	
	2015	87.6			76.5			88.4			87.6	
Uruguay (national) ^e	2008	85.0			68.7			86.0			85.3	80.6
(national)	2015	87.4			75.9			87.9			87.6	82.9
Venezuela (Bolivarian Republic of)	2014	60.4	60.4		16.7	16.7		76.1	76.1		60.	4
Latin America (weighted	2002	53.6 ^f			19.3 ^f			62.9 ^f			58.4 ^h	33.9 ^h
average)	2008	62.5 ^f			29.2 ^f			72.3 ^f			62.9 ^h	51.3 ^h
	2015	70.8 ^f	32.2 ^g	40.4 ^g	49.5 ^f	6.2 ^g	57.5 ^g	76.6 ^f	55.3 ^g	21.8 ^g	70.1 ^h	67.0 ^h

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Proportion of persons aged 65 or over having stated that they receive some type of pension benefit.

^b Proportion of persons aged 65 or over who receive contributory pensions and may also receive non-contributory pensions.

^c Proportion of persons aged 65 years or over who receive non-contributory pensions and may also receive contributory pensions, according to the eligibility criteria of each country (see table I.A1.2).

^d The comparison between the lowest and highest quintiles should be analysed with caution. The differential mortality of older adults belonging to different per capita income quintiles (Behm, 2011) may result in considerable differences in sample size of older persons in each quintile.

^e It is not possible to distinguish contributory from non-contributory coverage in household surveys in one or more years, or to determine whether the total percentage of persons aged 65 or over who receive a pension include those who receive non-contributory pensions. Hence there is a need for caution when comparing with other countries where this distinction is possible. For example, according to estimates based on administrative records, non-contributory old-age pension coverage that may be underestimated in total pension coverage in 2015 accounted for 0.3% of the population aged 70 years and over in Argentina (non-contributory pensions programme, old-age pension component); for 11.7% of persons aged 65 years or over in Brazil (Benefício de Prestação Continuada); for 22.9% of persons aged 65 or over in Colombia (Colombia Mayor); for 5% of persons aged 65 or over in El Salvador (Nuestros Mayores Derechos); for 15.4% of persons aged 65 or over in Guatemala (Aporte Económico del Adulto Mayor) and 6% of persons aged 70 or over in Uruguay (Pensión no Contributiva por Vejez).

^f Weighted average of the following countries: Argentina (urban areas), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas). The Bolivarian Republic of Venezuela is not included as information is not available for the entire reference period.

^g Weighted average of the countries where it is possible to distinguish between receipt of contributory and non-contributory pensions in household surveys: Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia.

^h Weighted average of the following countries: Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia.

In the different countries, there are various patterns in the levels and development of coverage of the pension recipient indicator.¹⁸

Around 2015, countries reflected a wide range of levels. Considering persons aged 65 or over in all cases, coverage varied from 9.6% in Honduras to 96.4% in the Plurinational State of Bolivia. In a group of five countries (Argentina, Brazil, Chile, Plurinational State of Bolivia and Uruguay) the coverage rate exceeded 80%. In five other countries (Bolivarian Republic of Venezuela, Costa Rica, Ecuador, Mexico and Panama), this indicator ranged from 62.8% (Ecuador) to 78% (Panama). In Paraguay and Peru, coverage was close to 50%, and in the remaining countries (Colombia, Dominican Republic, El Salvador, Guatemala and Honduras) it was less than 30% (see table 1.3).

These data, which reveal the large percentage of persons with no pension coverage in most Latin American countries for which information is available, are the result of changes in trends between 2002 and 2015. In that period, coverage increased by more than 20 percentage points in Argentina, Brazil, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru and the Plurinational State of Bolivia, and by 51 percentage points in Mexico. In countries where this increase can be documented on the basis of household survey data (Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia), it appears to stem from the expansion of non-contributory pensions, as there were much smaller changes in contributory pensions (less than 10 percentage points). Similarly, in a number of countries where coverage has increased (Argentina, Costa Rica, Ecuador, Plurinational State of Bolivia), pension systems have been reformed or adjusted in order to expand coverage and to improve the sufficiency of benefits (see chapters III and IV). The remaining countries reflect an increase of less than 10 percentage points and mixed results: while coverage in Chile and Uruguay is relatively broad, it is more limited in Colombia, the Dominican Republic, El Salvador, Guatemala and Honduras.

Inequalities in the receipt of pensions are also considerable based on the structuring axes of social inequality in the region (ECLAC, 2016b). Around 2015, coverage of pensions was higher among men than among women in most countries. Unequal access to pensions is also evident according to area of residence and socioeconomic status. As shown in figure I.10, although the gap between the lowest and highest income quintiles in pensions received narrowed in the period, it was still very wide around 2015 (27 percentage points). In 2015, half of older persons in the lowest income guintile received pension benefits, compared with more than 75% of their counterparts in the highest income guintile. However, coverage in the two lowest income guintiles increased considerably between 2002 and 2015, by 30 and 21 percentage points, respectively, while the highest income quintile posted an increase of 14 percentage points. This phenomenon stemmed from the expansion of non-contributory pensions mainly in these lower income quintiles. Similarly, higher education levels also indicate greater access to pensions. Nonetheless, the gap in coverage between those who had not completed primary school and those who had completed post-secondary studies narrowed from 27 to 12 percentage points between 2002 and 2015. Lastly, the difference in pension coverage between urban and rural areas was smaller, and stood at 3 percentage points in 2015, following a considerable decline since 2002. The increase in coverage in rural areas was noticeable, at almost 33 percentage points over the period.

Given that pension systems provide disability and survivor benefits in addition to old-age benefits, it is possible to identify pensions received by the different population groups.¹⁹ However, as shown in figure I.11, pension coverage is clearly focused on older persons and is very limited among younger age groups. Among pensioners aged 65 years or over, the percentage of men receiving pensions is higher than that of women. This situation reflects the gender gaps in access to pensions in the region.

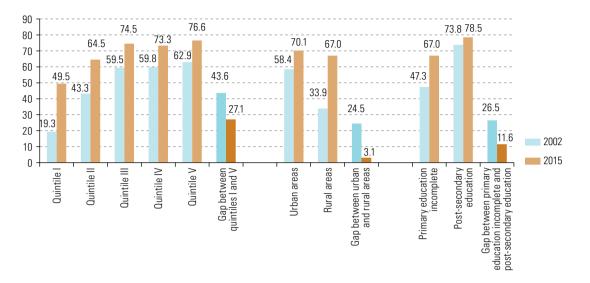
Inequalities in the receipt of pensions are also considerable based on the structuring axes of social inequality in the region. Around 2015, coverage of pensions was higher among men than among women in most countries. **Unequal** access to pensions is also evident according to area of residence and socioeconomic status.

¹⁸ As indicated previously, care should be taken when comparing coverage between countries as it is not clear in all cases whether or not the coverage of non-contributory pensions is included in overall coverage (see box I.2).

¹⁹ As there are a number of limits to household surveys in providing details on each of these benefits in the countries (see box I.2), the information presented in this chapter is focused on old-age pensions.

Figure I.10

Latin America (16 countries): persons aged 65 years or over who receive pensions and gap in pensions received,^a by income quintile,^b area of residence^c and education level,^b 2002 and 2015 (*Percentages*)

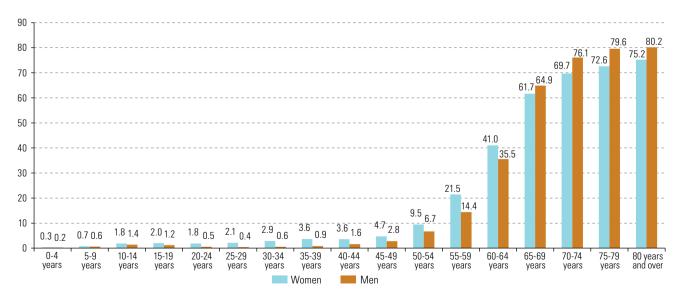


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

- ^a Difference in coverage between quintile V and quintile I, between urban and rural areas, and between those who have not completed primary school and those who have completed post-secondary studies.
- ^b Weighted average of 16 countries: Argentina (urban areas), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas). The Bolivarian Republic of Venezuela is not included as information is not available for the entire reference period.
- ^c Weighted average of the following countries: Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia.

Figure I.11

Latin America (17 countries): persons who receive pension benefits, by age group and sex,^a 2015 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Weighted average of 17 countries: Argentina (urban areas), the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay.

The increase in the number of pensioners in older age groups stems from the fact that the actual age at which an individual becomes eligible to receive pension or retirement benefits is often higher than the legally stipulated age, as a significant portion of older persons remain in the labour market longer: on average, 19% of older persons receiving pensions is still active in the labour market.²⁰ One of the possible explanations is the low pension amounts received.

2. Expansion of non-contributory pensions in the region

Owing to the exclusion of vast swathes of the population from access to contributory pensions, non-contributory pensions have expanded in the past few years. This mechanism, which aims to reduce unequal access to pension systems, has increased coverage in the region considerably.

Non-contributory pensions are cash transfers that the State provides mainly to older persons or persons with disabilities who have not been formally employed or have not made any (or enough) contributions to the pension system during their working lives. Generally, non-contributory pensions (or social pensions) are granted on the basis of requirements relating to age, degree of disability and level of poverty. In some cases, coverage is universal from a certain age or includes other population groups, such as vulnerable widows or widowers, orphans or other persons benefiting from special laws.

The number of Latin American and Caribbean countries with non-contributory pension systems has increased steadily, from 8 in 1990 to 26 in 2016 (see table I.A.2. in the annex). Regional coverage —including older persons, persons with disabilities and others— grew by about one million people in the early 1990s to slightly more than 24 million people in 2016.²¹ The non-contributory pensions with the widest coverage are the rural pension system (Previdência Rural) and the continuous benefit programme (Benefício de Prestação Continuada or BPC) in Brazil, which together represent transfers to 11 million older persons and persons with disabilities, and the pension for older adults created in 2007 in Mexico, which benefits 5.5 million persons over the age of 65 years. These are followed by the Colombia Mayor programme and Argentina's non-contributory pensions programme, with 1.5 million beneficiaries each, and by the Renta Dignidad universal old-age pension in the Plurinational State of Bolivia, with almost one million beneficiaries.

Various studies have focused on the effects of non-contributory pensions on poverty reduction and inequality in Latin American and Caribbean countries. Although the results are mixed, there is evidence of poverty and extreme poverty mitigation among the population receiving these pensions, particularly in Argentina, Brazil, Chile, Costa Rica, Peru, the Plurinational State of Bolivia and Uruguay.²² This stems from the increase in incomes of households with individuals who receive non-contributory pensions, which

Owing to the exclusion of vast swathes of the population from access to contributory pensions, noncontributory pensions have expanded in the past few years. This mechanism, which aims to reduce unequal access to pension systems, has increased coverage in the region considerably.

²⁰ Weighted average of 16 countries: Argentina (urban areas), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas).

²¹ Estimate based on administrative records.

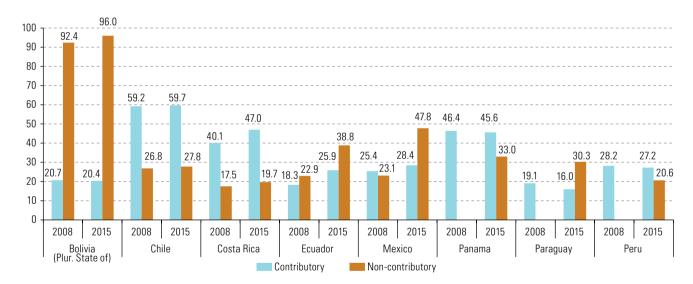
²² See Bertranou and Grushka (2002) for details on the situation in Argentina; Escobar, Martínez and Mendizábal (2013), Hernani-Limarino and Mena (2015) and Borrella-Mas, Bosch and Sartarelli (2016) for the Plurinational State of Bolivia; Schwarzer and Querino (2002) and Barrientos (2003) for Brazil; Joubert and Todd (2011) for Chile; Bertranou, Solorio and van Ginneken (2002) for Costa Rica; Martínez, Pérez and Tejerina (2015) for El Salvador; Galiani and Gertler (2016) for Perú and ILO (2002) for Uruguay.

is later translated into an increase in spending and consumption, particularly on food.²³ Social pensions have also helped to reduce inequality. A notable example is BPC in Brazil, which was responsible for a 7% reduction in the Gini index between 1995 and 2004.²⁴

The review of available household survey data from the eight Latin American countries where it is possible to distinguish between the types of benefits shows the growing importance of non-contributory pensions in the region.²⁵ Around 2015, on average 32% of the population in those countries aged 65 and over received contributory benefits, while 40% of this age group received non-contributory benefits. Moreover, of the total number of persons aged 65 or over receiving pension benefits around 2015, 53% received only non-contributory benefits, compared with 41% who received only contributory benefits and 6% who received both types of benefits. In Chile, Costa Rica, Ecuador, Mexico and the Plurinational State of Bolivia, non-contributory benefit coverage grew between 2008 and 2015 (see figure 1.12). In Panama, Paraguay and Peru, these pensions were created during the period.²⁶ Non-contributory benefits cover at least one fifth of the older population in the eight countries, more than 90% in the Plurinational State of Bolivia and about one third or more in Ecuador, Mexico, Panama and Paraguay.

Figure I.12

Latin America (8 countries): contributory and non-contributory pensions^a received by persons aged 65 years or over, around 2008 and 2015 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG). ^a Proportion of persons aged 65 or over who receive contributory pensions and may also receive non-contributory pensions, or persons aged 65 or over who receive non-contributory pensions and may also receive contributory pensions, according to the criteria established in each country (see table I.A1.2).

²³ See Bosch and Guajardo (2012) for data on Argentina; Martínez (2004) and Escobar, Martínez and Mendizábal (2013) for the Renta Dignidad programme in the Plurinational State of Bolivia; López García and Otero (2017) for Chile; Galiani, Gertler and Bando (2015) for Mexico and Galiani and Gertler (2016) for Peru.

²⁴ Veras Soares and others (2006) show that BPC and the Bolsa Família programme reduced the Gini index by 28% (7% for BPC and 21% for Bolsa Família). According to Marco (2016), although these pensions help to reduce the gap between men and women in terms of access to pensions, the same is not true for the gap in amounts, owing to the low level of non-contributory benefits.

²⁵ Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia. In this section, the reference group included in the analysis always includes these eight countries. See box I.2 for problems identifying contributory and non-contributory benefits in the countries of the region.

²⁶ As shown in figure I.14, there are no data on coverage in 2008 for Panama, Paraguay or Peru as the programmes came into effect later on (see table I.A1.2 in annex).

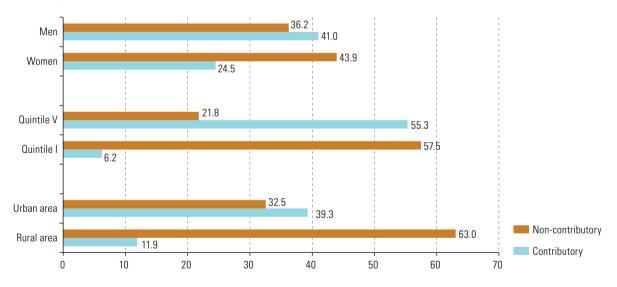
Around 2015, contributory benefits covered around or slightly more than half of older persons in the Bolivarian Republic of Venezuela, Chile, Costa Rica and Panama, compared with about one quarter in Ecuador, Mexico and Peru, and one fifth or less of this group in the Dominican Republic, Honduras, Paraguay, Peru and the Plurinational State of Bolivia.²⁷ This reflects the significant lack of social protection that a large contingent of older persons would be exposed to if they did not receive non-contributory benefits.

Given that eligibility for most non-contributory pensions in Latin America is based on beneficiaries' level of poverty or vulnerability (see table I.A1.2 in the annex), in all eight countries where this analysis is possible, these pensions cover more than half of persons aged 65 or over in the lowest income quintile, almost three times the level seen for their counterparts in the highest income quintile. Meanwhile, the gap in contributory coverage between the older persons in lowest and highest income quintiles was 49 percentage points.

The data also show greater access to non-contributory pensions for women aged 65 or over compared with men in the same age group, and for rural residents aged 65 or over, compared with urban residents also in the same age group. The opposite is true for contributory pensions (see figure I.13)

Figure I.13

Latin America (8 countries): contributory and non-contributory pensions^a received by persons aged 65 or over, by sex, income quintile and area of residence^b, around 2015 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a Proportion of persons aged 65 or over who receive contributory pensions and may also receive non-contributory pensions, or persons aged 65 or over who receive non-contributory pensions and may also receive contributory pensions, according to the criteria established in each country (see table I.A1.2).

^b Weighted average for the eight countries where it is possible to distinguish contributory and non-contributory benefits: Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia.

²⁷ The analysis includes the Bolivarian Republic of Venezuela, the Dominican Republic and Honduras. No non-contributory pension programmes were in effect in 2015 in the Dominican Republic or in Honduras. In the Bolivarian Republic of Venezuela, the survey helped to determine that measurable coverage referred to contributory benefits.

3. Considerable inequalities in sufficiency of pensions received

As shown in table I.4, the amount of pension benefits received by persons aged 65 years or over varies considerably from one country to the next.²⁸ Between 2002 and 2015, the average monthly amount of pension benefits received by persons aged 65 years or over increased by 31%.²⁹ In some countries (Mexico, Panama and Paraguay), there was a slight decrease in the average amount of pension benefits over the period, which stemmed mainly from the implementation and considerable expansion of non-contributory pensions. The average was lowered as amounts were smaller than contributory benefits. In all countries where it is possible to determine the amount of pension benefits received in contributory and non-contributory schemes, there is a big difference between the two. Around 2015, non-contributory pensions represented less than one guarter of contributory benefits in Ecuador, Mexico, Panama, Paraguay, Peru and the Plurinational State of Bolivia, and less than 40% in Chile and Costa Rica. There is also a big difference in the contributory and non-contributory amounts granted by the countries. Contributory pensions are lower than the regional average in the Bolivarian Republic of Venezuela, Chile, the Dominican Republic, Mexico and Peru.³⁰ Meanwhile non-contributory pensions are lower than the regional average in Mexico, Peru and the Plurinational State of Bolivia.

Average monthly pension benefits as a percentage of the minimum wage in the countries of the region are an additional indicator of benefit sufficiency.³¹ In countries where it is possible to identify non-contributory pensions, the amounts were always lower than the minimum wage around 2015, owing to the design of this benefit system, while 40% of contributory pensions were below this threshold.³² There are also large gaps based on gender and area of residence.³³ The fact that more than one third of contributory pensions are below the minimum wage reflects the considerable challenge of improving the design of pension systems and working conditions with the aim of overcoming the problems created by career shifts between formal and informal work and periods of unemployment, and especially, of increasing labour income, which shapes the contributory capacity of pension system design and the need to strengthen solidarity in the contributory and non-contributory components in order to mitigate the inequalities stemming from the labour market are also clear.

²⁸ Table I.A1.2 includes the median monthly amounts of pensions received, which provide a complementary perspective of distribution in the countries of the region.

²⁹ The percentage change in the reference period was calculated using the weighted average of average monthly pension benefits received by persons aged 65 years and older in 16 countries: Argentina (urban areas), Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay (urban areas). Average monthly pension benefits in 2002 amounted to US\$ 457 in 2010 dollars at purchasing power parity, and rose to US\$ 600 in 2015. These data are only indicative because, as mentioned throughout this chapter, it is not possible to determine in all the countries whether the coverage and amounts indicated in surveys include non-contributory benefits; thus the average total amounts may be underestimated or overestimated.

³⁰ In 2015, the average monthly pension based on a regional average of eight countries where it is possible to distinguish between non-contributory and contributory pensions was, in the case of contributory pensions, US\$ 529 (2010 dollars at purchasing power parity) and in the case of non-contributory pensions US\$ 79 (2010 dollars at purchasing power parity).

An indicator of individual sufficiency is the pension system replacement rate, in other words, the link between the pension granted to an individual a nd the income received during their working life (or at the end of their working life). Another indicator of sufficiency is the average monthly pension as a percentage of the poverty threshold in the countries (see chapter II).

³² Weighted average for the following countries where it is possible to compare contributory and non-contributory benefits: Chile, Costa Rica, Ecuador, Mexico, Panama, Paraguay, Peru and Plurinational State of Bolivia.

³³ On average, 48% of average monthly contributory pension benefits received by women are lower than the minimum wage, compared with 33% for men. For rural residents, the corresponding figure stands at 56%, compared with 38% for urban inhabitants.

Table I.4

Latin America (17 countries): average monthly pension benefits by age, around 2002 and 2015 (2010 dollars, at purchasing power parity)^a

		Total	pension amo	ount	Contributo	ory pension a	mount ^c	Non-contrib	utory pensio	n amount
Countries	Years	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
Argentina (urban) ^b	2003	442.9	521.3	380.5						
	2014	1 487.6	1 579.1	1 431.6						
Bolivia (Plurinational	2002	169.1	198.2	129.4	583.0	659.4	497.2	37.7	38.7	36.8
State of)	2015	213.9	261.0	171.8	702.7	738.7	650.1	65.6	64.8	66.3
Brazil ^b	2002	476.7	548.7	418.9						
	2015	667.5	699.0	641.5						
Chile	2003	404.0	439.8	372.8	460.7	488.3	434.6	128.4	128.4	128.4
	2015	418.2	504.9	355.9	517.5	586.7	453.2	200.2	200.2	200.2
Colombia ^b	1999	703.9	764.6	600.5	703.9	764.6	600.5			
	2015	926.6	1 012.6	824.8						
Costa Rica ^b	2004	547.6	596.7	473.9						
	2015	580.7	667.3	488.7	747.0	795.5	680.7	184.0	183.9	184.1
Dominican Republic	2005	457.2	426.2	520.8	457.2	426.2	520.8			
	2015	492.9	491.5	495.4	492.9	491.5	495.4			
Ecuador	2001	146.4	188.8	106.5	255.0	282.7	214.9	29.8	28.6	30.7
	2015	413.6	515.8	324.9	856.0	920.2	772.3	97.3	97.3	97.2
El Salvador ^b	2001	457.8	514.3	384.1	457.8	514.3	384.1			
	2015	598.9	732.1	446.7						
Guatemala ^b	2002	285.4	327.7	227.8	285.4	327.7	227.8			
	2014	307.2	342.4	266.4						
Honduras	2006	539.6	534.0	548.4	539.6	534.0	548.4			
	2015	547.5	593.1	490.5	547.5	593.1	490.5			
Mexico ^b	2002	422.6	457.2	356.5						
	2014	232.2	295.8	171.7	482.1	514.1	429.6	56.6	55.8	57.1
Panama	2001	854.0	964.1	690.0	854.0	964.1	690.0			
	2015	532.5	620.6	448.3	784.0	852.9	699.9	185.1	185.0	185.1
Paraguay	2002	769.1	803.3	737.6	769.1	803.3	737.6			
	2015	430.1	511.6	357.0	935.3	1 152.5	733.8	161.1	161.6	160.7
Peru	2002	160.9	168.2	148.0	160.9	168.2	148.0			
	2015	264.8	314.0	209.8	413.7	450.5	359.4	68.0	67.9	68.1
Uruguay (urban) ^b	2002	648.6	763.5	567.8						
	2015	829.4	947.1	751.9						
Uruguay (national) ^b	2015	812.4	920.6	739.3						
Venezuela (Bolivarian Republic of)	2014	363.5	365.4	361.7	363.5	365.4	361.7			

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a The data indicated come from household survey self-declarations, and thus may not correspond to data from countries' administrative records.

^b It is not possible to distinguish contributory from non-contributory coverage in household surveys in one or more years, or to determine whether the benefit amount includes recipients of non-contributory pensions. Hence there is a need for caution when comparing with other countries where this distinction is possible.

The inequalities in pensions received are linked to the structuring axes of social inequality in the region (ECLAC, 2016b). According to the data presented in table I.4, around 2015, in most countries the average monthly pension benefits received by women were lower than those received by men.³⁴ These gaps are also evident in

³⁴ The Dominican Republic is an exception, albeit in a context of very limited pension coverage.

analyses based on socioeconomic status, education level and area of residence (see figure I.14). Around 2015, the pensions of rural residents were slightly less than half of the amount received by urban residents. Among persons who had not completed primary school, average monthly pensions were less than one quarter of the amount received by persons who had completed post-secondary studies, while the average monthly amount of pension benefits received by persons in the lowest income decile was barely 10% of that received by persons in the highest income decile.

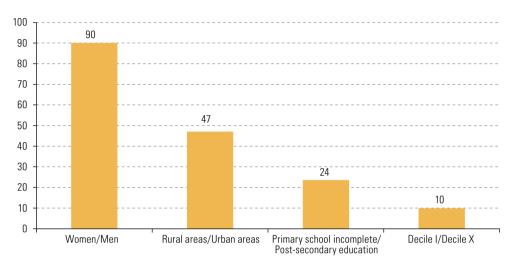


Figure I.14

Latin America: disparities in average monthly pension benefits received by persons aged 65 or over^a, by sex^b, area of residence^c, education level^b and income decile^b, around 2015 *(Percentages)*

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

- ^a The bars show the average monthly pensions received by women as a percentage of the amount received by men; those received by persons living in rural areas as a percentage of the amount received by persons living in urban areas; those received by persons who have not completed primary school as a percentage of the amount received by persons with post-secondary education, and those received by persons in decile I as a percentage of the amount received by persons in decile X.
- ^b Weighted average of the following countries: Argentina (urban areas), Bolivarian Republic Venezuela, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay.
- ^c Weighted average of the following countries: Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay.

D. Conclusions and policy recommendations

The evidence presented in this chapter on the basis of household survey data shows a decline in income inequality in Latin America between 2002 and 2016. However, the pace of this decline has slowed in the past few years. The decrease in inequality stems from a larger increase in income among the lowest income quintiles compared with the highest. This trend is also linked to the relative improvement in labour market indicators and the subsequent impact on access to pension systems.

Between 2002 and 2015, significant progress was made with the increase in affiliation to and contribution to pension systems, driven largely by lower unemployment and growth in the number and proportion of wage earners compared with total workers, as well as in employment formalization. This trend was especially marked among women. Also, the measures taken by some States to promote voluntary affiliation of self-employed workers to pension systems have paid off, although much work remains to be done. Progress is also evident in the increase in access to pensions among older persons; the expansion of non-contributory benefits in the region stand out in particular. Between 2002 and 2015, significant progress was made with the increase in affiliation to and contribution to pension systems. Progress is also evident in the increase in access to pensions among older persons; the expansion of non-contributory benefits in the region stand out in particular. However, pension system coverage —through the affiliation and contributions of the active population, and the receipt of pension benefits by older persons, as well as the amounts distributed— is another dimension that reflects social inequality. Considerable gaps remain that affect women and people belonging to the lowest income groups, living in rural areas, having achieved lower levels of education and working in low-productivity sectors. These gaps are manifested in the more limited access of these population segments to pensions, access mainly through non-contributory schemes that are not always linked to contributory programmes, and the smaller amount of pension benefits received. As a result, the structuring axes of social inequality in the region play a decisive role in exclusion from pension systems and in stratified access to different types and amounts of benefits.

Inequalities with respect to entry into the labour market and access to jobs as well as job quality —which are manifested in wage-earning opportunities, formalization of work contracts, steadiness of career paths, collective bargaining of wages and of other working conditions, particularly monthly income- also result in unequal contributions to pension systems, and, at the end of an individual's working life, to access sufficient pensions. In order to improve pensions, there is a need for better working conditions, and particularly, the possibility of building more stable careers with fewer interruptions and increasing compensation. At the same time, the failure to introduce solidarity mechanisms (contributory or non-contributory) to offset the significant differences in workers' contributory capacity will worsen the considerable inequalities in the labour market in the last stage of the life cycle. Although further progress is crucial to expanding the contributory base of pension systems by promoting increases in participation and employment —especially among women— and in employment formalization and wages, in Latin American labour markets there are intrinsic obstacles to universal access to decent pensions exclusively through contributory mechanisms. There is a need for continued development of non-contributory schemes in order to guarantee social rights (given the wide gaps that persist despite the key contribution of these schemes to pension system coverage); for complementarity between non-contributory and contributory programmes, which should also be reinforced in terms of solidarity (Uthoff, 2017); and for the strengthening of institutions working to coordinate and harmonize efforts to expand coverage, the sufficiency of benefits and the financial sustainability of systems, which are able to address the inequalities described.

Although the labour market plays a predominant role in the operation of pension systems, the evidence presented in this chapter indicates that design also affects the ability to reverse or at least reduce the impact of labour market inequality on access to pensions.

Thus, although the labour market plays a predominant role in the operation of pension systems, the evidence presented in this chapter indicates that design also affects the ability to reverse or at least reduce the impact of labour market inequality on access to pensions. In addition to strengthening inclusive labour policies combined with social security policies that focus on greater formalization, social dialogue, reinforcement of trade unions and collective bargaining in order to increase labour income and to improve working conditions and job protection, it is also important to emphasize the aspects of design that can address the problems identified in pension systems. These include, notably, measures to raise benefit levels, increasing their value in non-contributory and contributory schemes according to sufficiency and rights criteria, and strengthening solidarity mechanisms in contributory programmes with a view to benefiting, in particular, persons receiving the smallest pensions owing to the structural characteristics of the labour market and the axes of social inequality described. It is also crucial to reinforce existing regulatory mechanisms and institutions in order to avoid evasion and avoidance in the payment of contributions. Similarly, as discussed in the following chapters, eliminating openly discriminatory mechanisms from systems and, especially, achieving gender equality, are fundamental aspects of the reforms focused on the social and financial sustainability and equality of pension systems.

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Annex I.A1

Table I.A1.1

Latin America (18 countries): indicators of individual income distribution, 2001-2016^a

		Concentration indicators							
Country	Year	Otatio Jack	The H instant		Atkinson index ^c				
		Gini index ^b	Theil index ^c	(e=0,5)	(e=1,0)	(e=1,5)			
vrgentina ^d	2003	0.468	0.346	0.156	0.289	0.409			
. gorrand	2008	0.414	0.293	0.135	0.251	0.358			
	2012	0.389	0.258	0.120	0.226	0.325			
	2014	0.391	0.265	0.121	0.225	0.317			
	2016	0.392	0.274	0.124	0.228	0.322			
olivia (Plurinational State of)	2002	0.611	0.732	0.313	0.550	0.738			
	2008	0.513	0.492	0.219	0.401	0.565			
	2011	0.471	0.395	0.184	0.349	0.506			
	2014	0.471	0.403	0.185	0.349	0.506			
	2015	0.453	0.362	0.171	0.333	0.503			
	2002	0.569	0.650	0.262	0.431	0.547			
razil	2002	0.536	0.574	0.234	0.394	0.510			
	2008	0.523	0.555	0.234	0.394	0.510			
	2012	0.523	0.555	0.223	0.377	0.492			
	2015	0.511	0.520	0.216	0.369	0.489			
hile	2003	0.508	0.508	0.210	0.358	0.477			
	2009	0.478	0.453	0.188	0.323	0.434			
	2011	0.469	0.430	0.181	0.313	0.419			
	2013	0.466	0.424	0.178	0.306	0.408			
	2015	0.453	0.408	0.170	0.293	0.392			
olombia	2002	0.567	0.663	0.266	0.447	0.586			
	2009	0.557	0.620	0.256	0.436	0.576			
	2012	0.539	0.573	0.240	0.414	0.553			
	2014	0.540	0.577	0.240	0.412	0.547			
	2016	0.521	0.541	0.225	0.388	0.520			
osta Rica	2002	0.498	0.464	0.198	0.349	0.476			
	2008	0.485	0.423	0.185	0.327	0.441			
	2012 ^e	0.502	0.450	0.200	0.359	0.493			
	2014 ^e	0.498	0.449	0.200	0.359	0.491			
	2016 ^e	0.500	0.448	0.200	0.358	0.488			
ominican Republic	2002	0.513	0.491	0.212	0.372	0.500			
	2008	0.489	0.470	0.198	0.340	0.450			
	2012	0.469	0.412	0.179	0.316	0.425			
	2014	0.449	0.356	0.162	0.295	0.405			
	2016	0.470	0.405	0.179	0.320	0.438			
cuador	2001	0.537	0.641	0.243	0.393	0.501			
	2008	0.491	0.467	0.196	0.338	0.447			
	2012	0.463	0.392	0.170	0.302	0.410			
	2014	0.448	0.399	0.167	0.289	0.385			
	2016	0.445	0.390	0.165	0.288	0.390			
Salvador	2001	0.540	0.539	0.222	0.383	0.510			
Saivduul	2009	0.477	0.426	0.185	0.327	0.439			
	2013	0.454	0.410	0.170	0.296	0.396			
	2013	0.434	0.343	0.152	0.274	0.374			
	2014	0.421	0.343	0.132	0.258	0.374			
	2010	0.636	0.883	0.341	0.558	0.337			
uatemala		0.030	0.608		0.556	0.714			
	2006			0.253					
	2014	0.535	0.664	0.248	0.407	0.533			

Table I.A1.1 (concluded)

		Concentration indicators						
Country	Year			Atkinson index ^c				
		Gini index ^b	Theil index ^c	(e=0,5)	(e=1,0)	(e=1,5)		
Honduras	2001	0.554	0.592	0.247	0.421	0.552		
in the second	2009	0.502	0.494	0.207	0.356	0.470		
	2013	0.515	0.567	0.223	0.371	0.485		
	2014	0.481	0.423	0.184	0.324	0.434		
	2016	0.480	0.428	0.189	0.338	0.464		
Vlexico	2002	0.508	0.491	0.210	0.364	0.479		
VICAICO	2008	0.513	0.535	0.219	0.376	0.498		
	2012	0.499	0.499	0.207	0.359	0.486		
	2014	0.502	0.511	0.209	0.357	0.475		
	2016 ^f	0.504	0.473	0.195	0.335	0.446		
Nicaragua	2001	0.568	0.536	0.231	0.408	0.561		
	2009	0.463	0.400	0.175	0.314	0.440		
	2014	0.495	0.511	0.207	0.355	0.476		
Panama	2001	0.571	0.608	0.269	0.483	0.652		
anama	2008	0.527	0.516	0.228	0.407	0.548		
	2011	0.528	0.522	0.228	0.403	0.540		
	2014	0.509	0.470	0.211	0.384	0.528		
	2016	0.513	0.475	0.214	0.388	0.530		
Paraguay	2002	0.583	0.647	0.258	0.438	0.584		
arayuay	2008	0.516	0.539	0.219	0.372	0.490		
	2012	0.489	0.438	0.192	0.344	0.472		
	2014	0.522	0.542	0.219	0.372	0.493		
	2016	0.497	0.501	0.207	0.356	0.473		
Peru	2002	0.565	0.644	0.262	0.444	0.581		
eiu	2008	0.495	0.450	0.201	0.364	0.500		
	2012	0.457	0.383	0.173	0.318	0.445		
	2014	0.446	0.369	0.165	0.303	0.424		
	2016	0.452	0.377	0.169	0.309	0.431		
Uruguay	2002 ^d	0.474	0.393	0.177	0.322	0.448		
Jugudy	2008	0.453	0.382	0.166	0.295	0.397		
	2012	0.388	0.257	0.120	0.224	0.315		
	2014	0.392	0.271	0.124	0.229	0.319		
	2016	0.391	0.269	0.123	0.227	0.316		
/enezuela (Bolivarian Republic of)	2002	0.420	0.320	0.141	0.254	0.357		
	2008	0.380	0.250	0.115	0.213	0.299		
	2012	0.385	0.260	0.118	0.219	0.309		
	2014	0.378	0.242	0.112	0.210	0.300		

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of special tabulations of data from household surveys conducted in the countries. ^a Calculated from the distribution of personal per capita income in the country as a whole.

^b Includes those with zero income.

^c In order to reduce the impact of the highest and lowest values, the Theil and Atkinson indices exclude values close to zero and the three highest levels of per capita income. ^d Urban total.

 ^e Figures are not comparable with previous years.
 ^f The 2016 figures were estimated based on the 2016 statistical model for the continuation of the social conditions module of the national household income and expenditure survey, prepared by the National Institute of Statistics and Geography (INEGI) to mitigate the lack of comparability of the 2016 survey with the 2008-2014 series.

Table I.A1.2

Latin America and the Caribbean (26 countries): non-contributory pensions in effect, 2017

Country	Pension benefits	Year begun	Target population	Total number of recipients (latest year for which information is available)
Antigua and Barbuda	Old-age assistance programme	1993	 Persons aged 65 years or over Persons who are blind or have other disabilities aged 60 years or over and who are unable to generate their own income 	83 (2014)
Argentina	Programa de Pensiones no Contributivas (non-contributory pension programme)	1948	Persons who are socially vulnerable with no rights to retirement or pension benefits, who own no goods, and have no income or resources that would allow them to support themselves, and have no relatives who are legally obligated to provide for them: (1) Persons over the age of 70 years (2) Women with seven or more biological or adopted children (3) Persons with disabilities (4) Persons benefiting from special laws (5) Persons identified by national lawmakers	1 490 310 (2016)
Bahamas	Old-age non- contributory pension	1972	 Persons aged 65 years or over who are not eligible for retirement benefits 	1 705 (2015)
Barbados	Non-contributory old-age pension	1982	 Persons aged 65 years or over who are not eligible for retirement benefits Persons who are blind or with hearing or speech impairments aged 18 years or over 	5 963ª (2011)
Belize	Non-contributory pension program	2003	(1) Women over the age of 65 years and men over the age of 67 years with insufficient income	2 513 (2015)
Bermuda	Non-contributory pension	1970	 Persons over the age of 65 years with no rights to contributory pensions Persons with disabilities aged 18-65 years 	1 371 (2014)
Bolivia (Plurinational State of)	Renta Dignidad (universal old-age pension)	2008	Persons aged 60 years or over	977 759 (2016)
Brazil	Benefício de Prestação Continuada (continuous benefit programme)	1996	Persons aged 65 years or over and persons with disabilities of any age who prove that they do not have the resources to support themselves	4 385 204 ^b (2016)
	Previdência Rural (rural pension system)	1993	 Older persons (men and women over the age of 60 and 55, respectively) living in rural or urban areas of up to 50,000 inhabitants who carry out economic activities in rural areas or artisanal fishing Persons with disabilities living in rural areas 	6 684 273 (2015)
Chile	Pensión Básica Solidaria (basic solidarity pension; formerly welfare pension programme (PASIS))	2008	 Persons over the age of 65 years who do not receive contributory pensions Persons with physical and mental disabilities aged 18-65 years 	579 967 (2016)
Colombia	Colombia Mayor (older adult social protection programme)	2010	Older persons (women and men over the age of 54 and 59, respectively) living in poverty and extreme poverty	1 499 967 (2016)
Costa Rica	Régimen no contributivo de pensiones por monto basico (non-contributory pension regime paying a basic amount)	1974	 Older persons aged 65 years or over Persons with disabilities Widows who lack economic support Orphans People living in extreme poverty 	109 924 (2016)
Cuba	Régimen de Asistencia Social (social welfare system)	1976	 Older persons with no rights to old-age pensions Mothers taking unpaid leave to care for children who are sick or disabled Orphans aged 17 years who are continuing their studies Families previously dependent on the economic support of a worker who is now deceased Families of young people in military service who are the sole breadwinners or one of the breadwinners of those families Workers receiving long-term medical treatment Pensioners with dependent family members 	175 106 (2015)
Ecuador	Bono de Desarrollo Humano (pension for older adults and pension for persons with disabilities)	2003	 Vulnerable persons with disabilities who are not affiliated in any public social security system Vulnerable persons aged 65 years or over who are not affiliated in any public social security system 	625 266 (2016)
El Salvador	Nuestros Mayores Derechos presidential programme	2009	Persons aged 60 years or over living in rural communities and precarious urban settlements	31 656 (2016)

Table I.A1.2 (concluded)

Country	Pension benefits	Year begun	Target population	Total number of recipients (latest year for which information is available)
Guatemala	Programa de Aporte Económico del Adulto Mayor (economic contribution for older persons)	2005	(1) Persons aged 65 years or over living in poverty (2) Persons with physical, mental or sensory disabilities	103 167 (2016)
Guyana	Old-age pension	1944	(1) Persons aged 65 years or over	
Jamaica	Programme of Advancement Through Health and Education (PATH)	2002	(1) Persons aged 60 years or over (2) Persons with disabilities (3) Adults aged 18-59 years living in poverty	
Mexico	Pensión para Adultos Mayores (pension for older adults)	2007	Persons aged 65 years or over with no formal social security coverage or with contributory pension benefits that are lower than non-contributory benefits	5 454 050 (2016)
	Pensión Alimentaria para Personas Mayores de 68 que residen en la Ciudad de México (food pension for older adults aged 68 years living in Mexico City)	2001	Universal and unconditional coverage of persons over the age of 68 years	520 002° (2016)
Panama	120 a los 65 (special transfer programme for older persons)	2009	Persons over the age of 65 years who do not receive a contributory pension	129 241 (2016)
Paraguay	Programa Pensión Alimentaria para Adultos Mayores en Situación de Pobreza (food pension programme for adults living in poverty)	2009	Persons over the age of 65 years living in poverty	162 130 (2016)
Peru	Programa Nacional de Asistencia Solidaria Pensión 65 (national solidarity welfare programme)	2011	Households with persons over the age of 65 years living in extreme poverty	502 972 (2016)
Saint Kitts and Nevis	Non-contributory assistance pension	1998	 Persons over the age of 62 years with no rights to contributory pensions Persons with disabilities aged 16-62 years 	505 (2014)
Saint Vincent and the Grenadines	Non-contributory assistance old- age pension	1998	Persons over the age of 45 years at 5 January 1987 (in other words, 75 years or older in 2017)	
Trinidad and Tobago	Senior Citizens' pension	2001	Persons aged 65 years or over who are socioeconomically vulnerable	90 800 (2016)
Uruguay	Non-contributory old-age and disability pensions	1919	(1) Persons over the age of 70 years (2) Persons with disabilities	84 564 (2016)
Venezuela (Bolivarian Republic of)	Gran Misión en Amor Mayor programme	2011	Persons over the age of 55 years (women) and 60 years (men), who are citizens or foreign nationals legally resident in the country in the previous 10 years	509 806 (2015)

Source: Non-contributory social protection programmes in Latin America and the Caribbean database [online] http://dds.cepal.org/bpsnc/. ^a Includes only coverage of non-contributory old-age pensions.

^b Corresponds to data for October 2016. In December 2015, this programme covered 4,242,697 people. ^c Corresponds to data for June 2016. In 2015, this programme covered 510,000 people.

Table I.A1.3

Latin America (17 countries): median monthly pension benefits by sex, around 2002 and 2015 (2010 dollars, at purchasing power parity)^a

		Tota	l pension am	ount	Contribu	tory pension	amount ^c	Non-contri	butory pensi	on amount
Countries	Years	Both	S	ex	Both	S	ex	Both	Se	ex
		sexes	Men	Women	sexes	Men	Women	sexes	Men	Women
Argentina (urban) ^b	2003	302.6	360.3	247.1						
	2014	1 089.3	1 099.5	1 089.3						
Bolivia (Plurinational	2002	39.3	39.3	39.3	505.2	505.2	477.2	39.3	39.3	39.3
State of))	2015	68.5	68.5	68.5	657.8	685.2	575.6	68.5	68.5	68.5
Brazil ^b	2002	202.3	202.3	202.3						
	2015	349.1	349.1	349.1						
Chile	2003	257.3	260.7	256.7	274.4	274.4	274.4	128.3	128.3	128.3
	2015	290.0	334.6	258.7	379.2	401.5	356.9	200.2	200.2	200.2
Colombia ^b	1999	465.8	543.4	411.4	465.8	543.4	411.4			
	2015	569.8	641.0	470.1						
Costa Rica ^b	2004	263.8	284.9	253.3						
	2015	313.9	316.3	267.7	413.6	438.0	393.7	182.5	182.5	182.5
Dominican Republic	2005	201.3	201.3	268.4	201.3	201.3	268.4			
	2015	248.4	248.4	289.8	248.4	248.4	289.8			
Ecuador	2001	45.3	94.4	41.5	128.3	132.1	113.2	26.4	26.4	26.4
	2015	97.3	97.3	97.3	758.6	778.1	680.8	97.3	97.3	97.3
El Salvador ^b	2001	310.2	310.2	310.2	310.2	310.2	310.2			
	2015	391.2	465.7	372.6						
Guatemala ^b	2002	185.9	247.8	83.7	185.9	247.8	83.7			
	2014	218.3	261.9	131.0						
Honduras	2006	321.5	267.9	401.8	321.5	267.9	401.8			
	2015	395.1	395.1	395.1	395.1	395.1	395.1			
Mexico ^b	2002	224.6	226.1	223.0						
	2014	56.2	133.4	55.6	239.6	258.7	219.2	54.8	55.1	54.8
Panama	2001	600.7	696.8	490.2	600.7	696.8	490.2			
	2015	301.0	385.9	185.2	617.5	617.5	540.3	185.2	185.2	185.2
Paraguay	2002	574.5	759.2	567.4	574.5	759.2	567.4			
	2015	162.9	162.9	162.9	721.7	902.1	613.5	162.4	162.4	162.4
Peru	2002	108.2	117.4	101.7	108.2	117.4	101.7			
	2015	176.3	226.5	69.3	322.5	339.8	266.9	68.1	68.1	68.1
Uruguay (urban) ^b	2002	456.6	555.3	404.7						
	2015	552.6	637.6	510.1						
Uruguay (national) ^b	2015	548.3	614.2	510.1						
Venezuela (Bolivarian Republic of)	2014	274.7	274.7	274.7	274.7	274.7	274.7			

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of the Household Survey Data Bank (BADEHOG).

^a The data indicated come from household survey self-declarations, and thus may not correspond to data from countries' administrative records.

^b It is not possible to distinguish contributory from non-contributory coverage in household surveys in one or more years, or to determine whether the benefit amount includes recipients of non-contributory pensions. Hence there is a need for caution when comparing with other countries where this distinction is possible.



Updated review of poverty in Latin America¹

Introduction

- A. Income poverty trends
- B. Factors driving the recent poverty trend
- C. Poverty and social inequality trends
- D. Sufficiency and adequacy of labour income and pensions
- Bibliography
- Annex II.A1

¹ This analysis does not cover the countries of the Caribbean.

Introduction

In this edition of the *Social Panorama of Latin America*, the Economic Commission for Latin America and the Caribbean (ECLAC) provides an update on the magnitude and trends of poverty and related factors. Section A of this chapter analyses the evolution of poverty and extreme poverty since 2002, and it reviews recent trends in both indicators in the individual countries, based on the corresponding national estimates. Section B then describes how poverty has affected certain population groups depending on gender, age and area of residence. It then examines some of the factors driving poverty trends and analyses the impact of changes in average household income and its distribution and the changes observed in the different components of income in households in situations of poverty. In keeping with the central theme of this edition of the *Social Panorama of Latin America*, section D analyses the sufficiency of labour income and pensions as multiples of the poverty line; and it also reviews the effects of the levels of each type of income on the situation of poverty and extreme poverty. The chapter closes with a brief methodological annex on updating ECLAC poverty estimates.

This edition of the *Social Panorama of Latin America* innovates in two ways relative to previous editions. First, it presents new estimates for the regional poverty aggregate and analyses the factors associated with poverty, constructed by ECLAC on the basis of an updated methodology using the most recent data available. Second, figures obtained from national measurements are used to describe the levels and recent trends of poverty in the individual countries, in most cases, drawing on the official statistics used to monitor this issue.

Different types of measurement are used for different purposes. The poverty figures produced by the countries constitute one of the main sources of information used by governments to formulate and monitor public policies; they are also of great interest to public opinion. In contrast, the poverty figures estimated by ECLAC are generated with the aim of achieving the greatest possible comparability for various analytical purposes; and, given their different objectives and uses, they certainly do not seek to replace the national figures to describe poverty levels and trends in each country. As both data sets display similar trends, it is considered appropriate to use the national figures to describe the behaviour of poverty in each country. Meanwhile, comparable poverty measurements are used to construct regional aggregates and analyse the drivers of poverty and how different population groups are affected by it. Thus, ECLAC data contribute to a regional diagnosis that prioritizes evidence-based analysis on poverty-reduction policies.

A. Income poverty trends²

The updated ECLAC estimates of poverty and extreme poverty confirm that both phenomena diminished considerably between 2002 and 2014 in the region as a whole, although at a decreasing rate. In 2015 and 2016, the figures reveal an increase in regional levels of poverty and extreme poverty, although the rates in most individual countries continued to decline.

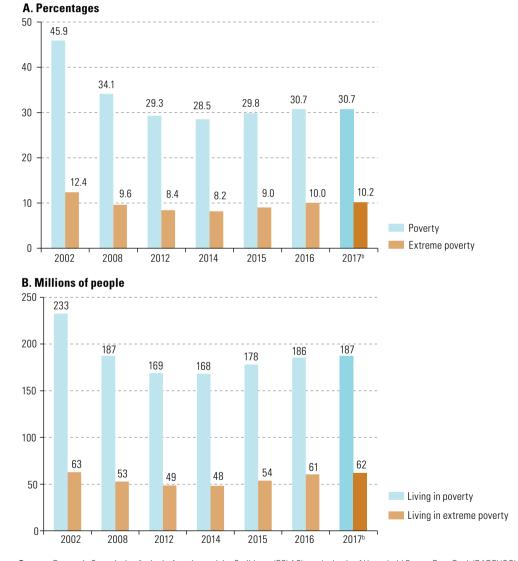
² The values of the regional income-poverty indicators reported in this edition of the Social Panorama of Latin America represent an updated series and differ from those reported in previous editions of this publication (on this point, see annex II.A1 of this chapter). ECLAC will publish its data by country during the first half of 2018, once the consultations with the respective countries have been concluded.

There were 186 million poor in Latin America in 2016, representing 30.7% of the population, while 61 million people or 10% of the population were living in extreme poverty.

Figure II.1

Latin America (18 countries).^a trends of poverty and extreme poverty, 2002-2017 (*Percentages and millions* of people) According to the most recent information, there were 186 million poor in Latin America in 2016, representing 30.7% of the population, while 61 million people or 10% of the population were living in extreme poverty (see figure II.1).

These figures reflect an increase starting in 2015. Until then, both poverty and extreme poverty had been on a downward path that began around 2002. In 2015 the poverty rate climbed by 1.3 percentage points, and in 2016 it rose by a further 0.9 points, which meant increases of 10 million and 8 million people living in poverty per year, respectively. Extreme poverty also increased, by 0.8 percentage points in 2015 and by a further 1 point in 2016, representing an additional 13 million people in extreme poverty altogether in those two years.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

^b The data for 2017 are projections.

The slowdown in poverty reduction in the region in this biennium contrasts with the trend in the earlier years of the century. According to ECLAC's historical analyses, the year 2002, when poverty and extreme poverty recorded their highest levels since 1990, marked the start of a downward path in both phenomena (ECLAC, 2016b). The Commission's updated estimates reveal that the number of people living in poverty fell sharply between 2002 and 2008, from 233 million to 187 million, and the number in extreme poverty decreased from 63 million to 53 million.³ The general poverty rate dropped by 2 percentage points per year in that period, while extreme poverty declined by 0.5 percentage points every year.

Between 2008 and 2014, the pace of poverty reduction faltered in two subperiods. In the first, between 2008 and 2012, poverty and extreme poverty declined by 1.2 and 0.3 points per year respectively. In the second subperiod, spanning 2012-2014, the poverty and extreme poverty rates fell by 0.4 and 0.1 percentage points per year, respectively.

Despite the recent increase at the regional level, a medium-term perspective shows progress in poverty reduction. Between 2002 and 2016, the poverty and extreme poverty rates decreased by 15.2 and 2.4 percentage points in total, corresponding to reductions of 1.1 and 0.2 points per year, respectively.

A comparison with 2008 also shows a positive balance in terms of general poverty, but not with respect to extreme poverty. While the 2016 the overall poverty rate was 3.4 percentage points lower than in 2008, the extreme poverty rate was 0.4 points higher. In terms of the absolute number of poor people, the comparison with 2008 is less encouraging. Due to population growth during the period analysed, the lowest poverty rate in 2016 corresponds to a similar number of poor people to the number in 2008. In the case of extreme poverty, the increase in the rate combined with total population growth produce a net increase of 8 million people in this situation.⁴

As was the case in other historical periods, the regional situation in 2015 and 2016 displays varies considerably across countries. Before describing this, it should be noted that, when household surveys are not available for a specific year or in time to be processed for inclusion in the relevant edition of the Social Panorama, as was the case in 2016 in the Bolivarian Republic of Venezuela, Brazil, Chile, Guatemala, Nicaragua and the Plurinational State of Bolivia, poverty levels are estimated by an indirect procedure that assumes, among other things, that the change in average household income is equal to the variation in per capita gross domestic product (GDP) of the year in question (see annex II.A1). In this case (2015-2016), the regional trends of poverty and extreme poverty are particularly influenced by the economic fortunes of two countries of considerable size for the region, the Bolivarian Republic of Venezuela and Brazil. As there are no comparable household survey data for 2016 in Brazil⁵ and for 2015 and 2016 in the Bolivarian Republic of Venezuela, projections of changes in poverty are influenced by per capita GDP contractions in Brazil (-4.4% in 2016) and in the Bolivarian Republic of Venezuela (-6.9% in 2015 and -10.8% in the following year).⁶ The increase in projected poverty in these countries outweighs the reduction in the rest of the region.⁷

Between 2002 and 2016, the poverty and extreme poverty rates decreased by 15.2 and 2.4 percentage points in total, corresponding to reductions of 1.1 and 0.2 points per year, respectively.

³ The updated ECLAC poverty measurement series spans 2002-2016, so comparable estimates for the 1990s are not available.

⁴ The population of Latin America saw strong growth in the period under analysis (19.1%), up from 506.7 million in 2002 to 603.5 million in 2016. This means that the increase in the population that has taken place since 2002 accounted for 29.7 million of the estimated 186 million poor in 2016 (30.7% of the population growth).

⁵ Since 2016, the National Household Survey (PNAD) in Brazil, which is the data source for measuring poverty in that country, has used a new version of the questionnaire that does not allow full comparability with the previous data series.

⁶ The projected trend is consistent with unofficial estimates made at the national level. See L. Spain, "Encuesta sobre Condiciones de Vida en Venezuela (ENCOVI)", Caracas, Universidad Católica Andrés Bello (UCAB), 2016 [online] www.fundacionbengoa.org/ noticias/2017/images/ENCOVI-2016-Pobreza.pdf.

⁷ If these two countries were not included in the regional estimate, there would be an overall decrease in total poverty of 1 percentage point and in extreme poverty of 0.5 percentage points in 2015 and 2016.

According to those national measurements, in that same period, the national poverty rates fell in 8 out of 11 countries. Thus, between 2014 and 2016, the aggregate regional trend for a subset of 16 countries is in line with the poverty reduction recorded in the official national figures.⁸

According to those national measurements, in that same period, the national poverty rates fell in 8 out of 11 countries. The largest reductions in absolute terms were registered in the Dominican Republic (6.4 percentage points), Panama (3.7 percentage points), Honduras (2.5 percentage points), Peru (2.0 percentage points) and Costa Rica (1.9 percentage points). Poverty also declined in Colombia and Uruguay, although by less than 1 percentage point. In the case of Mexico, the figures calculated using the 2016 statistical model, which sought to achieve the best comparability possible between the 2016 survey and the 2008-2014 series, indicate a reduction of 2.6 percentage points in the population with incomes below the welfare threshold between 2014 and 2016.⁹ In contrast, the poverty rate rose by 1.7 percentage points in Paraguay and by less than 1 point in El Salvador and Ecuador.

In countries where information is only available up to 2015, the figures report a reduction in poverty of 2.7 percentage points in Chile (between 2013 and 2015) and by less than 1 point in the Plurinational State of Bolivia (between 2014 and 2015).

The extreme poverty rate fell in 6 of the 11 countries for which information is available up to 2016. The largest reductions occurred in Honduras (2.1 percentage points), the Dominican Republic (2 points) and Panama (1.1 points). In Peru and Costa Rica, extreme poverty decreased by less than 1 percentage point in that period. In Mexico, the figures also indicate a reduction in the population below the minimum welfare threshold by 3.1 percentage points (a proxy for extreme poverty). In Uruguay, extreme poverty remained constant, while it grew by 1 percentage point in Ecuador and by less than 1 point in each of Colombia, El Salvador and Paraguay.

In the other countries with information available up to 2015, extreme poverty decreased in Chile (by 1 percentage point between 2013 and 2015) and in the Plurinational State of Bolivia (by less than half a point between 2014 and 2015), while it increased in the Bolivarian Republic of Venezuela (by 0.9 of a percentage point between 2014 and 2015).

In terms of future projections, the available information on the economic and distributive context suggests that there will be no appreciable changes in the region's poverty levels in 2017. In the countries with the largest populations, and thus a greater weight in the regional aggregate, variations in per capita GDP of more than 1%, higher inflation rates or significant distributive changes are not anticipated, so poverty and extreme poverty levels should be similar to those of 2016. However, as a result of population growth the number of people living in extreme poverty and in poverty is expected to increase by around 1 million.

⁸ Not all countries in the region have official income-poverty measures. In the case of Brazil, historically the figures published by the Institute of Applied Economic Research (IPEA) have been used, since the measures available use a methodology that is most similar to that employed by ECLAC (see [online] http://www.ipeadata.gov.br/ExibeSerie.aspx?serid=37814&module=M). In Mexico, the official poverty measurement is multidimensional, so the estimates published by the National Council for the Evaluation of Social Development Policy (CONEVAL) are used as an unofficial national reference, namely "population below the minimum welfare threshold", which is taken as a measure of "extreme poverty", and "population below the welfare threshold", which serves as a proxy for "total poverty".

⁹ The 2016 figures for Mexico correspond to the 2016 statistical model to ensure the continuity of the Socioeconomic Conditions Module (MCS) of the National Household Income and Expenditure Survey (ENIGH). This model was developed by the National Institute of Statistics and Geography (INEGI), to achieve the best comparability possible between the 2016 survey and the 2008-2014 series. See National Institute of Statistics and Geography (INEGI), "Modelo Estadístico 2016 para la continuidad del MCS-ENIGH", Aguascalientes, 2017 [online] http://www.beta.inegi.org.mx/proyectos/investigacion/eash/2016/.

Table II.1

Latin America (18 countries): poverty and extreme poverty rates, according to official national figures, 2012-2016^a (*Percentages of the population*)

•		Pov	erty			Extreme poverty			
Country	2012	2014	2015	2016	2012	2014	2015	2016	
Argentina				30.3				6.1	
Bolivia (Plurinational State of)	43.3	39.2	38.6		21.6	17.2	16.8		
Brazil ^b	15.9	13.3			5.3	4.2			
Chile	22.2	14.4	11.7		8.1	4.5	3.5		
Colombia	32.7	28.5	27.8	28.0	10.4	8.1	7.9	8.5	
Costa Rica ^c	20.6	22.4	21.7	20.5	6.3	6.7	7.2	6.3	
Dominican Republic	42.2	36.4	31.5	30.0	11.1	8.1	6.8	6.1	
Ecuador	27.3	22.5	23.3	22.9	11.2	7.7	8.5	8.7	
El Salvador ^c	34.5	31.8	34.9	32.7	8.9	7.6	8.1	7.9	
Guatemala		59.3				23.4			
Honduras	71.1	68.2	68.7	65.7	50.9	44.6	44.7	42.5	
Mexico ^d	51.6	53.2		50.6	20.0	20.6		17.5	
Nicaragua		29.6				8.3			
Panama	26.5	25.8	23.0	22.1	11.1	11.0	10.3	9.9	
Paraguay	31.4	27.2	26.6	28.9	7.4	5.5	5.4	5.7	
Peru	25.8	22.7	21.8	20.7	6.0	4.3	4.1	3.8	
Uruguay	12.4	9.7	9.7	9.4	0.5	0.3	0.3	0.3	
Venezuela (Bolivarian Republic of) ^c	21.2	32.6			6.0	9.5			

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official publications.

^a The figures correspond to the years as indicated, except in the case of Chile (2011, 2013 and 2015).

^b Corresponds to estimates made by the Institute of Applied Economic Research (IPEA). No data are available from this source for 2015. IDHM Radar figures for 2015 indicate that between 2014 and 2015 the proportion of the population with a per capita income of less than half the minimum wage rose from 22.1% to 24.3%. See United Nations Development Programme (UNDP)/Applied Economic Research Institute (IPEA)/João Pinheiro Foundation, "IDHM Radar", 2017 (August) [online] http://www.atlasbrasil.org. br/2013/data/rawData/RadarIDHM_VERSAO_Final.pdf.

^c Percentages of households.

^d Corresponds to the estimates made by the National Council for the Evaluation of Social Development Policy (CONEVAL) of "population below the minimum welfare threshold" and "population below the welfare threshold".

B. Factors driving the recent poverty trend

The link between the trends of the economy (illustrated by GDP) and the income that households actually receive depends on various structural and institutional factors that are fundamental elements for improving well-being and reducing poverty in individual countries. Not only was the reduction in poverty and extreme poverty rates between 2002 and 2014 linked to countries' economic growth, it was also the result of social protection and labour market policies developed in the region during the boom in commodity prices and before and after the 2008 global financial crisis (ECLAC, 2012 and 2015). As already indicated by ECLAC (ECLAC, 2015 and 2017a), the region must now continue to strengthen institutions and active policies, both distributive and redistributive, that will help maintain the declining trend of poverty and extreme poverty, and avoid costly setbacks during periods of low growth or decline, by fostering income growth in low-income households through the labour market and pension and public transfer systems.

The trend of poverty in Latin America over the last 15 years has been correlated with the phases of the business cycle in the region.

Figure II.2

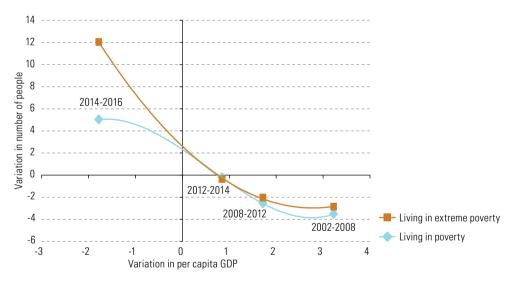
Latin America (18 countries).^a variation in the number of people living in poverty and extreme poverty and variation in per capita GDP, 2002-2016 (Annual equivalent percentage rates)

Labour market structure and policies, the provision of public services, social protection systems and poverty-reduction policies, the tax system and fiscal policy, among many other factors, have a direct effect on the level and distribution of the income that household's actually receive.

1. Link between per capita GDP, household income and poverty

At the aggregate level, the trend of poverty in Latin America over the last 15 years has been correlated with the phases of the business cycle in the region, as revealed by comparing the rate of change in the number of people living in poverty and the change in per capita GDP.

The initial years of the last decade saw vigorous growth of per capita GDP, driven by a high external demand for goods and services produced in the region, with rising prices that benefited the South American countries in particular. Between 2002 and 2008, when per capita GDP grew by 3.2% per year, the number of people in poverty fell at an average annual rate of 3.5%, while extreme poverty decreased by 2.9% per year. Between 2008 and 2014, the business cycle was in a downswing phase, in which two subperiods can be identified: the first, up to 2012, in which per capita GDP grew at an average rate of 1.7% (half of the rate recorded between 2002 and 2008); and the second, between 2012 and 2014, in which growth was 0.8% per year (again half of the rate corresponding to 2008-2012). In the first subperiod, the number of people living in poverty decreased by 2.6% per year, while the number in extreme poverty declined by 2% annually. Between 2012 and 2014, the number of people living in poverty and extreme poverty decreased at annual rates of just 0.2% and 0.4%, respectively. Lastly, in 2015 and 2016, the region's per capita GDP contracted by 1.8% each year, while the proportion of people living in poverty and extreme poverty grew by 5% and 12%, respectively (see figure II.2).



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG) and CEPALSTAT database.

^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The business cycle and poverty are linked through a broad range of factors. Households obtain income from various sources, mainly paid work, ownership of assets and transfers from social protection systems (which include programmes of cash transfers to poor households and non-contributory pensions), and transfers from other households. Accordingly, labour market structure and policies, the provision of public services, social protection systems and poverty-reduction policies, the tax system and fiscal policy, among many other factors, have a direct effect on the level and distribution of the income that household's actually receive and, consequently, determine the extent to which economic growth can generate better living conditions for the population.

Owing to the various institutional and public policy conditions prevailing in the countries of the region, similar levels or variations in GDP generate different levels and variations in household income. A comparison between the income reported in household surveys and GDP in national currency shows that in some countries household income represents more than 60% of GDP, while in others it is equivalent to 40% or less (see figure II.3). A comparison of annual variations in per capita GDP (in constant dollars in this case) and household income (expressed in real terms) is similarly heterogeneous (see figure II.4).

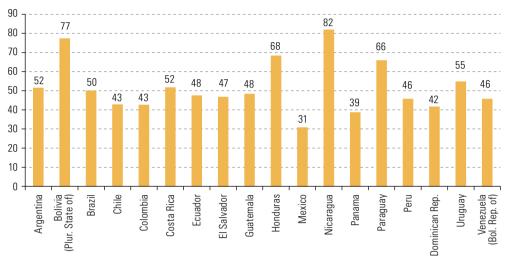


Figure II.3

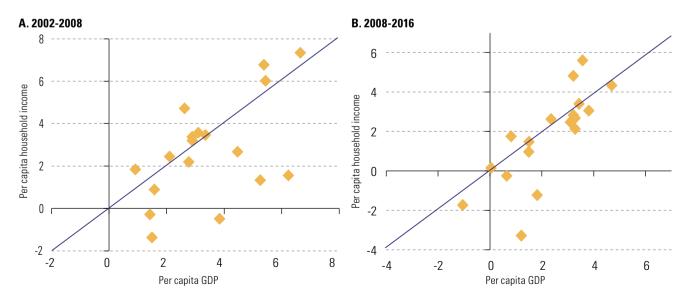
Latin America (18 countries): ratio of annual household income to per capita GDP, around 2016^a (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG) and CEPALSTAT database.

^a The data refer to 2016 except in the cases of the Bolivarian Republic of Venezuela (2014), Brazil (2015), Chile (2015), Guatemala (2014), Nicaragua (2014) and the Plurinational State of Bolivia (2015).

Figure II.4

Latin America (18 countries): variation in per capita household income and per capita GDP, 2002-2008 and 2008-2016^a (Annualized percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG) and CEPALSTAT database. ^a Corresponds to the annualized variation of per capita GDP in dollars at constant 2015 prices and the real variation in household income. The data correspond to 2002, 2008 and 2016 except as follows: Argentina (2003, 2008, 2016), the Bolivarian Republic of Venezuela (2002, 2008, 2014), Brazil (2002, 2008, 2015), Chile (2003, 2009, 2015), Ecuador (2001, 2008, 2016), El Salvador (2001, 2009, 2016), Guatemala (2000, 2006, 2014), Honduras (2001, 2009, 2016), Nicaragua (2001, 2009, 2014), Panama (2001, 2008, 2016) and the Plurinational State of Bolivia (2002, 2008, 2015).

Box II.1 Methodology for analysing the effect of variations in the level and distribution of income among households living in poverty

2. Importance of the level and distribution of income in households living in poverty

When measuring income poverty, the level and evolution of the poverty rate can be expressed as the sum of two factors: changes in income that affect all households in a generalized way and changes in income that affect households differently according to their position in the income distribution. The first factor, here referred to as the "average income effect" (or "growth effect"), measures changes in the poverty rate that stem strictly from changes in average household income. The second factor, the "distribution effect," indicates how distributive changes affect the poverty rate (see box II.1).

According to the traditional methodology for measuring poverty, based on income insufficiency, a country's poverty rate at a given moment is determined by three elements: the poverty line, average income and the structure of the income distribution. Hence, if the poverty line is kept constant in real terms, changes in the poverty indicator can be analysed in terms of variations in average income and in the income distribution.

According to Datt and Ravallion (1992), a poverty indicator can be calculated using the initial-period income distribution and the average income level of the end period. The difference between this indicator and the initial-period poverty rate can be interpreted as a growth effect. It is also possible to calculate the poverty rate that corresponds to the average income of the initial period, but with an income distribution similar to that of the final period. The difference between this indicator and the initial poverty rate is the distribution effect. Both effects can also be calculated by exchanging the initial and end periods.

In formal terms, if $H(y_t, d_t)$ is the poverty indicator for period t, determined by average income (y_t) and the shape of the distribution (d_t) , the growth and distribution effects can be decomposed as follows:

$$H(y_2, d_2) - H(y_1, d_1) = \underbrace{\left[H(y_2, d_1) - H(y_1, d_1)\right]}_{\text{Growth effect}} + \underbrace{\left[H(y_1, d_2) - H(y_1, d_1)\right]}_{\text{Distribution effect}} + R$$

In this decomposition, the strength of each effect depends on the base year used in the comparison (initial or final year), and it produces an unexplained residual. Both obstacles can be overcome by averaging the calculated effects using each of the two base years respectively (Kakwani, 1997), which is the procedure used to perform the calculations in this chapter.

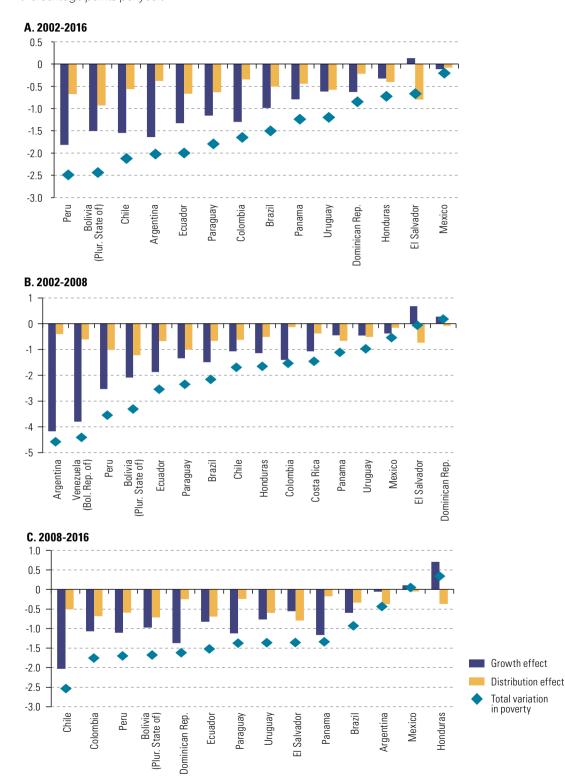
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of G. Datt and M. Ravallion, "Growth and redistribution components of changes in poverty measures", *Journal of Development Economics*, vol. 38, No. 2, Amsterdam, Elsevier, 1992; N. Kakwani, "On measuring growth and inequality components of changes in poverty with application to Thailand", *Discussion Paper*, Sydney, University of New South Wales, 1997.

Although the strength of the two effects has varied in recent years, it shows the predominance of the growth in average income in cases of greater poverty reduction, but also the importance of improvements in the income distribution to help reduce poverty.

Analysis of the growth and distribution effects on poverty is particularly relevant for describing structural trends, which span relatively long periods. In this case, this form of decomposition is applied to 2002-2016, divided into two subperiods — 2002-2008 and 2008-2016.

In general, average income growth had the greater effect in all countries in which poverty was reduced by 1 percentage point or more per year, both in the whole period and in the two subperiods. Average income growth accounted for an average of 71% of the variation observed between 2002 and 2016, and even more in Argentina, the Bolivarian Republic of Venezuela, Chile, Colombia and Peru. In the other countries, the distribution effect accounted for over 30% of the poverty reduction, approaching 40% in the Plurinational State of Bolivia and 50% in Uruguay (see figure II.5).

Latin America (selected countries): variation in poverty and the growth and distribution effects, 2002-2016, 2008-2012 and 2012-2016^a (*Percentage points per year*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG).

^a Data refer to 2002, 2008 and 2016 except in the cases of Argentina (2003, 2008, 2016), the Bolivarian Republic of Venezuela (2002, 2008, 2014), Brazil (2002, 2008, 2015), Chile (2003, 2009, 2015), Ecuador (2001, 2008, 2016), El Salvador (2001, 2009, 2016), Guatemala (2000, 2006, 2014), Honduras (2001, 2009, 2016), Nicaragua (2001, 2009, 2014), Panama (2001, 2008, 2016) and the Plurinational State of Bolivia (2002, 2008, 2015).

The relative strength of the two effects varied between the first and the second half of the periods analysed. Up to 2008, the growth of household average income predominated in all countries where poverty fell appreciably, except for Panama and Uruguay. This trend persisted in the most recent period, in which El Salvador was the only exception.

Nonetheless, between 2008 and 2016, the growth slowdown referred to in section A enhanced the relative importance of the distribution effect in some of the countries where poverty fell by the most, such as Colombia, Ecuador, El Salvador, the Plurinational State of Bolivia and Uruguay.

Thus, recent evidence confirms that distributive improvements are very important for reducing poverty. Although in some periods, particularly high-growth years, the general increase in income has driven poverty reduction, policies that favour income growth among the poorest are essential to continue reducing situations of need or to avoid setbacks in this area.

3. Contribution of income sources

The behaviour of the poverty and extreme poverty levels is directly related to the way in which the incomes of households in the lower part of the distribution vary. It is therefore interesting to know how the main sources of income contributed to the variation in total income, including labour income, public and private transfers and other income (mainly from the ownership of assets and the rent imputed for the use of owner-occupied housing).¹⁰

Between 2002 and 2008, the poverty reduction observed in most of the region's countries was mainly due to an increase in labour income. Of the 15 countries in which there was a significant increase in income among poor households, labour income accounted for three quarters or more of the increase in eight cases. Transfers (including pensions, public subsidies and contributions from other households) made a smaller contribution to income growth in poor households, except in Uruguay, where they played a prominent role (see figure II.6).

Although paid work was again the predominant source of income growth among poor households in 2008-2016, especially in Colombia, Ecuador, El Salvador and the Plurinational State of Bolivia, the other income sources played a greater role than in the earlier period. Income transfers had an appreciable effect on reducing poverty in Argentina (70%), Panama (54%), Paraguay (30%) and Uruguay (33%). Other income had a more visible effect than in the earlier period, mainly owing to an increase in the share of imputed rent in the income of households that own the home in which they reside.

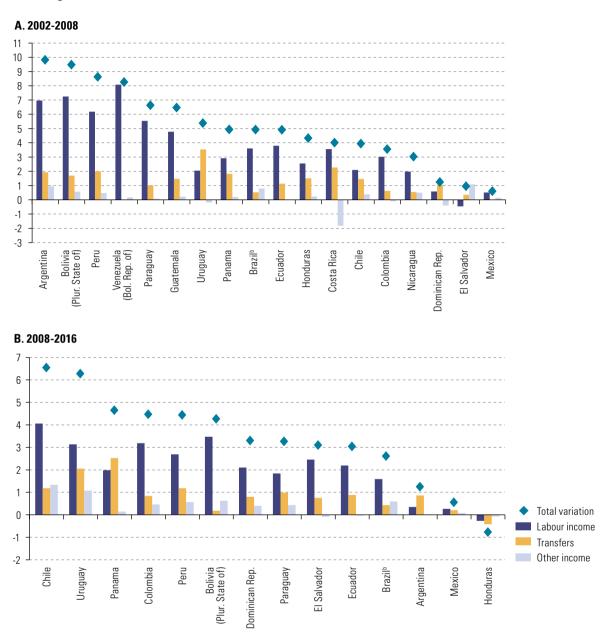
Per capita labour income in poor households increased considerably between 2002 and 2008, outpacing the growth recorded in 2008-2016 in most countries, especially in Argentina, Brazil, Paraguay and Peru. In the cases of Chile, Colombia, the Dominican Republic, El Salvador, the Plurinational State of Bolivia and Uruguay, per capita labour income grew fastest in the second period.

The variation in income sources can reflect changes in the amount received by each income recipient or in the proportion of the population that receives income from a given source. In the case of labour income, practically all of the increases originated in a mix of these two factors, albeit in different combinations in the two periods analysed, both between countries and between periods for the same country (see table II.2).

Per capita labour income in poor households increased considerably between 2002 and 2008, outpacing the growth recorded in 2008-2016 in most countries.

¹⁰ To ensure analytical consistency, the variation in income between two years is calculated for a constant percentage of households, equal to the base-year poverty rate.

Latin America (selected countries): contribution of each income source to the growth of total income among poor households, 2002-2008 and 2008-2016^a (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG).

^a Data refer to 2002, 2008 and 2016 except in the cases of Argentina (2003, 2008, 2016), the Bolivarian Republic of Venezuela (2002, 2008, 2014), Brazil (2002, 2008, 2015), Chile (2003, 2009, 2015), Ecuador (2001, 2008, 2016), El Salvador (2001, 2009, 2016), Guatemala (2000, 2006, 2014), Honduras (2001, 2009, 2016), Nicaragua (2001, 2009, 2014), Panama (2001, 2008, 2016) and the Plurinational State of Bolivia (2002, 2008, 2015).

^b In Brazil, social programme transfers are considered "other income", including those made as part of the Bolsa Família programme.

Table II.2

Latin America (18 countries): variation in per capita household labour income, labour income per occupied person and employment rate, among poor households, 2002-2008 and 2008-2016^a

		2002-2008			2008-2016			
Country	Labour income per capita	Labour income per occupied person	Employment rate	Labour income per capita	Labour income per occupied person	Employment rate		
	(Annual pe	ercentages)	(Percentage points per year)	(Annual percentages)		(Percentage points per year)		
Argentina	12.9	11.4	0.4	0.7	0.3	0.1		
Bolivia (Plurinational State of)	9.1	6.4	0.8	4.4	4.3	0.0		
Brazil	5.9	4.4	0.4	2.7	3.1	-0.1		
Chile	3.3	3.2	0.0	6.7	4.0	0.7		
Colombia	3.9	3.1	0.2	4.2	2.3	0.6		
Costa Rica	5.1	2.6	0.6					
Dominican Republic	0.8	-0.2	0.2	2.9	1.9	0.3		
Ecuador	5.2	5.5	-0.1	3.1	2.6	0.1		
El Salvador	-0.7	-0.7	0.0	3.7	2.0	0.4		
Guatemala	6.3	2.7	0.9					
Honduras	3.7	1.1	0.7	-0.4	-0.9	0.2		
Mexico	0.7	0.8	0.0	0.4	-2.1	0.9		
Nicaragua	2.5	1.3	0.3					
Panama	4.4	2.0	0.5	3.4	2.8	0.1		
Paraguay	7.6	4.7	0.8	2.6	1.8	0.2		
Peru	8.0	4.1	1.2	3.7	2.9	0.3		
Uruguay	3.4	0.4	0.8	6.0	5.4	0.2		
Venezuela (Bolivarian Republic of)	11.5	9.4	0.6					

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG).

^a Data refer to 2002, 2008 and 2016 except in the cases of Argentina (2003, 2008, 2016), the Bolivarian Republic of Venezuela (2002, 2008, 2014), Brazil (2002, 2008, 2015), Chile (2003, 2009, 2015), Ecuador (2001, 2008, 2016), El Salvador (2001, 2009, 2016), Guatemala (2000, 2006, 2014), Honduras (2001, 2009, 2016), Nicaragua (2001, 2009, 2014), Panama (2001, 2008, 2016) and the Plurinational State of Bolivia (2002, 2008, 2015).

Poverty, and extreme poverty in particular, have a severe impact on younger people. In the birth-to-14-year age group, both rates are much higher than in the rest of the population, which means that this group is overrepresented in the total number of people living in poverty and, in particular, those living in extreme poverty.

C. Poverty and social inequality trends

Poverty does not affect all people alike. According to an analysis based on some of the main drivers of social inequality, it affects children, adolescents and young people disproportionately, seriously compromising their chances for future development. Among people of productive age, poverty affects women more than men. With regard to where the population lives, although poverty levels have fallen in both urban and rural areas in the last 14 years, they remain very high in the latter.

According to ECLAC (2016a), social inequalities need to be analysed by considering the population groups that are particularly affected by adverse situations. Factors such as age, gender and place of residence are crucial for identifying shortfalls in various dimensions of well-being, such as poverty and employment. Data from recent household surveys afford an up-to-date view of poverty and its evolution at the regional level, based on some of the central drivers of social inequality.

Poverty, and extreme poverty in particular, have a severe impact on younger people. In the birth-to-14-year age group, both rates are much higher than in the rest of the population, which means that this group is overrepresented in the total number of people living in poverty and, in particular, those living in extreme poverty.¹¹

¹¹ This measurement, which is obtained by analysing the age structure of members of households identified as poor, complements other measures that analyse child poverty from different analytical perspectives. Some of these perspectives are discussed in ECLAC/UNICEF (2010).

In 2002, the poverty rate among the under-15s was above 60% regionwide, almost double the rate among persons aged 60 years and over, who displayed the lowest rate. In the case of extreme poverty, the under-15s rate is also twice that of the rest of the population.

The poverty reduction achieved in 2002-2016 benefited all age groups. Nonetheless, although poverty decreased by 13.5 percentage points among children and adolescents, the absolute decline was very similar in the 15-29 and 30-59-year age groups, and higher among adults aged 60 or over (15 percentage points). In relative terms, the incidence of poverty fell by slightly more than one fifth from the level recorded in 2002 among children and adolescents (the 0-14-year age group), while it dropped by almost half among older adults.

As a result of this uneven trend, 47 out of every 100 children under 15 remained poor in 2016; and 17 of them were living in extreme poverty. This compromises their chances for personal development and, consequently, impairs the future development of their countries and the region as a whole (see figure II.7).

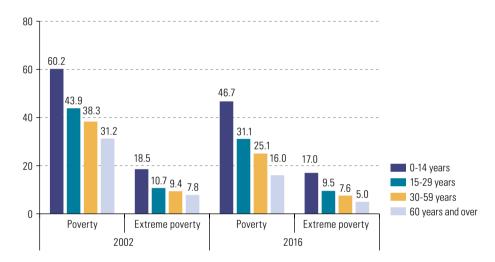


Figure II.7

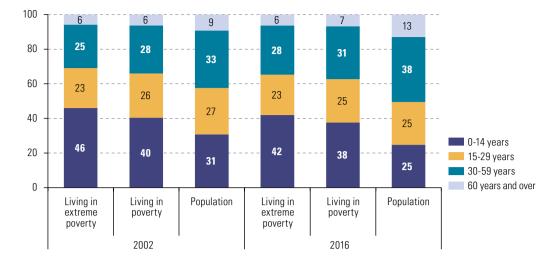
Latin America (18 countries):^a poverty and extreme poverty rates by age group, 2002 and 2016 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

An analysis of the age structure of the population at large, compared to that of people living in poverty, shows that children and adolescents are systematically overrepresented in poverty and extreme poverty situations in the region. For example, while children under 15 represented 25% of the population of Latin America in 2016, they accounted for 38% of people living in poverty and 42% of those in extreme poverty (see figure II.8).

The analysis in terms of poverty rates should not obscure a fact that emerges when considering variations in the totals of the different age groups and how they have varied in the selected period. In 2016 the number of children and adolescents aged from 0 to 14 years living in poverty is estimated to have fallen by 24 million. This reflected the combination of two processes: an improvement in well-being, which translated into a lower incidence of poverty in the group and explained approximately 71% of the variation; and population ageing, which reduced this group's share in the total population and accounted for 29% of the total variation.

Latin America (18 countries):^a share of each age group in the population and in the total number of people living in poverty and extreme poverty, 2002 and 2016 (*Percentages*)

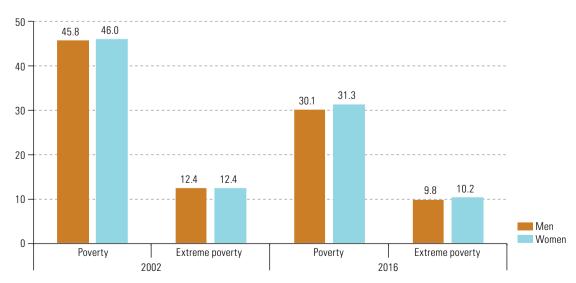


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

Gender differences in poverty and extreme poverty are the second driver of social inequality considered for the analysis. At the aggregate level, poverty and extreme poverty rates do not display significant gender disparities. In 2016, the poverty rate among women (31.3%) was 1.2 percentage points higher than that of men (30.1%), while the corresponding extreme poverty rates differed by 0.4 points (10.2% and 9.8%, respectively). While these figures represent a fall in poverty levels since 2002, the gender gap has widened from just 0.2 percentage points in that year, and the extreme poverty rate was the same for both sexes (see figure II.9).

Figure II.9

Latin America (18 countries).^a poverty and extreme poverty rates by gender, 2002 and 2016 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG).

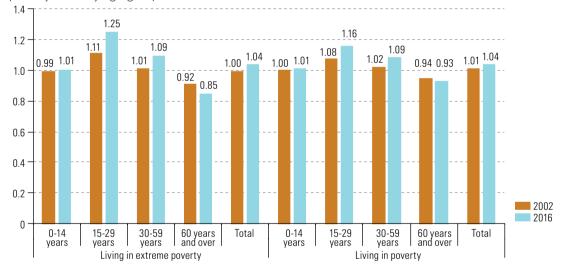
^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The differences in poverty rates between men and women are brought into focus when analysing the different stages of the life cycle. The incidence of poverty is higher among women of working age, in the 15-29 and 30-59-year age brackets. When evaluating the gender poverty gap, it is helpful to express gender differences synthetically through an indicator that calculates the ratio between the female and male rates.¹²

The index for the entire population reveals a slight increase in feminization, rising from 1.01 to 1.04 in the case of general poverty and from 1.00 to 1.04 for extreme poverty. This variation was mainly due to changes in the intermediate age groups (adolescents and young people from 15 to 29 years old and adults aged 30 to 59). In 2016, the index attained a level of 1.16 in the 15-29-year age group and 1.09 among 30-59-year-olds. This shows that the situation has deteriorated since 2002, when the indices were 1.08 and 1.02, respectively. Among the youngest, the index was barely above 1.00, while among the elderly the situation was relatively worse for men, with an index value of 0.93. In these two groups there were hardly any changes in the period analysed. In the case of extreme poverty, the femininity indices are very similar to those of general poverty, with a greater incidence in the 15-29-year-age group and lower among individuals aged 60 or over (see figure II.10).

Figure II.10

Latin America (18 countries):^a ratio between women and men of poverty and extreme poverty rates, by age group, 2002 and 2016



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The fact that the femininity indices of general and extreme poverty among persons aged 60 or over have remained constant and decreased, respectively, unlike trends among the younger age groups, could be reflecting the role played by non-contributory pension systems, for which coverage increased during the period analysed to gain a significant presence, especially among women.¹³

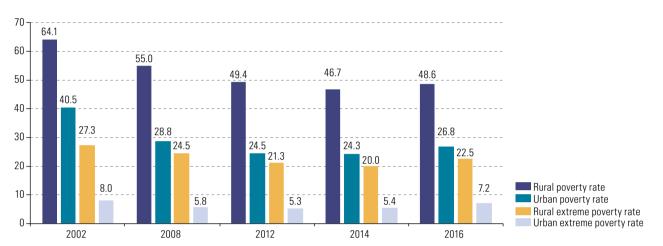
¹² This index is used by ECLAC to measure the femininity of poverty among the working-age population (20 to 59 years). The index, which is calculated as the ratio between the female and male poverty rates, is used to evaluate the degree to which women are over- or under-represented in the total population living in poverty. It is also used here to analyse the differences in all age groups and with respect to the total population.

¹³ The coverage of pensions of this type and their effects on welfare are discussed in chapters I, III and IV.

Lastly, although poverty and extreme poverty rates are trending down in both urban and rural areas, there are differences. In urban areas, both poverty and extreme poverty decreased between 2002 and 2012, and then flatlined until 2014; in rural areas, general and extreme poverty decreased in all subperiods until 2014. After that, they both increased until 2016 in urban and rural areas alike, although slightly faster in the former (see figure II.11).

Figure II.11

Latin America (18 countries):^a poverty and extreme poverty rates by geographical area, 2002-2016 *(Percentages)*



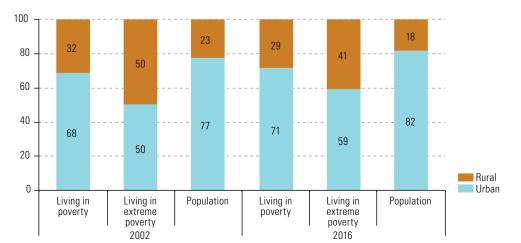
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

As seen in the other drivers of social inequality, there is evidence that the well-being of people living in the rural areas of Latin American countries has improved. Nonetheless, the rural population has declined faster than the number of people living in poverty in rural areas (see figure II.12). This implies a greater "ruralization" of poverty, as measured by an index similar to that used to analyse gender differences. This index rose from 1.59 to 1.89 between 2002 and 2016, indicating that poverty as a whole has become relatively more prevalent in rural areas. In contrast, extreme poverty has become less "ruralized", as the index fell from 3.42 in 2002 to 3.14 in 2016, although its level of ruralization is still much higher than that of general poverty).



Latin America (18 countries):^a proportion of rural and urban residents in the total population and in the total number of people living in poverty and extreme poverty, 2002-2016 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

D. Sufficiency and adequacy of labour income and pensions

The links between poverty and pension systems are manifold. The majority of people who are paid for their work are unable to generate enough labour income on their own to ensure their well-being and that of their families, which limits the contributions they can make to guarantee a sufficient pension in the future. Many occupied persons, particularly women, are not even paid enough to escape poverty. However, between 2002 and 2016, the number of pension recipients receiving amounts below the poverty line decreased.

1. Poverty and labour income

As indicated in the previous chapter, the growth of labour income in Latin America was one of the main factors behind the decrease in poverty in different subperiods. Nevertheless, there are still a significant number of occupied persons earn incomes below the minimum thresholds for meeting basic needs —both of individuals and households—, which affects not only their well-being today, but also their possibilities of receiving sufficient pensions in the future. At the same time, it clearly indicates the need for significant levels of intra- and intergenerational solidarity in pension systems, in order to move towards greater levels of benefit sufficiency, increase coverage and guarantee the systems' financial sustainability.

This analysis takes into consideration all occupied persons aged 15 or older in paid and unpaid work. These include employers, wage, self-employed and domestic workers, as well as unpaid workers. The latter category, composed mainly of people who work without any kind of remuneration in businesses owned by the household or a family member, has a strong gender bias towards women.

To analyse earned income, two thresholds, measured as multiples of the poverty line, are set and used as comparable well-being parameters across the different countries. The first threshold —income below the poverty line— indicates those occupied persons whose salary or self-employment income is not enough to lift them out of poverty. The second threshold —income four times below the poverty line— specifies situations in which the income of a single worker, male or female, is insufficient to keep an average-sized household out of poverty.¹⁴ Unpaid workers make up a separate group, to draw attention to a phenomenon with its own specific characteristics, such as the aforementioned gender bias and almost non-existent social security affiliation.

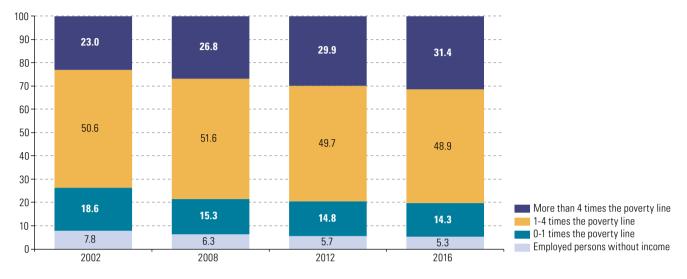
On average in Latin America in 2016, a total of 19.6% of occupied persons were either not paid for their work (5.3%) or received incomes below the poverty line (14.3%) In the same year, almost 7 out of 10 occupied persons (68.6%) earned less than the threshold of four times the poverty line, while 31.4% earned more than that. The situation has improved steadily since 2002, when 26.4% of occupied persons received income below the poverty line, including 7.8% who were not paid for their work. That year, almost 8 out of 10 occupied persons (77.0%) earned less than the threshold of four times the poverty line, 10 percentage points more than in 2016. A drop in the number of unpaid workers or of those whose income is below the poverty line, coupled with the increase in the group that receives income equal to or greater than four times the poverty line, led to a change in the income structure (see figure II.13)

On average in Latin America in 2016, a total of 19.6% of occupied persons were either not paid for their work (5.3%) or received incomes below the poverty line (14.3%) In the same year, almost 7 out of 10 occupied persons (68.6%) earned less than the threshold of four times the poverty line.

¹⁴ The average size of households in Latin America has decreased over the course of the period under consideration, down from 4.2 people in 2002 to 3.6 in 2016. The threshold has been set at four times the poverty line, as it represents the average for the period.

Latin America (18 countries):^a labour income of occupied persons aged 15 years or older, as multiples of the poverty line, 2002, 2008, 2012 and 2016

(Percentages)

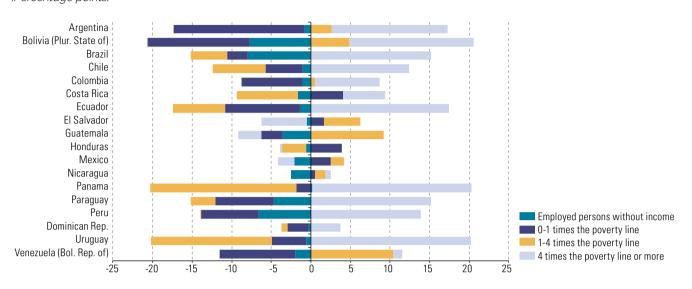


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The improvement seen in the region was the result of the progress made in the vast majority of countries. In Argentina, the Bolivarian Republic of Venezuela, Colombia and the Plurinational State of Bolivia, occupied persons moved from lower income groups (unpaid workers or with income below the poverty line) to income brackets between one and four times the poverty line or even greater. In Brazil, Chile, the Dominican Republic, Ecuador, Paraguay, Peru and Uruguay, the trend was even more positive, as the number of occupied persons in all groups with income below four times the poverty line fell and the number of occupied persons earning more than this threshold increased. In Chile and Uruguay, the most dramatic fall was in the group with an income of between one and four times the poverty line; in the Dominican Republic, Ecuador, Paraguay and Peru, the largest decrease occurred in the group of occupied persons who received incomes below the poverty line, while in Brazil the sharpest drop was among unpaid workers (see figure II.14)

Thus, the proportion of occupied persons whose income was below four times the poverty line fell significantly in several countries. This was the case in Argentina, Brazil, Chile, Ecuador, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay, where this proportion shrank by more than 10 percentage points between 2002 and 2016 (see figure II.15)

Latin America (18 countries): variation in the labour income of occupied persons aged 15 years or older, as multiples of the poverty line, between 2002 and 2016^a (*Percentage points*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG). ^a Data are for 2002 and 2016, except in the case of Argentina (2003 and 2016), the Bolivarian Republic of Venezuela (2002 and 2014), Brazil (2002 and 2015), Chile (2003 and 2013), Ecuador (2001 and 2016), El Salvador (2001 and 2016), Guatemala (2000 and 2014), Nicaragua (2001 and 2014), Panama (2001 and 2016) and the Plurinational State of Bolivia (2002 and 2015).

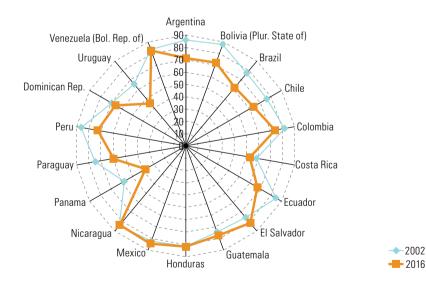


Figure II.15 Latin America (18 countries):

(18 countries): proportion of occupied persons aged 15 years or older who receive income below four times the poverty line, 2002 and 2016^a (*Percentages*)

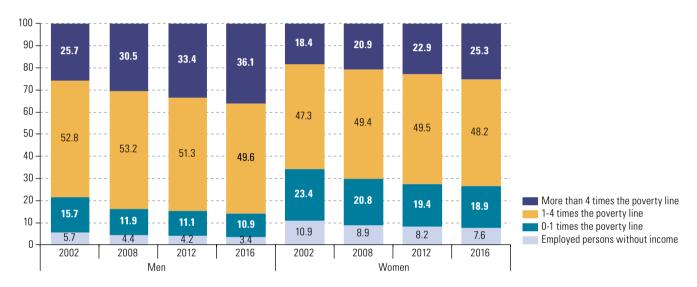
Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Data are for 2016, except in the case of the Bolivarian Republic of Venezuela (2014), Brazil (2015), Chile (2015), Guatemala (2014), Nicaragua (2014) and the Plurinational State of Bolivia (2015).

The gender bias in the labour markets of the countries of the region is also reflected in remuneration levels: men are better paid for their participation in the labour force. In 2016, of all occupied women aged 15 or older, 7.6% were unpaid. A further 18.9% received incomes below the poverty line, so more than a quarter of occupied women (26.5%) did not receive sufficient income to stay out of poverty on their own. The gap between men and women was more than 12 points: 14.3% of occupied men received income that was below the poverty line (3.4% were unpaid and the remaining 10.9% received incomes below the poverty line). Furthermore, 74.7% of women did not earn four times the poverty line for their work, while 63.9% of men did not.

Figure II.16

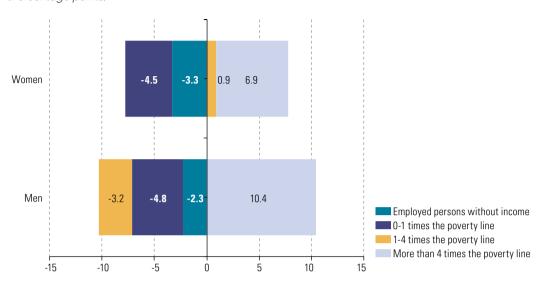
Latin America (18 countries):^a labour income of occupied persons aged 15 years or older, as multiples of the poverty line, 2002, 2008, 2012 and 2016 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey DataBank (BADEHOG). ^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

Between 2002 and 2016, the improvement in the income of occupied persons proved more favourable to men than women. The percentage of occupied persons whose incomes were greater than four times the poverty line not only increased more among men (10.4 percentage points, compared to 6.9 percentage points among women), but, moreover, this occurred in parallel to the decrease in the proportion of men in the three lower income groups. Among women, the smallest increase of 6.9 percentage points coincided with a rise in the incidence of occupied women who earned between one and four times the poverty line. Put simply, during the period under analysis and for the income brackets under consideration, the structure of labour income shifted more towards higher incomes among men than among women (see figure II.17)

Latin America (18 countries):^a variation in the labour income of occupied persons aged 15 years or older, as multiples of the poverty line, between 2002 and 2016^b (*Percentage points*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

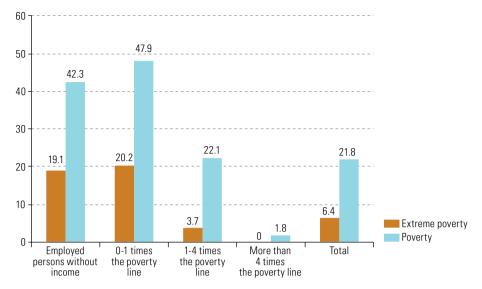
^b Data are for 2002 and 2016, except in the case of Argentina (2003 and 2016), the Bolivarian Republic of Venezuela (2002 and 2014), Brazil (2002 and 2015), Chile (2003 and 2015), Ecuador (2001 and 2016), El Salvador (2001 and 2016), Guatemala (2000 and 2014), Nicaragua (2001 and 2014), Panama (2001 and 2016) and the Plurinational State of Bolivia (2002 and 2015).

Lastly, receiving labour income that is below a certain threshold not only affects the well-being of workers and that of their households, but also their ability to generate sufficient pensions for when they retire (for which, in addition, they should be in occupations that meet the legal requirements for contributing to and later drawing a contributory pension). One way to analyse the sufficiency of this income is by measuring the incidence of poverty and extreme poverty among occupied persons aged over 15 according to their labour income. There may be occupied persons with incomes below the poverty line in both poor and non-poor households, depending on the number of workers and sources of income available to members of the household. Given the importance of labour income in total household earnings, a positive correlation between poverty and low labour incomes is to be expected.

The proportion of households in situations of extreme poverty where one member receives income above the poverty line is very low: 3.7% among occupied persons who earn between one and four times the poverty line and none among occupied persons whose incomes are above four times the poverty line. However, when labour incomes are below this threshold, the incidence of extreme poverty shoots up to 19.1% among unpaid occupied persons and 20.2% among those whose income is below the poverty line.

The proportion of households in situations of extreme poverty where one member receives income above the poverty line is very low: 3.7% among occupied persons who earn between one and four times the poverty line and none among occupied persons whose incomes are above four times the poverty line.

Latin America (18 countries):^a incidence of poverty and extreme poverty among occupied persons aged 15 or older, as multiples of the poverty line, based on their labour income, 2016^b (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, the Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

^b Data are for 2016, except in the case of the Bolivarian Republic of Venezuela (2014), Brazil (2015), Chile (2015), Guatemala (2014), Nicaragua (2014) and the Plurinational State of Bolivia (2015).

Poverty and pension income 2.

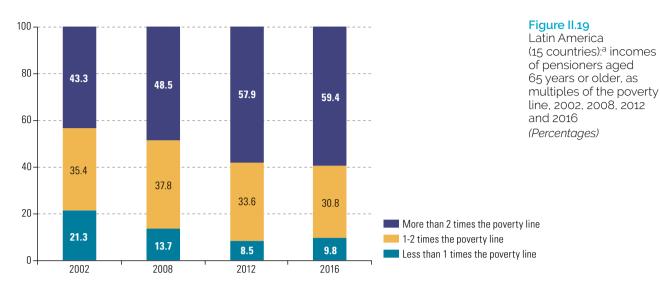
In the previous section, the income level of occupied persons was measured as multiples of poverty lines. This section adopts a similar approach, analysing income received from old-age, disability and survivor pensions according to three thresholds: below the poverty line, between the equivalent of the poverty line and two times the poverty line, and higher than two times the poverty line.¹⁵ The selection criteria for the first threshold is the same as that used for occupied persons identifying incomes from pension that are not enough to keep the beneficiary out of poverty. The second threshold is set for situations in which pensions are insufficient to keep beneficiaries and one additional person out of poverty.¹⁶ In all cases, the data provided refer to persons 65 years or over.

Based on this premise, in 2016 10% of pensioners received income that was below the poverty line; 33% received income that was between the equivalent of the poverty line and two times the poverty line; and 57% reported receiving income that was more than two times the poverty line. This represented an improvement over 2002, when 22.5% of pensioners —almost one quarter of the population group— had pensions below the poverty line, 36% received a sum between the equivalent of the poverty line and two times the poverty line and 41% declared income more than two times the poverty line (see figure II.19).

16 This criterion takes into account the income that allows persons who live on their own or couples whose adult children no longer live in the household to stay out of poverty.

In 2016 10% of pensioners received income that was below the poverty line; 33% received income that was between the equivalent of the poverty line and two times the poverty line; and 57% reported receiving income that was more than two times the poverty line.

¹⁵ Since the aim is to assess the sufficiency of the benefits paid by contributory pension systems, age groups in which there are no pension recipients have not been included. Likewise, contributory pensions are only considered for those countries that distinguish them from non-contributory pensions in the survey. For the other countries, it is assumed that pensions are mainly contributory.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

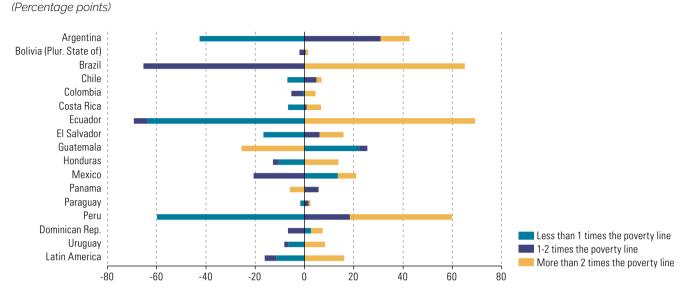
There has been a trend towards increasing pension benefits in all the countries in the region, with a few exceptions. Argentina, Chile, the Dominican Republic, Ecuador, El Salvador, Honduras, Peru and Uruguay recorded declines in the numbers of persons receiving income below the poverty line, along with an increase in numbers in the other two thresholds. In Brazil and Colombia, the improvement was reflected in a drop in pensions that are between the poverty line and two times the poverty line and an increase in pensions that are more than two times the poverty line.¹⁷ In the Plurinational State of Bolivia and Paraguay, the variation was of little significance, while in Mexico and the Dominican Republic the variation was mixed and in Panama the structure of pension income shifted towards lower incomes¹⁸ (see figure II.20).

As in the case of labour income, there is a gender bias in terms of the pension benefits received: there is a greater number of women in the lowest income brackets. However, between 2002 and 2016, the gender gap narrowed slightly, probably because women make up a larger share of direct beneficiaries of pensions as their participation in the labour market has soared in the last few decades. As a result, in the period under review and for the income brackets considered, the shift of the structure of pension income towards higher incomes was more pronounced for women than for men (see figures II.21 and II.22).

¹⁷ The case of Brazil is unusual in that there is a minimum value for pensions that is equivalent to the minimum wage. In addition, the minimum wage increased significantly in real terms during the period under review

¹⁸ Eight countries of the region have detailed information on non-contributory pensions. When considered together with contributory pensions, there are two effects: one the one hand, there is a spike in coverage; on the other, the structure of pension income shifts towards lower incomes, particularly in groups whose income is below the poverty line or between the poverty line and two times the poverty line, depending on the country.

Latin America (15 countries): variation in incomes of pensioners aged 65 years or older, as multiples of the poverty line, between 2002 and 2016^a

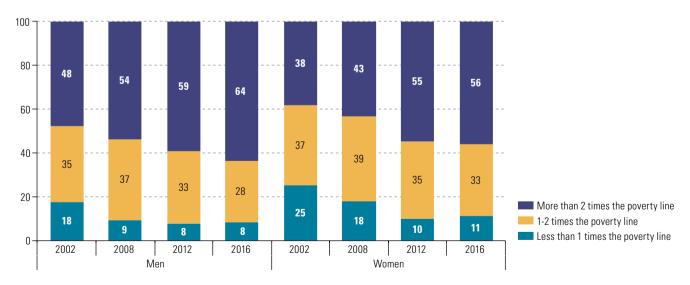


Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG). ^a Data are for 2002 and 2016, except in the case of Argentina (2003 and 2016), Brazil (2002 and 2015), Chile (2003 and 2015), Ecuador (2001 and 2016), El Salvador (2001 and 2016), Panama (2001 and 2016) and the Plurinational State of Bolivia (2002 and 2015).

Figure II.21

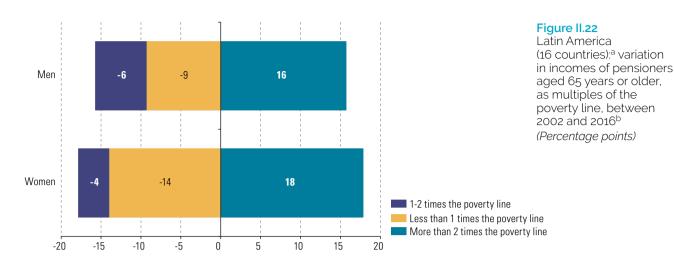
Latin America (16 countries)^a income levels of pensioners aged 65 years or older, as multiples of the poverty line, by sex, 2002, 2008, 2012 and 2016

(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, ElSalvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

^b Data are for 2002 and 2016, except in the case of Argentina (2003 and 2016), Brazil (2002 and 2015), Chile (2003 and 2015), Ecuador (2001 and 2016), El Salvador (2001 and 2016), Guatemala (2000 and 2014), Panama (2001 and 2016) and the Plurinational State of Bolivia (2002 and 2015).

The receipt of pension income below certain thresholds has an impact on the well-being of recipients and their households. While pensions are not the only source of income of persons aged 65 or over, the incidence of poverty and extreme poverty in this age group is measured by the level of their pension income against poverty lines. Figure II.23 shows that in 2016, the incidence of poverty of persons aged 65 or over receiving pension benefits below the poverty line was 29.9%. For pensioners whose benefits were between the equivalent of the poverty line and two times the poverty line, the incidence of poverty was 8.4%; for those whose pensions were more than two times the poverty line, the incidence was just above 1%. As in the case of occupied persons, pensioner poverty is the product of the make-up of the household and the income each member of the household receives from different sources. Between 2002 and 2016, there was a marked improvement, in particular among pensioners receiving income between the equivalent of the poverty line and two times the poverty line: the incidence of poverty in this group fell by more than 12 percentage points in 12 years.

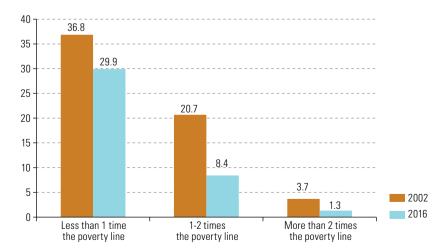


Figure II.23

Latin America (15 countries):^a incidence of poverty among pensioners aged 65 or older, as multiples of the poverty line, based on their pension income, 2002 and 2016^b (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

^a Weighted average for the following countries: Argentina, Brazil, Chile, Colombia, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

^b The data refer to 2016, except for Brazil (2105), Chile (2015) and the Plurinational State of Bolivia (2015).

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Annex II.A1

Background on the updated poverty measurements

ECLAC has systematically conducted income poverty measurements in Latin America since the 1980s with a view to describing and analysing poverty in the region using a common methodology. The poverty figures published by the Commission in recent years have been based on the methodology and the calculations outlined in ECLAC (1991).

In the more than 20 years since the introduction of that method, the region has undergone economic and social changes that have had repercussions on the consumption habits and living conditions of the population. As a result, ECLAC has updated its poverty measurements to ensure that the figures better reflect the current living conditions and standards of living in the countries of the region (see ECLAC, 2017).

The context has changed since the first publication of ECLAC poverty estimates; countries now have official—for the most part— national poverty measurements produced by national statistical offices or other State agencies. Generated on the basis of methodologies and application criteria that are appropriate to the needs and constraints of each country's particular situation, these measurements meet the specificity requirements for use in local contexts but their comparability between countries is limited.

The need for a comparable measure arises from the multiplicity of procedures and assumptions used for national estimates and from differences in the levels of well-being implicit in the resulting measurements. Using the poverty rates coming from national measurements to compare countries could lead to erroneous conclusions because they comprise a combination of different situations of poverty specific to each country and the various mechanisms used to measure them. Furthermore, there are limitations to measuring poverty thresholds based on purchasing power parity dollars, including the absence of correlation with the satisfaction of basic needs and the fact that purchasing power parity indices do not reflect the prices in the consumption bundle of a representative poor household (UNDP, 2004, Reddy and Pogge, 2003).

Thus, the ECLAC calculations aim to provide a regional perspective of poverty that is as comparable as possible, given the variety of measurement tools and the data collection methods specific to each. As a result, a set of concepts and procedures common to all countries were adopted for calculating poverty lines and building income aggregates, as outlined in this section.

To update poverty measurements, data from the most recent information sources were used and some specific issues with the methodology that was historically used by ECLAC were revised.

The data on which the new poverty lines are based refer to the most recently conducted surveys of household expenditure —whether on income and spending or on living conditions— which have been made available with the help of national statistical offices and central banks of countries in the region. Because these surveys are conducted less frequently (in general every 10 years) than household income surveys in the region, there may be several years' difference in the periodicity of the most recent surveys available for each country. The surveys were conducted between the mid-2000s and the mid-2010s (see table II.A1.1).

Table II.A1.1

Surveys used to calculate poverty lines

Country	Name	Coverage	Period
Argentina	Encuesta Nacional de Gastos de los Hogares	National	2012-2013
Bolivia (Plurinational State of)	Encuesta Continua de Hogares	National	2013
Brazil	Encuesta de Presupuestos Familiares	National	2008-2009
Chile	VII Encuesta de Presupuestos Familiares	Urban	2011-2012
Colombia	Encuesta Nacional de Ingresos y Gastos	National	2006-2007
Costa Rica	Encuesta Nacional de Ingresos y Gastos de los Hogares	National	2012-2013
Dominican Republic	Encuesta Nacional sobre Gastos e Ingresos de los Hogares	National	2006-2007
Ecuador	Encuesta de Condiciones de Vida (ECV)	National	2013-2014
El Salvador	Encuesta Nacional de Ingresos y Gastos de los Hogares	National	2005-2006
Guatemala	Encuesta Nacional de Condiciones de Vida	National	2014
Honduras	Encuesta de Condiciones de Vida de los Hogares	National	2004
Mexico	Encuesta Nacional de Ingresos y Gastos de los Hogares	National	2012
Nicaragua	Encuesta Nacional de Hogares sobre Medición de Nivel de Vida	National	2014
Panama	Encuesta de Ingresos y Gastos de los Hogares	Urban	2007-2008
Paraguay	Encuesta de Ingresos y Gastos y de Condiciones de Vida	National	2011-2012
Peru	Encuesta Nacional de Hogares	National	2014
Uruguay	Encuesta Nacional de Gastos e Ingresos de los Hogares	National	2005-2006
Venezuela (Bolivarian Republic of)	IV Encuesta Nacional de Presupuestos Familiares	National	2008-2009

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

The use of the most recent data to define the new poverty lines has led to a revision of some methodological aspects. Thus, while there are some changes with respect to the methodology applied in ECLAC (1991), the structure remains the same (see table II.A1.2). The changes are as follows:

- (a) Implementation of a new procedure for the selection of the reference population: the reference population refers to the group of households, categorized by per capita income, that exceeds a core set of critical deficiencies in housing, basic services, education and food. The expenditure of the reference population is verified to be above the resulting poverty line. This criterion replaces the one used in ECLAC (1991) that was based solely on insufficient dietary energy.
- (b) Adoption of Orshansky coefficients observed in countries:¹⁹ the new poverty lines incorporate the Orshansky coefficients estimated for each country and geographical area (urban or rural) based on the data collected from expenditure surveys. In the former methodology, the same Orshansky coefficients were used for all countries (2.0 in urban areas and 1.75 in rural areas).²⁰
- (c) Elimination of the adjustment of income to national accounts: under the 1991 methodology, this procedure sought to correct the underestimation of income in household surveys. It involved comparing the income-related responses in the survey with household income and expenditure accounts in national accounts and applying a correction factor based on the gap observed. While it is understood that household surveys tend to underestimate the totals of income earned by

¹⁹ The Orshansky coefficient is the ratio between non-food spending and food spending (i.e. the inverse of the Engel coefficient). The coefficient, obtained for the reference population, is used to establish the poverty line to determine the cost of non-food goods and services.

²⁰ It should be noted that the criterion of a sole coefficient was partly modified beginning with the Social Panorama of Latin America, 2008 (ECLAC, 2009)

households, it is also understood that with the previous methodology there was a risk of introducing biases in the measurement of poverty and inequality. The new series eliminates the adjustment procedure, understood as manipulating the income microdata from surveys to bring them in line with values obtained in national accounts or sources other than the survey.

Three of the main arguments in support of abandoning the adjustment of income were: (a) any discrepancy with the national accounts is interpreted as an omission of the survey, without considering the possible measurement errors in national accounts; (b) since the ability of surveys to capture the income of the richest recipients is limited, the adjustment overcompensates for underreporting by low-income households; and (c) as the information required for the adjustment of income is not available in most countries and is provided with a delay of several years in others, the quality and timeliness of the information are not reliable.

Table II.A1.2

Comparison of the methodologies used in ECLAC (1991) and ECLAC (2017)

	1991	2017
Information source	 (a) National household budget surveys carried out in the 1980s in 10 countries. (b) Recommended energy requirements in FAO/OMS/ UNU (1985) 	 (a) National household budget surveys carried out between the mid-2000s and mid-2010s in 18 countries. (b) Recommended energy requirements in FAO/OMS/ UNU (2001)
Reference population	First rolling quintile that attains the average energy intake	First rolling quintile that meets two conditions: - Presents less than 10% of critical deficiencies - Has a median income equivalent to or above the poverty line
Basket of staple foods	 Selected on the basis of observed consumption patterns With nutritional adjustments Without consumption out of household 	 Selected on the basis of observed consumption patterns With nutritional adjustments With consumption out of household
Orshansky coefficient	 Single value for all countries (2.0 and 1.75) From 2007, variable value based on price trends and not price structure 	Country-specific values, based on price structure and trends
Continuous update of poverty lines	 Various criteria From 2007, consumer price index (CPI) of foods in the basket of staple foods and CPI for non-food products 	CPI of foods in the basket of staple foods and CPI for non-food products
Household income aggregate	- With correction for non-response - With adjustment to national accounts	 Revised income aggregates to ensure consistency with international recommendations Application of upper limit to imputed rent With correction for non-response Without adjustment to national accounts

Source: Economic Commission for Latin America and the Caribbean (ECLAC).

The estimates are based on the data on income from the regional household surveys listed in table II.A1.3. In the absence of the household survey for a particular country or year, poverty is estimated indirectly by applying to the year preceding that for which the projection is required a formula using the variation in per capita GDP for the corresponding year.

Table II.A1.3

Latin America (selected countries): household surveys used for calculating regional aggregates, by approximate year

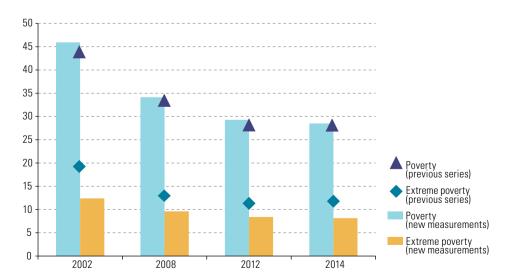
	Approximate year					
	2002	2008	2012	2014	2015	2016
Argentina	2003	2008	2012	2014		2016
Bolivia (Plurinational State of)	2002	2008	2011	2014	2015	
Brazil	2002	2008	2012	2014	2015	
Chile	2003	2009	2011	2013	2015	
Colombia	2002	2009	2012	2014	2015	2016
Costa Rica	2002	2008	2012	2014	2015	2016
Dominican Republic	2002	2008	2012	2014	2015	2016
Ecuador	2001	2008	2012	2014	2015	2016
El Salvador	2001	2009	2013	2014	2015	2016
Guatemala	2000	2006		2014		
Honduras	2001	2009	2013	2014	2015	2016
Mexico	2002	2008	2012	2014		2016
Nicaragua	2001	2009		2014		
Panama	2001	2008	2011	2014	2015	2016
Paraguay	2002	2008	2012	2014	2015	2016
Peru	2002	2008	2012	2014	2015	2016
Uruguay	2002	2008	2012	2014	2015	2016
Venezuela (Bolivarian Republic of)	2002	2008	2012	2014		

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).

When compared with the figures published in the past, the new figures show an increase in poverty levels and a decline in extreme poverty in the region. Using 2014 as the year of reference and on the basis of the new measurements, the poverty rate (28.5%) is 0.3 percentage points higher than the previous series (28.2%) and extreme poverty is 3.6 percentage points lower (8.2% compared to 11.8%). The difference in the series of data does not imply a change in regional poverty trends, even though the size of the difference may vary from one year to the next (see figure II.A1.1).

Figure II.A1.1

Latin America: poverty and extreme poverty, by applied methodology, 2002-2014 (Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Household Survey Data Bank (BADEHOG).



New trends in pension system reforms in Latin America

Introduction

- A. Classification of pension system reforms
- B. The new cycle of structural reforms to pension systems
- C. New trends in Latin American pension systems
- D. Concluding remarks
- Bibliography



Introduction

Latin American pension systems in have undergone a myriad of changes over the last 36 years. These significant reforms have wide-ranging economic, social and political implications, given that establishing definitions and consensus in this area is a complex process that requires interlinkages across a number of dimensions.

The institutional development of pension systems has been based on obligatory and contributory pension schemes, particularly in Latin America, where pioneering countries introduced their first pension plans at the start of the twentieth century (Mesa-Lago, 2008). From this perspective, the main purpose of a pension system is to provide a form of income insurance (for disability, old age and death) that distributes consumption throughout the life cycle. A more contemporary definition of pension systems also takes into account public policy objectives, including poverty relief and the redistribution of income (Barr and Diamond, 2008).

In the most modern approaches to social protection, designing pension systems requires a fine balance: in addition to fulfilling the classic function of insuring income against different risks, they must exhibit the solidarity required to ensure that plans are sustainable and address the poverty and inequality caused by low coverage and other factors (see chapter I).

Although a basic assessment of pension systems can cover various elements, the results of that assessment should provide answers to at least three questions for pension schemes that fall under the social protection framework.

The first is: "What coverage does the pension system provide?" It is necessary to define and estimate indicators of the quantity and quality of coverage in order to assess the pension system. The quantity dimension includes coverage of active workers (proportion of working age population paying contributions into pension systems) and pensioners (proportion of adults over 65 years of age receiving pension benefits).¹ In general, the quality dimension of coverage of the active population is determined by the density of contributions (proportion of working life during which workers pay contributions into a pension system).

The second question is: "Are the retirement benefits sufficient?" The most common aggregate comparison involves comparing the average pension benefits to the extreme poverty line, the poverty line, minimum wage and per capita income. These indicators are used to estimate the sufficiency of benefits. The quality of entitlements on an individual level is estimated by comparing pension levels in retirement relative to earnings when working; this is known as the pension replacement rate.

The third question is: "What is the cost of the coverage and benefits provided?" It is necessary to assess whether or not the pension system is financially sustainable; for example, whether government contributions as a percentage of GDP are commensurate with spending on other economic and social needs.²

These questions and the answers thereto have been one of the main driving forces behind the introduction of parametric and structural pension system reforms in Latin America (see section A). Inequalities in the coverage, benefits and funding of

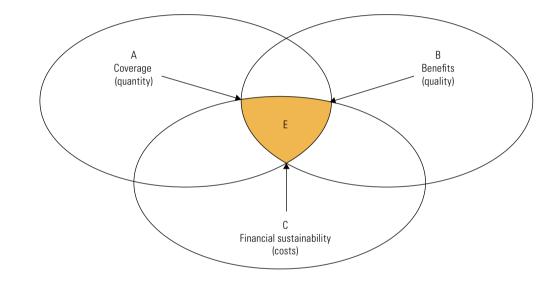
In the most modern approaches to social protection, designing pension systems requires a fine balance: in addition to fulfilling the classic function of insuring income against different risks, they must exhibit the solidarity required to ensure that plans are sustainable and address the poverty and inequality caused by low coverage and other factors (see chapter I).

¹ The coverage indicator for the economically inactive population is not age-specific. The threshold of 65 years reduces the probability of underestimating the coverage of pensioners since there is a higher probability that people over 65 years of age are retired.

² The fiscal impacts of pension systems have been a matter of constant debate in the region. There are notable differences in the public spending commitments between pay-as-you-go schemes, fully funded plans and other models. For a more detailed analysis in this regard, see Arenas de Mesa (1999), Mesa-Lago (2000), Arenas de Mesa and others (2008), Centrángolo and Grushka (2008) and Uthoff (2011 and 2016).

Diagram III.1 Basic assessment of a pension system^a pension systems create pressure for change and for testing new models that are being developed in a bid to balance out social protection and financial costs.

Diagram III.1 represents each of the areas of a basic assessment of pension systems: (i) set A is coverage or quantity of persons covered; (ii) set B is benefit or pension level, which gives a notion of the quality of the system; and (iii) set C is costs and financial sustainability of the pension scheme. The intersection of the three sets —set E— represents equilibrium, a pension system which has attained adequate coverage, provides sufficient benefits and is financially sustainable. If the pension system falls outside of E, it will require modifications or reform because it does not meet the standards for coverage and sufficiency of benefits or it has a funding shortfall which makes the pension scheme unsustainable. In general, a pension system that falls short in these three areas meets the conditions for implementing structural reform (see section A.1).



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

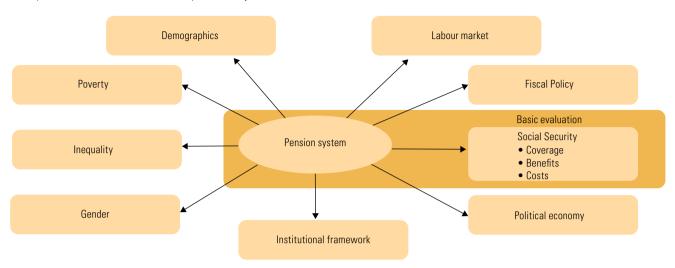
^a A pension system should aim to fall in set E, which is characterized by sufficient coverage, sufficiency of benefits and financially sustainable costs.

It is essential to widen the scope of analysis in order to strengthen contemporary pension systems and to ensure that future designs for pension schemes incorporate other elements that are essential for achieving the objectives of social protection. There are other elements which may be added to a basic assessment within a social security system, thus transforming it to a comprehensive assessment of the pension system (diagram III.2). The analysis of each of these elements, which are linked to the variables of a basic assessment, can reveal the conditions requiring modifications to or reform of the pension system.

It is recommended that a comprehensive assessment of pension systems be carried out before embarking on reform. In most countries in the region, only basic assessments have been conducted, focusing on the financial sustainability and fiscal impacts of pension systems. It is essential to widen the scope of analysis in order to strengthen contemporary pension systems and to ensure that future designs for pension schemes incorporate other elements that are essential for achieving the objectives of social protection (Cecchini and Martínez, 2011).

Diagram III.2

Comprehensive assessment of a pension system



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

As indicated in the introductory chapter, the social, economic and political impacts of the demographic transition and the rapidly ageing population in Latin America will place increasing importance on pension regimes (Huenchuan, 2013). Several pension system reforms have been conducted in the region in recent decades. Eleven countries implemented structural reforms in their pension systems, with 9 of them doing so between 1993 and 2003, Chile— on two occasions, in 1981 and 2008— and Panama in 2008; and 14 countries introduced parametric reforms between 2008 and 2017. The structural reforms saw the implementation of distinct pension models. This chapter will examine the lessons, principles and criteria that can be learned from these experiences.

A. Classification of pension system reforms

Numerous structural and parametric reforms to pension systems have been undertaken in Latin America. Among the countries implementing structural reforms, 11 incorporated a fully funded system, either as the main pillar or in complement to the traditional pay-as-you-go model. These structural reforms have given rise to distinct pension regimes, thus confirming that there is no single model for the region. Today, the public pay-as-you-go model remains the most widespread in the region, as it is present in 10 countries and is a pillar of the pension system in 5 other countries.

Numerous reforms of pension systems and models have been undertaken in Latin America and the Caribbean over the last 36 years. They have given rise to distinct pension regimes, thus confirming that there is no single model for the region.

Reforming the pension system entails a significant interweaving of political, economic, social, technical, institutional and logistical actions which, in turn, carry the risk of opening up various sources of conflict with different social actors and power groups (Arenas de Mesa, 2010). The pension system reforms in Latin America can be classified as structural or parametric (Mesa-Lago, 2004 and 2008; Gill and others, 2005; and ECLAC, 2006).

Structural reforms lead to the creation of a new pension system and are perhaps one of the most profound and important social policies to have been implemented in Latin America over the past 36 years. This is not only because of the beneficiary population involved. but also the social, fiscal and institutional effects thereof, which are a matter of constant debate.

Table III.1

Latin America (selected countries): structural reforms to pension systems, 1981-2008

1. Structural reforms

Structural reforms lead to the creation of a new pension system and are perhaps one of the most profound and important social policies to have been implemented in Latin America over the past 36 years. This is not only because of the beneficiary population involved, but also the social, fiscal and institutional effects thereof, which are a matter of constant debate.

Structural reforms in Latin America and the Caribbean have consisted in transforming the institutional design of the pay-as-you-go (or collective partial capitalization) system through the introduction of fully funded systems.³ In general, structural reforms give rise to a lengthy transition period during which at least two pension systems —the old and the new— coexist. Like parametric reforms, the objectives of structural reforms include improving the coverage, adequacy of benefits and financial sustainability of pension systems.

The structural reforms implemented between 1981 and 1996 gave rise to different models of pension systems in the region, disproving the theory of a single model for Latin America that had been proposed during the 1990s, with the Chilean reform of 1981 hailed as a model to be followed (World Bank, 1994; Mesa-Lago, 2008). In that pioneering reform, the public pay-as-you-go (PAYG) system had been entirely replaced by a fully funded, commercially run system that should reach maturity after a transition lasting more than forty years. The reforms were emulated in many countries in the region and around the world. Ten countries in Latin America joined in the process, adding a fully funded regime to their systems, either as the main pillar or in complement to the traditional pay-as-you-go system (see table III.1).⁴

Country	Year	Model
1. Chile	1981	Substitutive
2. Bolivia (Plurinational State of)	1997	
3. Mexico	1997	
4. El Salvador	1998	
5. Dominican Republic	2003	
6. Peru	1993	Parallel
7. Colombia	1994	
8. Argentina	1994	Integrated parallel
9. Uruguay	1996	Mixed
10. Costa Rica	2001	
11. Panama	2008	

Source: A. Arenas de Mesa and F. Bertranou, "Learning from social security reforms: two different cases, Chile and Argentina", World Development, vol. 25, No. 3, Amsterdam, 1997; C. Mesa-Lago, Reassembling Social Security: A Survey of Pensions and Healthcare Reforms in Latin America, New York, Oxford University Press, 2008 and "Las reformas de pensiones en América Latina y su impacto en los principios de la seguridad social", Financiamiento del Desarrollo series, No. 144 (LC/L.2090-P), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2004; I. Gill, T. Packard and J. Yermo, Keeping the Promise of Social Security in Latin America, Washington, D.C, World Bank, 2005 and Economic Commission for Latin America and the Caribbean (ECLAC), Shaping the Future of Social Protection: Access, Financing and Solidarity (LC/G.2294(SES.31/3)), Santiago, 2006.

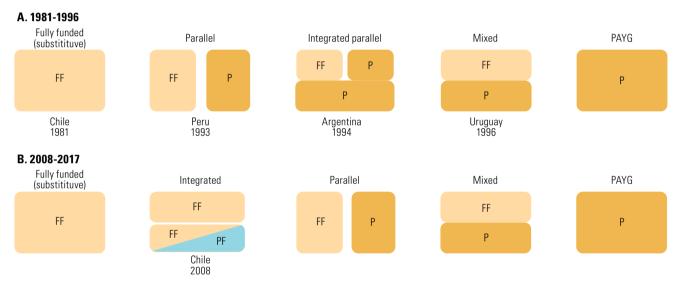
³ Pay-as-you-go systems that have reserve funds are known as collective partial capitalization systems; when the reserves are depleted they are then referred to as pay-as-you-go systems.

⁴ Other countries have tried to undertake structural reforms through the introduction of individual funding, but were unsuccessful in doing so; this was the case in Nicaragua (2000) and Ecuador (2001).

Structural reforms led to the creation of various models of contributory pension systems, which are added to the traditional public pay-as-you-go system now present in 10 countries of the region. The substitutive model, which completely replaced the public pay-as-you-go scheme by fully funded accounts managed by the private sector, was adopted in Chile (1981), the Plurinational State of Bolivia (1997), Mexico (1997), El Salvador (1998), and the Dominican Republic (2003). In the parallel model, implemented in Peru (1993) and Colombia (1994), workers must choose either the public PAYG system or the system of private accounts, which are mutually exclusive and compete for affiliates. The integrated parallel model implemented in Argentina (1994) entails a parallel model with a universal basic benefit, meaning that any worker, whether enrolled in the PAYG system or private accounts, is covered by public funds. The mixed model, in which the public PAYG system and private accounts are complementary, with workers paying into both systems simultaneously, was implemented in Uruguay (1996), Costa Rica (2001), and Panama (2008) (see table III.1 and diagram III.3A).

Diagram III.3

Latin America (selected countries): pension models and the countries that pioneered them, 1981-2017



Source: Economic Commission for Latin America and the Caribbean (ECLAC). Note: FF: Fully funded, P: pay-as-you-go, PF: public funding.

The pay-as-you-go contributory pension systems give rise to inter- and intragenerational transfers. In general, these transfers are from the healthy cohort to the sick, the young to the elderly, high-income to low-income or male to female. Structural reforms to pension systems in the region have, at various times, adjusted or removed these transfers, creating a potential burden on the fiscal accounts (contingent liability) that the State will have to cover (Arenas de Mesa, 2010).

2. Parametric reforms

A parametric reform is one that involves changes to the parameters of the pension system and, therefore, does not change the structure of the existing model. The most frequent parametric adjustments include: (i) increasing the contribution rate, (ii) raising the retirement age (by sex), which expands the pool of active contributors and reduces the influx of pensioners, (iii) changing the access conditions for benefits, for example, by raising or lowering the required number of years of contributory bases on which pensions are calculated by increasing the number of years required to be eligible to estimate benefits.

Parametric reforms are generally associated with changes to the framework of PAYG systems. However, they can be applied to fully funded systems. Such reforms, when applied to public PAYG systems, generally aim to establish financial balance. To achieve this and implement parametric reforms efficiently, it is necessary to conduct actuarial studies of the new parameters and generate simulations showing the possible financial effects and the repercussions on coverage and benefits that would ensue.

Given the political economy of pension reforms, proposed parametric changes tend to be applied only to new pensioners and, therefore, do not affect the pool of current participants or persons over a legally stipulated age, thus leaving unchanged the conditions of access and benefits of workers close to retirement. One possible outcome of this is a long transition period, during which two pension systems covering both prior and new beneficiaries coexist for an extended time; another is a scaling down of the potential financial effects which, depending on the design and transition, could turn into medium-term benefits.

Demographic, economic and social changes must be constantly assessed in a pension system. In this regard, actuarial and financial analyses are essential for guiding pension policy design and developing the parametric adjustments in a timely manner with a view to optimizing pension systems and ensuring that they serve their intended purpose.

In Latin America, 10 countries use public PAYG or collective partial capitalization pension models. Argentina, Brazil, Cuba, Haiti and the Bolivarian Republic of Venezuela have pay-as-you-go systems, while Ecuador, Guatemala, Honduras, Nicaragua and Paraguay have a collective partial capitalization system. Five other countries in the region also include public pay-as-you-go (or collective partial capitalization) in their pension models. This is the case of Colombia and Peru, where there is a parallel model, and of Costa Rica, Panama and Uruguay, where there is a mixed model.

Between 2008 and 2017, 14 Latin American countries implemented parametric reforms: 11 of them adjusted their public PAYG systems and 3 made adjustments to their fully funded systems. Examples of reforms to public systems include: (i) in Uruguay, relaxed eligibility criteria for retirement benefits, ensuring adequate coverage of the pension system and maintaining the advances made in the social protection system (2008); (ii) in Cuba, efforts to rectify the inadequacy of some benefits and ensure financial sustainability (2009); (iii) in Guatemala, raising of the retirement age and the number of years of contributions to qualify for retirement (2010); (iv) in Paraguay, raising of the minimum number of contributory years for benefit eligibility (2010); (v) in Nicaragua, higher contribution rate for employers and better benefits for the most vulnerable (2013); (vi) in Honduras, raising of the retirement age under the civil servant pension system from 58 to 65 years and the number of contributory years to qualify for benefits (2014); (vii) in the Bolivarian Republic of Venezuela, standardization of the existing PAYG regimes (2014); (viii) in Haiti, Decree setting the contribution rate in the PAYG system for civil servants at 8% (2015); (ix) in Brazil, tightening of the eligibility criteria for retirement benefits (2015); (x) in Ecuador, regulation adjusting retirement benefits to the previous year's inflation (2015); and (xi) in Costa Rica, raising of the age of eligibility for government-funded pension from 55 to 60 years (2016).

Examples of parametric reforms to fully funded systems include: (i) in Colombia (2009), the introduction of a multifunds system along the lines of the changes implemented in Chile in 2002; (ii) in Peru (2016), the creation of a new measure allowing beneficiaries to withdraw almost all of their savings from private pension funds;⁵ and (iii) in El Salvador (2017), the recently adopted pension system reform (see table III.2 and section B.2-b).

Demographic, economic and social changes must be constantly assessed in a pension system. In this regard, actuarial and financial analyses are essential for guiding pension policy design and developing the parametric adjustments in a timely manner with a view to optimizing pension systems and ensuring that they serve their intended purpose.

⁵ This reform has been the subject of debate because of the potential risks it poses to the pension fund system. However, it has yet to be enacted.

	Structura	Structural reforms (3)		etric reforms (14)	
	Year	Model	Year	Model	
1. Argentina	2008	PAYG			
2. Chile	2008	Integrated			
3. Bolivia (Plurinational State of)	2010	Substitutive (nationalized)			
1. Colombia			2008	Parallel	
2. Peru			2016	Parallel	
3. El Salvador			2017	Substitutive	
4. Uruguay			2008	Mixed	
5. Costa Rica			2016	IVIIXEU	
6. Cuba			2009		
7. Paraguay			2010		
8. Guatemala			2010		
9. Nicaragua			2013		
10. Venezuela (Bolivarian Republic of)			2014	PAYG	
11. Honduras			2014		
12. Haiti			2015		
13. Ecuador			2015		
14. Brazil			2015		

Table III.2

Latin America (selected countries): reforms to pension models, 2008-2017

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

B. The new cycle of structural reforms to pension systems

Between 2008 and 2017, three of the five countries that had implemented substitutive models reformed their pension systems: Chile, in 2008; the Plurinational State of Bolivia, in 2010; and El Salvador, in 2017. Furthermore, in 2008, Argentina abandoned the fully funded system to return to a PAYG model. There is a noticeable shift towards solidarity-based public pension systems, bucking the trend of the 1990s, which saw the introduction of fully funded models.

1. Pension system reforms: a new trend towards public pension schemes

Between 2008 and 2017, three of the five countries that had implemented substitutive models reformed their pension systems. In 2008, Chile established a solidarity pension which led to the formation of an integrated system of pensions. A 2017 draft reform bill under debate proposes that the State's participation and the solidarity pension should continue to increase, which would consolidate the integrated model. The Plurinational State of Bolivia nationalized the fully funded system in 2010 and increased the State's participation. In 2017, El Salvador adopted a pension system reform to maintain the fully funded system while adding a collective savings fund known as the solidarity guarantee account. Furthermore, in 2008, Argentina abandoned the fully funded system —and thus the integrated parallel model— and returned to a PAYG model (see table III.2). In that same year, Chile introduced an integrated pension model (see

Between 2008 and 2017, three of the five countries that had implemented substitutive models reformed their pension systems.

There has been a trend towards public funding and solidarity pensions, unlike the reforms of the 1990s, which focused on incorporating fully funded schemes into pension systems. The new regional trend towards greater State participation in pension systems includes the design of contributory and non-contributory solidarity mechanisms.

diagram III.3-B). In this regard, there has been a trend towards public funding and solidarity pensions, unlike the reforms of the 1990s, which focused on incorporating fully funded schemes into pension systems. The new regional trend towards greater State participation in pension systems includes the design of contributory and non-contributory solidarity mechanisms.

(a) Argentina (2008): return to the PAYG regime

In 1994, Argentina implemented a structural reform of its pension system, creating an integrated parallel model. Influenced by the reform undertaken by Chile in 1981, it established a fully funded pillar managed by retirement and pension fund management companies (AFJP) (Arenas de Mesa and Bertranou, 1997).

While the main objective was to solve the fiscal problem related to the Argentine pension system, the 1994 reform did not relieve the burden on the fiscal accounts caused by the pension system owing to the cost of transition from one system to another and the transfer of provincial (local) pension funds with financial shortfalls to the central government.

The second round of reform of the Argentine pension system entailed a number of adjustments from 2002 onward. The structural reform of 2008 was the most important because it changed the pension model, breaking with the fully funded system — the Integrated Pension and Retirement System— to return to a public pay-as-you-go regime under the Argentine Integrated Social Security System.

(i) Parametric reforms: 2002-2007

Prior to the 2008 structural reform, a number of changes had been made to the pension system in Argentina. Those involving an increase in benefits were introduced in 2002 and targeted the lowest pensions. Benefits were again raised in 2006. The Indexation Act, adopted in 2008 some months before the structural reform that ended the SIJP, had the biggest impact on benefits. As a result of these changes, and the Act in particular, in the period 2002-2012 the minimum retirement pension rose tenfold and benefits above the minimum rose between three and four times (Bertranou and others, 2012).

Other reforms to the pension system focused on increasing its coverage by making the conditions of access to benefits more flexible. This was known as the pension fund moratorium, introduced in 2005. The moratorium, or Pension Inclusion Plan, as it is officially entitled, established a mechanism allowing own-account workers who did not meet the minimum pensionable service requirements to receive a reduced pension benefit. Such was its success that between 2005 and 2011, individuals covered under the moratorium accounted for nearly 40% of retirement and pension benefits. There was also a general increase in coverage as a result of the rise of non-contributory pension programmes, particularly disability pensions. Some of the effects of these measures are reflected in the coverage of pensioners (persons over the age of 65 who receive benefits), which rose from 70% to 90% between 2006 and 2014 (see figure III.1).

In early 2007, workers were given freedom of choice of retirement regimes. Those affiliated to the fully funded system were given the option to switch regimes every five years. The pay-as-you-go system became the default option for workers who had not explicitly chosen a regime. These changes were a precursor to the structural reform that would be implemented the following year.

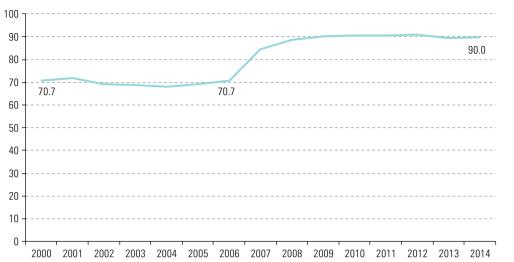


Figure III.1

Argentina: coverage of pensioners (population aged 65 years and over)^a 2000-2014 (Percentages)

Source: Economic Commission for Latin America and the Caribbean on the basis of the Inter-American Development Bank's System of Indicators of Labor Markets and Social Security (SIMS) database [online] http://www.iadb.org/en/databases/sims/ sims-labor-markets-and-social-security-information-system,20137.html.

^a Coverage of pensioners: percentage of the population over 65 years of age receiving pension benefits.

(ii) Objectives and key measures of the structural reform of 2008

The structural pension-system reform of 2008 completely replaced the fully funded regime by a pay-as-you-go system, with funds managed by the State. The main objectives were to relieve the burden on the fiscal accounts, increase coverage, and raise the level of benefits (Bertranou and others, 2012).

Of the 11 countries to have implemented the fully funded system (see table III.1), Argentina became the first in the region to abolish it. In this regard, the 2008 reform is clearly the most significant since that of 1994 as it completely redesigned the pension system with a return to the pay-as-you-go regime.

It unified the two regimes under the Argentine Integrated Pension System (SIPA), a pay-as-you-go system managed by the State. Some parametric modifications relating to the calculation of pension levels were also introduced. In addition, the State committed to ensuring that retirement benefits under the PAYG system would be higher than those paid to individuals who remained in the fully funded system. However, the comparison is difficult to make, one of the many reasons being that the fully funded system did not offer defined benefits (Hohnerlein, 2013).

(iii) Fiscal impacts

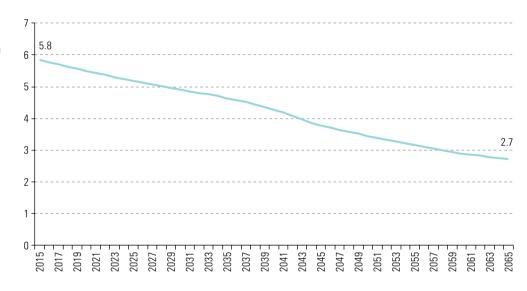
In 2008, upon the abolition of the fully funded system, the Sustainability Guarantee Fund (FGS) —established in 2007 in the context of the transfer of beneficiaries of the fully funded system to the public system— was allocated a sizeable initial sum of US\$5.69 billion, followed by US\$25.55 billion (a combined total representing 8.5% of GDP), from the transfer of funds from the individual accounts. In 2016, the Fund accumulated US\$55 billion, equivalent to 10.1% of GDP.

Unlike AFJPs, whose investment decisions were based on maximizing returns on invested capital, the Fund's central purpose is economic development. Prior to the reform, a number of changes to investment criteria had been introduced: between 5% and 20% of the portfolio had to be invested in production and infrastructure projects; the amount of investment in government debt was increased; investment in domestic assets was lowered; and investment abroad was prohibited and completely eliminated (Hohnerlein, 2013).

The National Social Security Administration (ANSES) is the institution responsible for managing the Fund. Since 2008, a number of mechanisms for the institutional oversight of the management of FGS resources have been created. One innovation was the establishment of a committee of both houses of the National Congress to manage the use of the funds through requests for information and the formulation of observations, proposals and recommendations (Bertranou and others, 2011).

ANSES spending has also risen significantly since the 2008 reform. At the root of this is the pension fund moratorium law, which opened membership to beneficiaries who previously did not meet the requirements to qualify for a pension. As a result of the increase in coverage, pension expenditure rose from 3.8% to 6.4% of GDP between 2005 and 2010 (ANSES, 2011).

Assessing financial sustainability is the most difficult part of the analysis of the fiscal effects of the 2008 reform. It was conducted without an actuarial study and, to date, no report on the actuarial and financial balance of the new pension system has been published (Bertranou and others, 2012; Hohnerlein, 2013; Mesa-Lago, 2014). Given the current demographic transition, this could complicate matters in the future. Like in many countries in the region, the population of Argentina is ageing; the ratio of the working-age population (15 to 64 years) to the population aged 65 and over will drop from 5.8 to 2.7 in the next 50 years (see figure III.2).



Source: Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, "Long term population estimates and projections 1950-2100. 2015 Revision".

The system's financial sustainability should be assessed against the demographic situation that Argentina will face in the coming years, as well as other factors, if the country is to achieve balance between adequate coverage, sufficiency of benefits and the financial sustainability of the pension system. The coverage and sufficiency indicators for the Argentine pension system are above the regional average. The structural and parametric reforms implemented have considerably improved the sufficiency of benefits and the coverage of the pension system. However, owing to the absence of actuarial studies, an analysis of the system's financial sustainability is yet to be conducted. This should be assessed against the demographic situation that Argentina will face in the coming years, as well as other factors, if the country is to achieve balance between adequate coverage, sufficiency of benefits and the financial sustainability of the pension system.

Figure III.2

Argentina: working-age population to population aged 65 and over, 2015-2065 (Number of persons)

(b) Chile (2008): from a fully funded scheme towards an integrated pensions system

The structural reform of the Chilean pension system in 2008 created a new integrated pension model in which the fully funded system continues to be the main pillar of the pension scheme. The purely substitutive model of 1981 saw the State-run PAYG system fully replaced by fully funded and privately run systems. By contrast, the integrated pension model includes aspects that constituted conflicting paradigms during discussions on pension system reforms; they are still considered as such in most countries in the region. Consequently, the following aspects were integrated in a single system: (i) non-contributory and contributory systems; (ii) public funding from general revenues and fully funded capitalization; and (iii) joint public and private administration of the pension system. This new integrated model breaks with some of the premises of the pioneering substitutive model of fully funded accounts introduced in 1981. One example is the return of the State in the administration and the financing of contributory benefits in the pension system.

(i) Objectives and key measures of the structural reform of 2008

The 2008 pension system reform in Chile had three main objectives. The first was to set up a Solidarity Pension System (SPS) to address poverty among persons over 65 years of age. This meant that the State assumed the role of guarantor of the pension system for the poorest 60% of the population in addition to adopting an approach that social protection was a universal right for those earning a livelihood in Chile. The second objective was to increase coverage for vulnerable groups, specifically young people, women and self-employed workers. The third was to enhance the fully funded system by encouraging competition, investment regulation, cost-cutting and voluntary pension saving (Arenas de Mesa, 2010).

The Pension Reform Act contains close to 100 measures which can be divided into 7 categories: (i) solidarity pension system, (ii) gender dimension, (iii) policies geared towards the most vulnerable youth, (iv) policies geared towards self-employed workers, (v) improving the fully funded system, (vi) public institutions, and (vii) fiscal sustainability. The Solidarity Pension System has two main pillars. First, it established a new non-contributory pension system, the Basic Solidarity Pension (PBS), to replace the welfare pension (PASIS). Second, it established the Solidarity Pension Payment (APS), which is run and financed by the State to complement the lowest pensions. When an individual's contributory pension is equal to zero, he or she receives a non-contributory pension that is equal to the PBS. However, if that person receives a self-financed contributory pension with solidarity contribution (PMAS), he or she receives an APS in an amount that is reduced proportionally to the value of the self-financed pension. The sum of the APS and the self-financed contributory pension gives the total pension which, in the solidarity system, is always equal to or lower than the PMAS.

The aggregate coverage of the SPS increased as intended in the reform, reaching nearly 1.4 million beneficiaries in July 2017. This total corresponds to 581,771 non-contributory pensions (PBS) —which increased between 2008 and 2010 and subsequently fell, bottoming out at this figure in July 2017— and 815,620 Solidarity Pension Payments (see table III.3). Coverage under the solidarity pension system has increased significantly and, at present, its benefits are equivalent to those granted by the AFP system. This reinforces the integrated model of publicly funded pensions established in 2008.

Table III.3

Chile: pensioner coverage under the solidarity pension system, 2008, 2010 and 2017 (Number of beneficiaries)

	2008	2010	July 2017
Basic Solidarity Pension (PBS)	596 645	623 508	581 771
Solidarity Pension Payment (APS)	13 836	387 587	815 620
Total	610 481	1 011 095	1 397 391

Source: Superintendency of Pensions of Chile.

Gender mainstreaming was another of the main axes of the reform in the light of the gender inequalities both in the labour market and in the pension system.

Gender mainstreaming was another of the main axes of the reform in the light of the gender inequalities both in the labour market and in the pension system. These include wage disparities, the heavier burden of unpaid domestic and care work faced by women due to the unequal distribution of productive and reproductive work and the use of sex-differentiated life tables in the calculation of pensions in the fully funded pension system. Women account for 68% of the beneficiaries of the solidarity pension system. Under the new non-contributory system, women and their spouses can be beneficiaries if their household falls within the poorest 60% of the population. This put an end to the previous discriminatory practice in which men accounted for the majority of beneficiaries of non-contributory pensions and women were automatically denied coverage. Thus, for the first time, elderly women living in poverty and extreme poverty were given access to a State-funded benefit as primary beneficiaries. The reform also provided for a special subsidy for women for each live birth to offset the disparity caused by the use of sex-differentiated life tables in the calculation of pensions.

Another measure with a strong gender component is the establishment of a single premium for both men and women for disability and survivor insurance, with the excess premiums paid by women returned to their individual accounts. In cases of divorce, where it is ruled that economic detriment justifies compensation, the reform allows the use of a portion of the funds accumulated in private individual accounts. In addition, it allows for women to pass on survivorship entitlements to their male spouses whereas before, the survivorship benefit was only allocated if the man had a disability.

A number of different measures were introduced for self-employed workers —who currently account for close to 5% of covered persons— including: mandatory contributions, access to disability and survivor insurance and, in response to high demand, access to insurance against occupational accident and illness risks.⁶ The rationale was to establish new duties (mandatory contributions) and rights (access to short term benefits that incentivize contribution).

(ii) Fiscal impacts

The reform resulted in considerable fiscal spending, which estimates place at 1% of GDP in 2025. The largest item of public expenditure in the civilian pension system is the cost of the solidarity pension system, which represented 22.5% of total spending on pensions in 2015 and is projected to account for 40% in 2030 (see table III.4).

	2010	2011	2012	2013	2014	2015	2025	2030
Solidarity pension system	0.8	0.8	0.8	0.7	0.7	0.7	1.0	1.0
Total pension system	3.8	3.6	3.6	3.3	3.2	3.1	2.7	2.5

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of figures from the Budget Office of the Ministry of Finance of Chile.

Table III.4

Chile: actual and projected public spending on the solidarity pension system, 2010-2015, 2025 and 2030 (*Percentages of GDP*)

⁶ Contributions from self-employed workers have yet to be made mandatory. Although this was supposed to enter into effect in 2019, the draft bill presented in 2017 postponed it for five years.

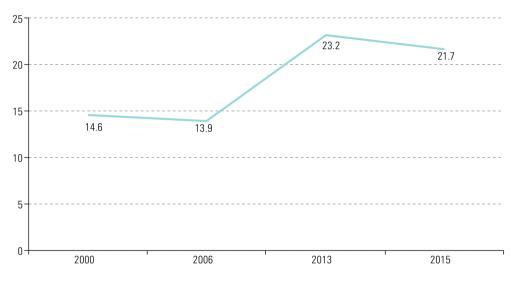
The financial sustainability of the pension system reform of 2008 depends primarily on two sources of funding: savings on pension expenditures under the former PAYG system and the Pension Reserve Fund that was established by the 2006 Fiscal Responsibility Act and amended by the 2008 reform to guarantee financing for future generations (Arenas de Mesa, 2010).⁷

(iii) Main results

The large number of beneficiaries of the basic solidarity old-age pensions under the solidarity pension system translated into an increase of close to 10 basis points in the coverage of pensioners (persons aged 65 and over) in the non-contributory system since the reform (see figure III.3).

Figure III.3

Chile: coverage of pensioners (population aged 65 years and over) receiving non-contributory pensions,^a 2000, 2006, 2013 and 2015 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of information from Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC and Superintendency of Pensions of Chile.
^a The data from 2000 and 2006 refer to the welfare pension programme (PASIS), the former non-contributory old-age pension system.

The median replacement rate in the fully funded system has been estimated at 34%. When the benefits granted under the reform (Solidarity Pensions System) are added, this rises to 45% (Presidential Advisory Commission on the Pension System, 2015). According to the projections of the Presidential Advisory Commission, the Solidarity Pension System will account for 37% of the average benefits to be paid out by the integrated system between 2025 and 2030. As table III.5 shows, the solidarity pension will be the largest pillar of pensions on average for beneficiaries and especially for women (54.2%).

⁷ Established in 2006 to finance minimum and welfare pensions, the Pension Reserve Fund (FRP) became in 2008 the financial instrument for ensuring the sustainability of the benefits paid under the solidarity pension system. The Fund receives an annual tax contribution that varies between 0.2% and 0.5% of GDP, depending on the overall fiscal balance. Investments are managed by the Central Bank of Chile and it was first considered a source of funding for the solidarity pension system in the Budget Act of 2017.

Table III.5

Chile: distribution of pillars in average pension payments, 2025-2030 projections (*Percentages*)

	Contributions ^a	Recognition Bond ^b	Returns ^c	Solidarity pension system ^d
Women	22.8	0	23.1	54.2
Men	32.1	0.9	40.7	26.4
Total	28.4	0.5	33.8	37.2

Source: Presidential Advisory Commission on the Pension System, "Results of the Pension System: coverage and adequacy of benefits" in *Final report*, Santiago, Chile, 2015.

^a Amount of contributions paid into the fully funded system.

^b Financial instrument that recognizes the contributions paid into the former PAYG system.

^c Earnings from pension fund investment gains.

^d Benefits paid by the solidarity pension system.

Another key outcome of the 2008 reform was the significant decline in the incidence of extreme poverty in the over-60 population, from 7.5% in 2006 to 1.5% in 2015 (Ministry of Social Development of Chile, 2015 and 2107).

(iv) Actuarial studies

Pursuant to the Fiscal Responsibility Act (2006), the Budget Office of the Ministry of Finance of Chile has been studying the sustainability of the Pension Reserve Fund since 2010 (Bravo and Ruiz-Tagle, 2010; DIPRES, 2014 and 2016). The Fund was established in December 2006 to cope with demographic changes in Chile and their impact on the financial sustainability of the pension system. According to the most recent study (2016), the Fund will continue to grow under different alternative scenarios, meaning that its accumulated capital is more than sufficient to cover the outlays of the solidarity pension system for the next few decades (DIPRES, 2016).

The 2008 pension reform attained coverage of 60% of the lowest-income households. As a result of this coverage and the design of the solidarity pension system, replacement rates rose, on average, from 34% to 45%. The low replacement rates among the rest of the population, especially the 40% of households in the third and fourth income distribution quintiles, indicate that benefits are insufficient and, therefore, that the pension system does not fall within the area of equilibrium (E) shown in diagram III.1. Consequently, discussion on the pension system continues and a new reform is currently under debate in the National Congress of Chile (see section B.2-c).

(c) Plurinational State of Bolivia (2010): nationalization of the fully funded system and a new universal non-contributory pension scheme

Before 1997, the Bolivian pension system faced a multitude of problems, including the high fragmentation of pension regimes along trade union lines, low coverage, substantive gender gaps in coverage and benefit levels, potential actuarial imbalances as a result of retirement ages (50 for women and 55 for men) and a steady increase in fiscal transfers to keep the system afloat (Mesa-Lago and Ossio, 2013). Although these problems are common in the region, they have been dealt with differently in other Latin American countries.

In 1997, the Plurinational State of Bolivia adopted the Chilean pension model; a structural reform that entailed the abolition of the public PAYG system in favour of a privately run fully funded system. The administration fees charged by private pension fund administrators were decidedly lower than those charged in Chile or Peru (0.5%, against 1.76% and 2.27%, respectively), even though the market was less competitive (fewer private pension fund administrators) than in Chile or Peru. Given the size of the

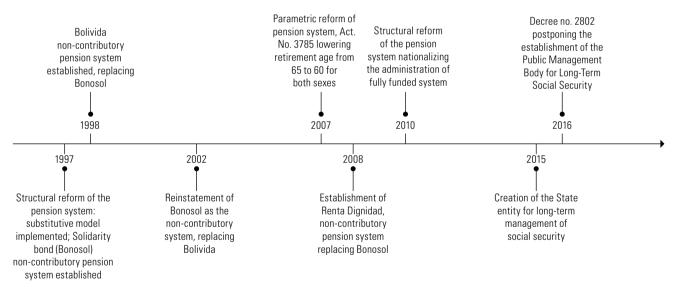
Bolivian market, the pension fund administrator industry became a duopoly, which made regulatory oversight of the quality of services provided difficult (Barr and Diamond, 2008). In that same year, the country established the non-contributory pension system, Solidarity Bond (Bonosol), which was replaced by the programme Bolivida in 1998.

In 2002, earnings from the privatization of several State-owned companies were used to revive the non-contributory pension system and the Bonosol programme was reinstated. In 2007, a parametric reform of the pension system was implemented through Act No. 3.785 which, among other measures, established a minimum pension and defined the pension entitlement rules (persons aged 60 and over and 15 years of contributions).

In 2008, a new non-contributory pension system entitled Renta Dignidad was established, replacing Bonosol and significantly raising the coverage and the benefits funded by the public sector. In 2010, the Government promulgated a new structural reform of the pension system which nationalized the fully funded system but retained its structure (see diagram III.4). It also created a fund to finance solidary contributions to the lowest pensions in the contributory system. The reform also entailed a gender mainstreaming component, with the creation of a bonus for each live-born child with a view to increasing women's pensions (see more examples of gender mainstreaming in pension systems in chapter IV).

Diagram III.4

Plurinational State of Bolivia: pension system milestones, 1997-2016



Source: Economic Commission for Latin America and the Caribbean (ECLAC).

(i) Key measures

Four years before the promulgation of the Pensions Act of 2010, the Government had defined four areas for development in the proposed structural reform of the pension system: universality, actuarial sustainability, financial sustainability and non-discrimination among generations. The Government emphasized the importance of preventing further generations from being punished by structural pension system reforms.

The key measures of the 2010 reform include: (i) replacement of the two private pension fund administrators that ran the fully funded regime by a State entity for the long-term management of social security (Gestora Pública de la Seguridad Social de Largo Plazo); (ii) establishment of a solidarity fund, financed, inter alia, through an additional contribution of 0.5% to be paid by workers; (iii) lowering of the retirement age from 60 to 58 years (50 years for miners); (iv) creation of a solidarity complement for

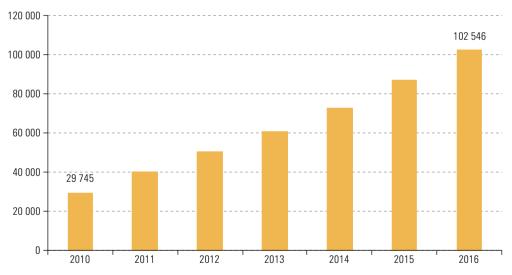
contributory pensions —the solidarity fraction— which requires a minimum of 10 years of contributions and increases benefits by raising the density of contributions; and (v) creation of a bonus for women for each live-born child. The latter two are similar to the benefits introduced under the Chilean pension reform of 2008.⁸

The change in the administration of the fully funded contributory regime is undoubtedly the most complex part of the Bolivian reform. The transition from private to public management has taken more than seven years. According to the Government, the difficult transition is owed to problems relating to the information storage software, the human capital required, the new institutional framework and the negotiations with the Bolivian Workers' Union (COB) on the leadership of the new institution.⁹

Coverage (of workers) in the contributory pension system was low, but stable, between 2009 —prior to the structural reform— and 2014. The percentage of the economically active population paying into the system rose from 13.4% in 2009 to 14.4% in 2014 (IDB, 2015). The 2010 reform eased access to retirement benefits, as a result of which the number of beneficiaries in the integrated system more than tripled between 2010 and 2016, jumping from 29,745 to 102,546 pensioners (see figure III.4). The largest increase was registered in the solidarity pension, which rose to 60,402 beneficiaries in February 2017 (APS, 2017).

Figure III.4

Plurinational State of Bolivia: beneficiaries of the integrated pension system, 2010-2016 (*Number of beneficiaries*)



Source: Ministry of the Economy and Public Finance of the Plurinational State of Bolivia, *Boletín Mensual del Sistema de Pensiones*, No. 132, year 11, La Paz, March 2017.

(ii) New non-contributory pension system: Renta Dignidad

The Renta Dignidad non-contributory pension system was established in 2008. Unlike Bonosol (2002), which was open only to persons born after 1975, this system is universal in that anyone over the age of 60 is eligible. This approach is provided for in article 1 (constitutional framework) of Act 3791 establishing the universal old age pension (Renta Dignidad). To be entitled to pension payments, recipients must: (i) be

⁸ The Chilean pension reform introduced the Solidarity Pension Payment (APS) and the bonus for each live-born child granted to women (see section B.1-b).

⁹ In early 2011, the Government of the Plurinational State of Bolivia issued a Supreme Decree postponing the establishment of the Public Management Body for Long-Term Social Security. The Government issued another Supreme Decree to establish the body in January 2015, but in June 2016 again postponed its establishment until 15 September 2017.

of Bolivian nationality, reside in the country and be over 60 years of age;¹⁰ (ii) not be in receipt of income from the long-term social security system or any remuneration financed by the national budget; (iii) be registered in the system's database (this is an administrative requirement, not a legal one); and (iv) not be subject to a suspension of benefits under the Renta Dignidad, Bolivida or Bonosol systems (this applies when individuals collected a benefit more than once for a given period or when it is determined that the beneficiary did not meet the minimum age requirement) (Escobar, Martínez and Mendizábal, 2013).

The benefit amount differs depending on whether or not individuals are covered under the contributory pension system or the supplementary system. Monthly payments of 270 bolivianos (US\$39.1) are provided to those who are not covered under the contributory system; those who are receive 200 bolivianos (US\$30.4).

The number of persons covered by the non-contributory pension system climbed from 364,000 to 493,000 between 1997 and 2007. With the introduction of the universalist Renta Dignidad system, that number jumped to 975,000 in 2016, which corresponds to 96.6% of the over-60 population (see figure III.5).



Figure III.5

Plurinational State of Bolivia: number of beneficiaries in the non-contributory pension system, 1997-2016 (Thousands of persons)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Authority for Oversight and Control of Pensions and Insurance of the Plurinational State of Bolivia (APS) and K. Müller, "The political economy of universal pensions in Bolivia", *Sozial Politik*, vol. 1, Freiburg, 2016.

Note: No data are available for 2002.

Between 2006 and 2009, in the period immediately following the inception of Renta Dignidad, the incidence of extreme poverty fell from 37.7% to 31.9%. This suggests that the programme had a significant impact on poverty reduction.

(iii) Fiscal effects of the non-contributory pension system

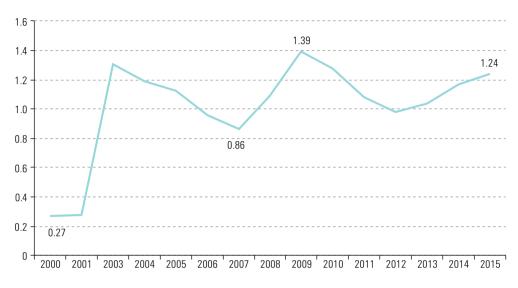
The restoration of Bonosol resulted in an increase in pension payments and coverage; consequently, public spending on the non-contributory pension system rose from 0.27% to 0.86% of GDP between 2001 and 2007. Subsequently, the creation of the Renta Dignidad programme and its focus of universal coverage caused a significant

¹⁰ An individual who is not a recipient of a contributory pension may be entitled to 100% of the non-contributory benefit; an individual who receives a contributory pension is entitled to 75% of the non-contributory benefit.

The non-contributory pension system attained almost universal coverage of the over-60 population. Consequently, the potential fiscal effects of the Renta Dignidad programme have more to do with the level of benefits —which represented close to 15% of the minimum wage in 2016— than coverage. hike in the number of beneficiaries, pushing up public spending to 1.39% of GDP in 2009. Average economic growth between 2010 and 2015 was slightly above the average growth rate in the number of beneficiaries, causing public spending on the non-contributory pension system to account for 1.24% of GDP in 2015 (see figure III.6).

Figure III.6

Plurinational State of Bolivia: public spending on non-contributory pensions, 2000-2015 (*Percentages of GDP*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), Non-contributory social protection programmes in Latin America and the Caribbean database [online] http://dds.cepal.org/bpsnc/index-en.php. Note: No data are available for 2002.

The non-contributory pension system attained almost universal coverage of the over-60 population. Consequently, the potential fiscal effects of the Renta Dignidad programme have more to do with the level of benefits —which represented close to 15% of the minimum wage in 2016— than coverage.

2. New bills and reforms relating to pensions in Latin America: 2016-2017

In 2017, five countries in Latin America focused on reform of their pension systems. While in Costa Rica and Peru there are ongoing discussions on the challenges facing pension systems and the necessary changes, in Brazil and Chile, bills on pension reform have been submitted to the relevant congressional authorities and El Salvador has adopted a reform.

A round table is under way in Costa Rica, and it is expected to yield one or more proposals on how to maintain the financial sustainability of the public pension system by the end of 2017. In Peru, the discussions are focused on increasing coverage and the density of contributions. In January 2017, a social protection commission was established to discuss reforming the pension system in favour of an integrated model, along the lines of the Chilean reform of 2008.

(a) Brazil (2016-2017): bill on parametric reform of the public pension system

Brazil is among the Latin American countries that has not implemented a structural reform of pension systems and maintains a public pay-as-you-go model. However, a number of parametric reforms have been introduced, with repercussions on the system's coverage (particularly with regard to the over-60 population), pension levels and financial sustainability.

In 1988, social security was recognized as a right in the Federal Constitution of Brazil. Since then, the country has implemented four pension reforms requiring constitutional amendments (in 1998, 1999, 2003 and 2005) (Caetano, 2014) and adopted Act no. 13.138 restricting access to benefits in 2015.

The pension system currently comprises three subsystems: the General Social Security Regime (RGPS), which covers workers in the private sector; the Government Social Security Systems (RPPS), which cover civil servants;¹¹ and the supplementary pension regime, which is voluntary and generally used by high-income workers. There also exists a non-contributory pension system called the continuous benefit programme (BPC), which allocates the equivalent of minimum wage to all persons over 65 who do not receive pensions, persons with disabilities and families whose per capita income is 25% lower than the minimum wage. The General Social Security Regime is further divided in two: an urban regime, which maintains the traditional characteristics of a contributory system, and a rural one. The rural RGPS has also been characterized as semicontributory (Robles and Mirosevic, 2013) or directly as non-contributory (Schwarzer and Querino, 2002), given the fact that accessibility conditions and levels of benefits are similar to those of a non-contributory system.

At the end of 2016, the Government passed a fiscal reform (constitutional amendment bill 55) that aims to limit annual increases in federal government spending to the inflation rate of the previous year, for 20 years. It is difficult to implement the reform, in particular the spending cap, without affecting other areas of the federal budget —notably expenditure related to pension systems. In that regard, in December 2016 the Brazilian Congress began debate on a new pension reform with an emphasis on the fiscal aspects thereof.

(i) Objectives of the bill on parametric reform

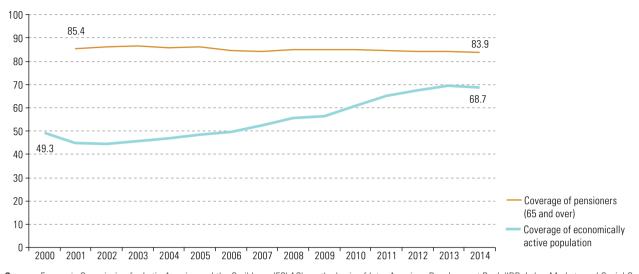
The Government put particular emphasis on the financial and fiscal impacts of the pension system in laying out the pension reform before Congress, linking it to commitments made in the 2016 fiscal reform given the weight of the pension system in federal fiscal expenditure. According to data from the Ministry of Finance, pension spending, including on non-contributory pensions (BPC), accounts for close to 55% of total primary expenditure (Brazilian Ministry of Finance, 2017).

When assessing a pension system, its financial sustainability must be taken into account; to do this in a pay-as-you-go system, it is important to include information on demographic changes. This information is also necessary for analysing other relevant aspects such as coverage and sufficiency of benefits. In terms of coverage, Brazil is among the countries in the region that have made the most progress, with high rates of coverage of the economically active population and of pensioners under contributory and non-contributory systems (Nery, 2016; ANFIP, 2017) (see figure III.7).

¹¹ There are several independently administered systems for civil servants at municipal, state and central government levels.

Figure III.7

Brazil: coverage of the economically active population^a and pensioners (adults aged 65 or over)^b, 2000-2014^c (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Inter-American Development Bank (IDB, Labor Markets and Social Security Information System [online] http://www.iadb.org/en/databases/sims/sims-labor-markets-and-social-security-information-system,20137.html; data from Ministry of Finance of Brazil, *Anuário Estatístico da Previdência Social, Suplemento Histórico 2014*, Brasilia, Social Insurance Secretariat/National Institute of Social Security (INSS)/Empresa de Tecnología e Informaciones de Previsión, 2014; Latin American and Caribbean Demographic Centre (CELADE) - Population Division of ECLAC (CELADE), "Long term population estimates and projections 1950-2100. The 2013 Revision"; and R. Rofman and L. Lucchetti, "Pension systems in Latin America: concepts and measurements of coverage", *SP Discussion Paper*, No. 0616, Buenos Aires, World Bank, 2016.

^a The total active workers contributing to social security over the economically active population, on the basis of administrative data.

^b Percentage of people aged 65 or more receiving pension benefits.

^c As no data are available on coverage of pensioners in 2010, the values for 2009 are repeated.

The sufficiency of benefits is also relatively high in Brazil. According to estimates by the Organization for Economic Cooperation and Development (OECD), the average replacement rates in Brazil (48%) are higher than in Chile and Mexico (45% and 42%, respectively), although they remain lower than in OECD and European Union countries, where they stand at 58% and 60%, respectively (BID, 2015).

A thorough evaluation of the measures proposed in the pension reform in Brazil must take into consideration their potential impacts in at least three areas: financial and fiscal trends, protection through coverage and adequacy of benefits.

(ii) Key measures

The proposed parametric reform of the Brazilian pension system contains significant modifications in several areas. The primary measures relate to restrictions on access to benefits in the different regimes. Currently before the parliament, the reform has undergone many changes since the original bill, which generated spirited debate, was presented.

At present, there are two qualifying conditions for retirement: length of contribution period and age. The first entitles men to retire after 35 years of contributions and women after 30 years. Under the second, men can retire at 65 years of age and women at 60, providing that they have contributed for at least 15 years.

The original draft of the reform had eliminated the possibility of retiring on the basis of contribution period, setting the retirement age at 65 with a minimum of 25 years of contributions for both men and women. The provisions of the initial draft were modified and, at the time of writing, men and women in the urban RGPS system can retire with 15 years of contributions, and women can retire at 62 years of age. Various studies have estimated the effects of the tightening of pension eligibility requirements on coverage. An examination of the employment history and effective density of contribution of

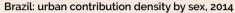
An examination of the employment history and effective density of contribution of the male and female pensioners covered by the urban RGPS system in 2014 reveals that, had the eligibility restrictions contained in the original proposed pension reform (PEC 287) been in effect. 40.1% of retirees would not have been entitled to pension benefits. This figure corresponds to 27% of men and 56.5% of the women who retired that year.

the male and female pensioners covered by the urban RGPS system in 2014 reveals that, had the eligibility restrictions contained in the original proposed pension reform (PEC 287) been in effect, 40.1% of retirees would not have been entitled to pension benefits. This figure corresponds to 27% of men and 56.5% of the women who retired that year (Chiliatto, 2017) (see box III.1).

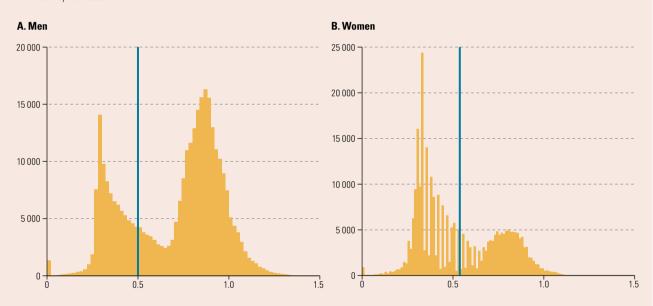
Box III.1

Density of Contribution in Brazil

Various studies have analysed the potential effects of the Brazilian pension system reform (PEC 287) on coverage using National Social Security Institute (INSS) microdata on the payment of benefits under the General Social Security Regime (Nagamine and Ansiliero, 2016; Chiliatto, 2017; Mostafa and Theodoro, 2017). Using this database, it is possible to estimate the density of contribution (average frequency of contributions paid into a contributory pension system) of people retiring in urban areas in 2014 (data also exist for rural areas and different regions). This indicator will be very useful for analysing the potential impacts of the Brazilian pension reform even though the database does not include economically active contributors and, therefore, does not completely reflect the realities of the labour market.



(Number of retirees)



Source: M. Chiliatto-Leite, "Densidade de contribuição na previdência social do Brasil", Studies and Perspectives series-ECLAC office in Brasilia, No. 3 (LC/TS.2017/109; LC/BRS/TS.2017/3), Brasilia, Economic Commission for Latin America and the Caribbean (ECLAC), 2017.

The figures present the density of contribution calculated for men and women in urban areas who retired in 2014 under the general regime (RGPS) based on qualifying conditions of minimum contribution and minimum age. There is a marked disparity in contribution densities between men and women, which, on average, stand at 70.3% and 53.3%, respectively. In addition to gender differences, there are significant disparities within both groups. Taking into consideration the density of contribution and assuming that the qualification restrictions contained in the originally proposed pension reform (PEC 287) were in effect, 40.1% of retirees in urban areas would not have been entitled to pension benefits in 2014. This figure corresponds to 27.6% of men and 56.5% of the women who retired that year.

Source: M. Chiliatto-Leite, "Densidade de contribuição na previdência social do Brasil", Studies and Perspectives series-ECLAC office in Brasilia, No. 3 (LC/TS.2017/109; LC/BRS/TS.2017/3), Brasilia, Economic Commission for Latin America and the Caribbean (ECLAC), 2017.

The entitlements for retirement upon reaching retirement age are currently calculated thus: a base replacement rate of 70% of the average wage plus 1% for year of contribution. In other words, a worker with 30 years of contributions would receive a pension equal to 100% of the average wage. The original reform proposal entailed reducing the base replacement rates to 51% of the average wage plus the 1% for

each year of contribution, meaning that after 30 years of contributions, the replacement rate would amount to 81%. It would require 49 years of contributions for a worker to qualify for 100% of the average salary. At the time of publication, this proposal, still under discussion, set the base replacement rate at 60% and access to 100% after 40 years of contributions on a sliding scale.

Public servants must meet two conditions to qualify for retirement: they must have reached retirement age (60 years for men and 55 for women) and accumulated the minimum years of contribution (35 for men and 30 for women). The original draft of the reform contained a proposal to change the entire public system using the same criteria applied in the general regime. The current version was also modified along the same lines of the RGPS: the statutory retirement age would be raised to 65 years for men and 62 for women, with a minimum of 25 years of contribution for both sexes.

Rural workers are currently entitled to retire five years earlier than their urban counterparts —men at 60 years and women at 55— upon completing at least 15 years of activity. The original proposal was to amend the regulations for the system to work in exactly the same way as the general regime (minimum age of 65 years and at least 25 years of contributions). Applying the same requirements of the general pension system to the rural sector pension system would have a significant effect on coverage and the fight against poverty (Chiliatto, 2017). The modified proposal drops the change in ages, but does stipulate a minimum of 15 years' contributions in order to be entitled to a pension higher than the minimum wage. In line with the rules governing the transition, the changes to the statutory retirement age will take effect in 2020.

(iii) Fiscal debate and actuarial studies

The federal budget for pensions rose steadily from 4.6% of GDP in 1995 to 6.9% in 2006. Between 2006 and 2014, this indicator remained relatively constant at 6.9% of GDP before rising to 8.2% of GDP in 2016 (see figure III.8). The increase in those last two years reflects, to some extent, the recession in Brazil —GDP plunged 7% between 2015 and 2016, resulting in a drop in revenue from contributions— and the increased demand for social protection for older persons in times of economic crisis. In this context, the increase in public spending on pensions is more a reflection of cyclical factors than a structural trend. It is vital to conduct an actuarial study in order to identify the origin (cyclical or structural) of pension expenditure.



on pensions, 1995-2016^a (Percentages of GDP)



Source: Institute for Applied Economic Research (IPEA), "Reforma da providência, análise da PEC 287/2016", Rio de Janeiro, unpublished, 2017.

^a Projection for 2016.

Pay-as-you-go pension systems should conduct actuarial and financial assessments that anticipate the parametric changes that must be implemented to maintain the sustainability of the pension system. A parametric reform as profound as the one currently being proposed in Brazil requires an actuarial study to evaluate the proposed measures from at least three perspectives: the changes in the incentives to participate in the system and receive benefits, the levels of benefits and the financial sustainability of the pension system.

The last actuarial study carried out in Brazil focused on the Government Social Security Systems (RPPS) and was published by the Brazilian Ministry of Social Welfare (Ministry of Social Welfare of Brazil, 2012). The study, which disaggregated the results of the analysis of financial and actuarial balances by RPPS group, showed that the actuarial balances of regimes in states, capitals and municipalities with more than 400,000 inhabitants were in critical condition, while smaller municipalities had attained satisfactory results. In that regard, it raised the need to harmonize thereafter the parameters establishing restrictions and benefits and to implement parametric reforms that would ensure actuarial balances in several RPPS regimes.

According to the Government's fiscal projections of public spending on pensions in the medium term, in the absence of pension system reform, expenditure would amount to 9.7% of GDP in 2027. However, if the reform is carried out, expenditure would remain stable at 8% of GDP (Brazilian Ministry of Finance, 2017). This analysis reinforces the idea that the proposed pension reform is primarily a fiscal reform intended to maintain stability in public spending in the medium term. These projections should be taken in consideration with the study of the potential impact on social protection (changes in coverage and adequacy of pensions) with a view to maintaining and ensuring equity, especially in the poorest and most vulnerable sectors of the population.

(iv) Political economy of the pension system reform

In analysing the reform of the Brazilian pension system, it is important to consider at least two elements that have conditioned the proposals and debates on the pension system: the explosive political climate and social polarization surrounding the impeachment of President Dilma Rousseff and the assumption of power of the current Government; and the economic crisis that saw GDP shrink by 7% in the 2015-2016 biennium, in the largest decline in decades.

In the light of the current economic and social circumstances, the reform of the pension system is in jeopardy. In a context of crisis and instability, discussing and implementing such a consequential reform that would reduce coverage and weaken the social safety net could aggravate the situation, especially in the light of the current economic slowdown.

The political economy restricts the policy space in pension system reform; it is therefore fundamental to design and manage this element in order to implement and stabilize the pension system. The reform proposal currently under debate was designed with a clear fiscal target to reduce the federal budget and meet the objectives of the 2016 fiscal reform (Brazilian Ministry of Finance, 2017). In this context, social dialogue and cross-cutting (political) agreements have not been successful and it was assumed that the pension reform would have received the same congressional support given to fiscal reform. However, the parliamentary debate and discussions with social organizations sparked much opposition to the reform, primarily because of the assumption that the proposed legislation would reduce both coverage and benefits.¹²

¹² Another factor to be considered is the labour reform adopted in 2017. The potential impact of this reform on the informal sector could affect the flow of income from contributions and reduce the coverage of contributory pension system.

(b) El Salvador (2017): reform of the fully funded system

Compared with the rest of the region, the pension system in El Salvador is relatively new. The first contributory pension system was established in 1969, while the non-contributory system was introduced only in 2009, on the heels of the global financial crisis.

In 1998, El Salvador implemented a structural reform of the pension system. Heavily influenced by the Chilean reform model, the country opted for a substitutive reform and replaced the public PAYG system by a fully funded system. The system, privately run by pension fund management companies (AFPs), has a 13% contribution rate and the payouts depend on the total amount saved in individual accounts (Mesa-Lago, 2016).

The objectives of the 1998 reform were threefold: to restore the financial stability of the pension system; to guarantee a decent retirement by increasing coverage, standardizing access to benefits and ensuring a guaranteed minimum pension; and to generate savings to fund long-term investment. At present, the objectives of that reform remain unachieved or even more distant than when the fully funded system was introduced (El Salvador, Government of, 2016). The system's coverage remains low for the region, the level of benefits is inadequate and the financial sustainability of the system is such that urgent reform is needed to ease the burden on the fiscal accounts associated with the transition from a public PAYG system to a fully funded one.

The Salvadoran pension system was reformed in 2017, after more than 20 months of a parliamentary debate during which several reform proposals were presented by the Government, social organizations and political parties. While the Government was seeking to establish a mixed system, the adopted reform maintained the fully funded system with a few adjustments.

(i) Background and goals of the 2017 reform

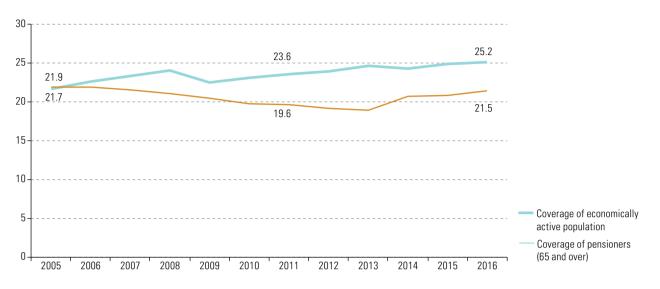
One of the main weaknesses of the Salvadoran pension system is the low coverage, both of active participants (number of contributing members over economically active population) and, in particular, pensioners (beneficiaries aged 65 years or over). The coverage of active participants increased slightly from 21.9% to 25.2% between 2005 and 2016, while that of pensioners has remained relatively unchanged in the last 10 years, at around 21.5% (see figure III.9).

The coverage of pensioners (aged 65 and over) by income quintile shows that, on average, 36.3% of the highest-income sectors (fifth quintile) of the Salvadoran population are covered; however, this percentage drops to barely 8% per quintile for the remaining 80% of the population situated in quintiles 1 to 4. Almost 20 years after the implementation of the 1998 reform, not only has the target of increasing pension system coverage been undershot, but also current coverage remains highly unequal (see figure III.10).

The Salvadoran pension system was reformed in 2017, after more than 20 months of parliamentary debate.

Figure III.9

El Salvador: coverage of the economically active population^a and pensioners (population aged 65 or over)^b, 2005-2016 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of data from the Superintendency of the Financial System of El Salvador and the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC, "Long term population estimates and projections 1950-2100. 2016 Revision". ^a The total active workers contributing to social security over the economically active population.

^b Percentage of people aged 65 or more receiving pension benefits.

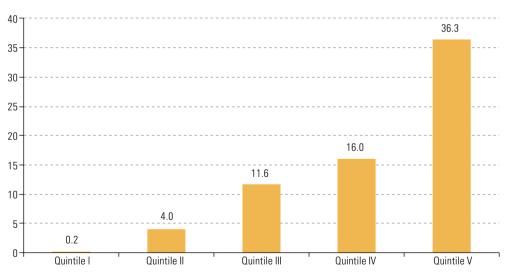


Figure III.10

El Salvador: coverage of pensioners (population aged 65 and over)^a by income quintile, around 2011 (*Percentages*)

Source: Government of El Salvador, "Proposal for a mixed pension system", San Salvador, 2016. ^a The total active workers contributing to social security over the economically active population.

Upon retirement, two out of every three pensioners receive the lump-sum payment of the balance in their individual account because of non-compliance with the 25 years of contributions needed to qualify for pension benefits (El Salvador, Government of, 2016). As a result, the State was obliged to subsidize pensions in the fully funded system, pursuant to Decree no. 1217 (2003) and Decree no. 100 (2006), which guaranteed that pensioners in that system would receive benefits almost equivalent to those under the former PAYG system.

Upon retirement, two out of every three pensioners receive the lump-sum payment of the balance in their individual account because of noncompliance with the 25 years of contributions needed to qualify for pension benefits. In this context, in February 2016, the Government of El Salvador submitted a proposal for structural reform of the pension system to the Legislative Assembly, which entailed the creation of a mixed model along the lines of the reform implemented in Uruguay in 1996. In 2017, the Government presented new proposals for pension system reform, which were debated along with four other initiatives put forward by various social organizations and political parties in El Salvador (Mesa-Lago and Rivera, 2017). The bill presented by the Government aimed to stabilize the fiscal effects of the transition to a fully funded system, guarantee a minimum lifelong pension and address the slow progress with regard to coverage. The reform adopted by the Legislative Assembly in September 2017 was based primarily on the proposal submitted by Iniciativa Ciudadana para las Pensiones (ICP)¹³ and opposition parties. It maintains the fully funded system and establishes a collective savings fund entitled Cuenta de Garantía Solidaria to finance, inter alia, the minimum and lifelong pension benefits.

(ii) Key measures

The main changes introduced by the 2017 reform include:

- An increase in contributions from 13% to 15%, with employer and worker contributions each going up one percentage point, to 7.75% and 7.25% respectively.
- The implementation of the distribution of the 15% contribution for the period 2017-2050 (see table III.6). Beginning in 2018, 8% (comprising the worker contribution of 7.25% and 0.75% coming from employer contributions) will be allocated to individual savings accounts; 2% of employer contributions will go towards AFP commissions and insurance, and the remaining 5% will be paid into the Cuenta de Garantía Solidaria (CGS).
- The use of CGS resources to finance the longevity insurance for lifelong pensions (which require 20 years of contributions followed by 20 years of receiving pensions) and minimum pensions (for individuals who have accumulated 25 years of contributions).
- CGS managed by pension fund management companies and functioning as a collective savings fund financed by employer contributions.
- The introduction of new pension modalities: a temporary economic benefit for individuals with more than 10 but less than 20 years of contributors and a permanent economic benefit for those with more than 20 years and less than 25 years of contributions (see table III.7).
- The definition of a new gender-equal methodology for calculating pension], replacing the concept of "necessary capital" required to finance one unit of pension based on sex differentiated mortality tables; and
- The establishment of four multifunds, separated by level of investment risk, namely: growth, moderate, conservative, and special retirement. The new CGS will be managed in the conservative fund.

¹³ ICP comprises the Salvadoran Association of Pension Fund Managers (ASAFONDOS), the National Association for Private Enterprise (ANEP), the Salvadoran Foundation for Economic and Social Development (FUSADES) and the Committee of Workers in Defence of the Pension Funds of El Salvador (COMTRADEFOP).

	2016	2017-2018	2019	2020-2027	2050
Contribution					
Workers	6.25	7.25	7.25	7.25	7.25
Employers	6.75	7.75	7.75	7.75	7.75
Total	13.0	15.0	15.0	15.0	15.0
Contribution destination					
Individual account	10.8	8.0	8.05	8.1	11.1
Solidarity-based guarantee account (CGS)	0.0	5.0	5.0	5.0	2.0
AFP insurance and commissions	2.2	2.0	1.95	1.9	1.9
Total	13.0	15.0	15.0	15.0	15.0

Table III.6

El Salvador: contribution rate and destination of pension contributions, 2016-2050 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Government of El Salvador, Legislative Decree No. 787 amending the Pensions Savings System Act (2017); Decree No. 927 establishing the Pensions Savings System Act (1996); C. Mesa-Lago, "Los modelos mixtos de pensiones en Costa Rica y Uruguay: algunas lecciones para la re-reforma en El Salvador", Aporte al debate sobre las políticas públicas, N° 06, San Salvador, Fundación Dr. Guillermo Manuel Ungo (FundaUngo), 2016.

Table III.7

El Salvador: old-age benefits in the pension system reform, 2017

Measure	Age requirements	Contribution requirements	Benefit	Solidarity-based guarantee account (CGS)
Lump sum	55 years for women and 60 for men	Under 10 years of contributions	Contributions to individual pension savings account repaid	Return of contributions
Temporary economic benefit	55 years for women and 60 for men	Between 10 and 20 years of contributions	Monthly payments until expiration of the individual pension savings account	Return of contributions
Permanent economic benefit	55 years for women and 60 for men	Between 20 and 25 years of contributions	Monthly payments for 20 years	Lifelong pension
Phased withdrawals	55 years for women and 60 for men	Over 25 years of contributions	Monthly payments for 20 years	Lifelong pension and minimum pension

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of Government of El Salvador, Legislative Decree No. 787 amending the Pensions Savings System Act (2017).

The 2017 pension reform in El Salvador can be considered to be parametric because it does not create a new pension model. However, the fully funded pension system will coexist with a new collective savings mechanism managed by the private sector (AFP) and which offers different benefits (see table III.7).

(iii) Fiscal impacts

As can be seen from the Chilean example, the heavy fiscal burden of transitioning from a PAYG system to a fully funded one can restrict the implementation of a structural reform to introduce a substitutive model.¹⁴ In El Salvador, the State must continue to pay pension commitments even though there is no income from contributions of active workers, which are funnelled into private individual accounts. As a result, the technical reserves of the PAYG system, estimated at US\$338 million (representing 3% of GDP), ran out in 2001, sparking a downward spiral of the country's fiscal accounts. El Salvador's public debt levels are indicative, among other factors, of the lack of a solution to the financial problem of pensions. Between 2000 and 2016, the debt increased from 30% to 44.3% of GDP.

Contracting external debt in the form of eurobonds was not the only recourse of the Salvadoran Government in its attempts to correct the financial imbalance of the pension system between 2001 and 2006. Since 2006, the Government has relied on the

¹⁴ It is estimated that in the two decades immediately following the implementation of the individually funded system in Chile, the fiscal cost averaged 5% of GDP (Arenas de Mesa and Mesa-Lago, 2006).

Pension Trust Fund Act, which makes it compulsory for AFPs to purchase government pension bonds known as Certificados de Inversión Previsional (CIP).¹⁵ This means that a significant portion of pension payments are financed by the economically active population, as in the public pay-as-you-go system. In addition, there are two possible risks: that of an increase in public debt and of late payment on CIPs.

Before the reform was adopted, the Ministry of Finance had submitted to the Legislative Assembly the estimates of the pension system debt in three scenarios: in the event of no reform, in the event of adoption of the Government's proposal and in the event of the adoption of the proposal tabled by ICP and opposition parliamentary groups If no reform was adopted, it was estimated that pension system debt would jump from 16.4% to 29.5% of GDP between 2017 and 2027. If the Government's proposal was adopted, the debt would shrink from 16.1% to 10% of GDP in that same period. However, Government estimates based on the combined ICP/opposition proposal suggested that the increase in pension system debt would be higher than in the absence of reform, more than doubling from 16.1% of GDP in 2017 to 33.9% in 2027 (Ministry of Finance of El Salvador, 2017).

(c) Chile (2017): bill for the establishment of a collective savings system

The Presidential Advisory Commission on the Pension System, comprised of eminent Chilean and international personalities tasked with proposing policy alternatives to address deficiencies in the public pension system, was established in April 2014. It submitted its proposals in September 2015. During that period, there had been protests against the fully funded system and, in August 2016, a presidential statement announced plans to modify the pension system on the basis of the Commission's work and other proposals. These proposals included the establishment of a solidarity-based pension system with tripartite funding, in which the employer contribution rate would be raised from 0% to 5% over a six-year period. These funds would go towards the creation of a solidarity-based collective savings fund, with a view to raising current and future pensions. Given the need for changes to the pension system to have national support, all political parties and social stakeholders were included in the consultation process.

In August 2017, a proposal for reforming the pension system that included three bills was submitted to the National Congress of Chile. The first bill introduces constitutional amendments relative to the proposed new public agency and establishes that the State shall be responsible for running one pillar of the pension system (in addition to its current responsibilities in the Solidarity Pension System through the Social Security Institute (IPS)). The second increases the pension contribution rates from 10% to 15% and establishes a collective savings system, and the third proposes improving and regulating the fully funded system. If the bill that entails constitutional amendments is adopted, a bill establishing the new public agency for the administration of the collective savings system would have to be submitted.

(i) Objectives and key measures of the pension reform bill

The proposed reform of the pension system has three main objectives:

 To increase middle-income pensions. There is consensus regarding the insufficiency of benefits paid by the fully funded system, particularly to the middle classes, since the Solidarity Pension System covers some of the needs of the two

¹⁵ CIPs are financial instruments that allow the State to borrow money from the individually funded system to pay pensions through the Salvadoran Social Security Institute (ISSS) and the National Institute for Public Employees' Pensions (INPEP).

lowest-income quintiles. The aim is to increase the amounts of current old-age pensions provided by AFPs by 20%.

- ii) To strengthen the solidarity pension system and increase gender equality. The Commission's findings confirmed the existence of gender gaps in pensions under the fully funded system, owed, in particular, to the use of sex-differentiated mortality tables in the calculation of benefits.
- iii) To strengthen public institutions and State participation in the management of pensions, bolstering the integrated pension model introduced by the 2008 pension reform.

One of the key measures contained in the pension reform bill is increasing the contribution rate from 10% to 15% (to be paid by employers in the case of wage workers and as own contributions by self-employed or own-account workers) over a six-year period. This consolidates the tripartite financing of the pension system: workers contribute 10%, employers provide 5% plus the disability and survival insurance contribution (the latter provision was implemented in the 2008 reform) and the State finances the Solidarity Pension System, which includes non-contributory benefits (PBS), contributory pensions (APS) and the bonus for each live-born child.

There is a proposal to use the funds that would be collected from the additional 5% in the contribution rate to create a collective savings system (SAC), administered by the public sector through a new autonomous public agency called the Collective Savings Board of Trustees. Consequently, a constitutional amendment was required.

The savings system also provides for the creation of a personal savings fund (FAP, accounting for a further 3% contribution) comprising the fully funded accounts administered by the State and a collective savings fund (FAC, an additional 2% in contributions). The collective savings fund would cover three benefits intended to increase solidarity in the pension system: (i) the intergenerational solidarity contribution, which is a transfer from young cohorts to older persons as in the pay-as-you-go system (contributions from the economically active population finance pensioners' benefits);¹⁶ (ii) the compensatory allowance for women, which corresponds to transfers from men to women to partially offset the gender inequality in pensions under the fully funded system;¹⁷ and (iii) the intragenerational solidarity contribution, which are transfers of contributors from high-income to low-income contributors.¹⁸

(ii) Fiscal impacts and actuarial studies

The main fiscal impacts of the pension reform bill include: (i) the cost of the increase in public servants' rate of contributions (5%), to be borne by the State; (ii) the cost of higher pension contributions for public servants resulting from the increase in the maximum contributory income, and (iii) the administration costs associated with the new public agency, separating one-time costs (establishment/installation) from recurrent (operating) costs. The Government has estimated the cost at approximately US\$ 2 billion (close to 0.5% of GDP).

There is a proposal to use the funds that would be collected from the additional 5% in the contribution rate to create a collective savings system (SAC), administered by the public sector through a new autonomous public agency called the Collective Savings Board of Trustees. Consequently, a constitutional amendment was required.

¹⁶ The intergenerational solidarity contribution is a monthly benefit similar to the Solidarity Pension Payment (APS) established under the 2008 pension reform. It is intended for future old age pensioners aged 65 and over, with 20% of the pension coming from individual savings and a ceiling of 120,000 pesos (US\$185) for pensions amounting to 600.000 pesos (US\$ 920) or more.

¹⁷ The compensatory allowance for women, similar to the bonus for each live-born child granted under the 2008 reform, is intended as reparation for inequalities in pension amounts resulting from the use of sex-differentiated mortality tables in the individually funded system. The proposed benefit would be awarded to women retiring at the age of 65 and it is estimated that it would increase their pensions by 14%. The benefit is capped at around US\$450 and decreases gradually if the woman decides to take early retirement.

¹⁸ The intragenerational solidarity contribution is funded from amounts left over after financing the intergenerational solidarity contribution and the compensatory allowance for women. The benefit corresponds to a transfer from high-income to low-income contributors which is calculated on the basis of a redistribution formula and deposited into the individual capitalization accounts to be managed by the Collective Savings Board of Trustees.

When the Pension Reserve Fund was established in 2006, it was decided that an actuarial study would be conducted every three years to assess parameters and ensure its financial sustainability. The pension reform bill includes a similar provision for the annual actuarial assessment of the collective savings fund. That fund operates on the logic of a PAYG system, with worker contributions and defined benefits for pensioners. Its financial sustainability will depend on the timely update of its parameters.

(iii) Bolstering the integrated pension model

Today, there is ample evidence that the model of fully funded pensions managed by the private sector in Chile has not been sufficient to meet the population's pension needs, in particular those of low- and middle-income workers, women and the self-employed (Presidential Advisory Commission on the Pension System, 2015). The response has been to implement pension reforms that promote greater solidarity and participation on the part of the State with a view to ensuring the sufficiency of benefits in a system that maintains coverage indicators (especially of pensioners, or the over 65 population) and enhances financial sustainability.

The 2017 pension reform bill being debated in parliament takes the 2008 reform further in that it improves on and consolidates the integrated pension model. This is achieved through joint public-private management and by establishing solidary transfers —financed by the private sector and managed by the State— in the contributory system which co-exist with a privately managed fully funded system.

There is a structural dimension to the debate raised by this proposal, given that the establishment of a collective savings system —administered by the State through a novel public agency and financed by employers— would consolidate an integrated pension system in which the public and private sectors complement each other with regard to management and funding. The proposed collective savings fund is based on the old logic of pay-as-you-go systems, in which contributions are amassed in a collective fund from which benefits are paid out to pensioners. Thus, it can be seen as a measure that combines individual savings and group savings in one pension system.

Chile moved from a purely substitutive model (1981) to an integrated model, which includes a fully funded scheme and public funding through the Solidarity Pension System (2008).¹⁹ The reform proposed in 2017 could consolidate the integrated model by moving forward in implementing a solidarity-based tripartite system, increasing State participation and improving the fully funded system.

C. New trends in Latin American pension systems

Between 2008 and 2017, structural reforms had a common denominator: advancing the development of solidarity mechanisms. Most of these reforms also strengthened the administration and public financing of pension systems. The pension reform processes in the region are revealing a new trend of a return to the basic principles of social security systems. Furthermore, the evidence shows that the structural reforms of pension systems have different effects on men and women. To address these gender-differentiated impacts, the gender dimension must be incorporated in the design of the reforms. Another trend concerning social protection for older persons in Latin America has been the establishment and increase in coverage of non-contributory pension systems.

¹⁹ A purely substitutive model is one in which the publicly funded PAYG system is replaced entirely by an individually funded system that is managed by the private sector.

Several structural reforms have been implemented in pension systems throughout Latin America. The reforms carried out in Argentina, the Plurinational State of Bolivia, Chile and El Salvador between 2008 and 2017, in particular, have a common denominator: advancing the development of solidarity mechanisms.²⁰ Most of these reforms also strengthened the administration and public financing of pension systems. The pension reform processes in the region reflect a new trend of a return to the basic principles of social security systems, especially in countries that had previously gone the route of purely fully funded systems.

These new trends are related both to the design of pension systems (new models and gender mainstreaming) and changes in the main indicators of pension coverage (contributory and non-contributory systems) in the region.

Models and reforms: new trend towards public and solidarity-based systems

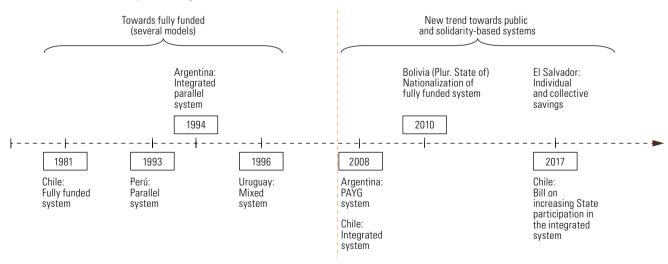
Over the past 10 years, there have been new trends in the design and modification of pension systems in the region. They reveal that the focus of proposals has shifted back to the principle of solidarity and that the establishment of solidarity-based contributory and non-contributory mechanisms are key elements for the development of pension systems. In addition, a common thread in the reforms has been increased involvement of the State, both in the administration and financing of pension systems.

The left side of diagram III.5 illustrates the trends observed in the 1980s and 1990s (influenced by the Chilean reform of 1981), when pension systems adopted the fully funded model, primarily managed by the private sector. The results of those and subsequent reforms of purely fully funded and other pension systems alike indicate that there is now a tendency to promote greater solidarity in pension systems, with the presence of the State to ensure sufficient coverage, sufficiency of benefits and financial sustainability.

Several structural reforms have been implemented in pension systems throughout Latin America. The reforms carried out in Argentina. the Plurinational State of Bolivia. Chile and El Salvador between 2008 and 2017, in particular, have a common denominator: advancing the development of solidarity mechanisms. The pension reform processes in the region reflect a new trend of a return to the basic principles of social security systems, especially in countries that had previously gone the route of purely fully funded systems.

Diagram III.5

Latin America: trends in pension system reforms, 1981-2017



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries.

²⁰ The parametric reform undertaken in Uruguay in 2008, details of which can be found in chapter IV, can also be included in this group.

In this context, the pension system that is exclusively fully funded (substitutive model) is clearly on the wane in the region. There is much doubt that a policy of concentrating the efforts of the pension system exclusively on individual capacity to save is feasible or has the capacity to respond to the region's pension coverage needs and social protection demands.

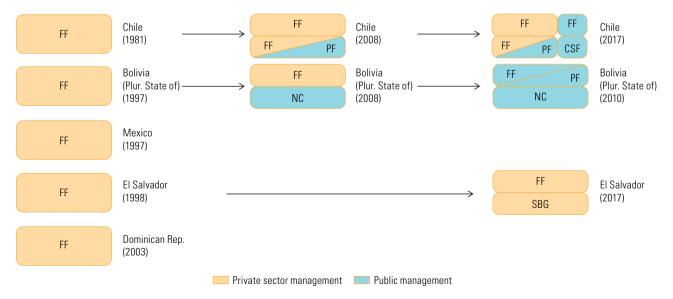
It is well documented that the fully funded pension system is more advantageous for men, formal-sector workers in urban areas, employees with high incomes and stable jobs and those who contributed for most of their working lives. The average pensioner in the countries of the region does not fit this mould for many reasons, including: the high level of informality in the labour market (see chapter I), the large proportion of unstable jobs with low density of contribution in the formal sector and the rise in the number of women entering the workforce in recent decades, which should lead to a surge in female primary pensioners in the region.

In this context, the pension system that is exclusively fully funded (substitutive model) is clearly on the wane in the region. There is much doubt that a policy of concentrating the efforts of the pension system exclusively on individual capacity to save is feasible or has the capacity to respond to the region's pension coverage needs and social protection demands (Gill, Packard and Yermo, 2005; ECLAC, 2006; Barr and Diamond, 2008; Mesa-Lago, 2008; Arenas de Mesa, 2010; Becker and Mesa-Lago, 2013; Uthoff, 2016; Sojo, 2017).

Thus, three of the five countries that had adopted a substitutive fully funded model amended their pension model or moved to a different one between 2008 and 2017. This is the case in Chile, where an integrated model was implemented in 2008 and debate has been ongoing about a new pension reform bill in 2017. Similarly, in the Plurinational State of Bolivia, which in 2008 had established a non-contributory pension system with a universal approach (Renta Dignidad), carried out in 2010 a structural reform of the pension system, nationalizing the capitalization system and creating new responsibilities for the State in the pension system. In El Salvador, too, the pension system was reformed with the addition of a collective savings mechanism to the fully funded model in 2017 (see diagram III.6)

Diagram III.6

Latin America (five countries): transition from pure fully funded pension systems to solidarity schemes and public pension systems



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information from the countries. Note: FE: Fully funded, PF: Public funding, CSF: Collective savings fund, NC: Non-contributory, SBG: Solidarity-based guarantee account.

2. Including the gender dimension in the design of pension system reforms²¹

The gender dimension was generally absent from the 11 structural reforms of pension systems in Latin America between 1981 and 2008 (see table III.1), the implicit assumption being that such reforms were gender neutral (Arenas de Mesa and Montecinos, 1999). The evidence shows that the structural reforms of pension systems have different effects on men and women. To address these gender-differentiated impacts, the gender dimension must be incorporated in the design of pension reforms in lam.

In the above-mentioned structural reform processes, gender analysis was not sufficiently extensive in government, academic and political spheres. This was due in part to the population's general lack of knowledge regarding how the new pension systems worked and the limited space given during the twentieth century to the issue of gender equality in studies of those systems in Latin America. In this century, efforts were made to compensate for the lack of attention to the gender variable. While gender is being mainstreamed into discussions on pensions, progress is slow and uneven (Arenas de Mesa and Gana, 2001; Bertranou, 2001; Birgin and Pautassi, 2001; Bertranou and Arenas de Mesa, 2003; Marco, 2004 and 2016; Amarante, Colacce and Manzi, 2016; Arza, 2017).

Between 2008 and 2016, some of the parametric and structural reforms in the region included the gender dimension and attempted to address gender inequalities which are particularly present in the labour market or in the very design of the new pension systems. Some of these advances include: (i) special benefits for women who opt for early retirement (Costa Rica in 2005), (ii) equal pension rights of female domestic workers (Uruguay in 2006 and Chile in 2008); (iii) recognition of maternity and of unpaid work through bonuses for each live-born child (Chile in 2008, Uruguay in 2008 and the Plurinational State of Bolivia in 2010); recognition of sex-differentiated mortality tables for the calculation of benefits (Plurinational State of Bolivia in 2017).

Gender equality in pension systems should be addressed in a comprehensive and multidisciplinary manner. There are fiscal impacts of promoting pension systems that focus more on solidarity and incorporate the gender dimension, and these must be taken into account in the design of pension reforms in order to achieve adequate coverage and ensure the financial sustainability of pension systems.

The gender dimension has cross-cutting effects, for example in the areas of coverage, benefits and financial sustainability. Consequently, the equilibrium of pension systems (see diagram III.1) also depends on the effective and comprehensive incorporation of the gender dimension in future pension reforms in the region.

Increase in contributory coverage (economically active population) in pension systems in Latin America: 2000 and 2014

Pension system reforms require systematization and rigorous follow up —for example, with regard to changes in levels of coverage— to address the lack of protection observed in most of Latin America. Investing in information systems to track the effects of the reforms and the evolution of the key variables of pension systems is crucial to the development of public policies for social protection in the region.

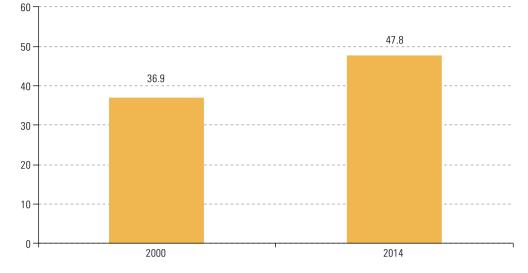
The evidence shows that the structural reforms of pension systems have different effects on men and women. To address these genderdifferentiated impacts, the gender dimension must be incorporated in the design of pension reforms in lam.

Pension system reforms require systematization and rigorous follow up —for example, with regard to changes in levels of coverage— to address the lack of protection observed in most of Latin America.

²¹ See a more in depth analysis of gender mainstreaming in pension systems in Latin America in chapter IV.

The coverage of the active population in contributory pension systems in Latin America, measured as the proportion of the economically active population that makes contributions, increased from 36.9% to 47.8% between 2000 and 2014 (see figure III.11).²²

Figure III.11 Latin America (18 countries)^a: coverage of the economically active population,^b 2000 and 2014 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official information on the economically active population from the respective countries and the Latin American and Caribbean Demographic Centre (CELADE)-Population Division of ECLAC estimates and projections.

^a Weighted average for 18 countries: Argentina, Bolivarian Republic of Venezuela, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Plurinational State of Bolivia and Uruguay.

^b The total active workers contributing to social security over the economically active population.

The trend of coverage economically active population in the region between 2000 and 2014 establishes at least three precedents: (i) average coverage has increased despite the economic crises of the past 15 years; (ii) given the rapid incorporation of contributors in the pension system, it will take half a century for the region to attain average levels of coverage similar to that of Uruguay in 2014 (87.2%); and (iii) an estimated 142 million economically active people have no social security or are not covered by contributory pension schemes. This explains, in part, the significant expansion of non-contributory pension systems in the region over the past two decades.

4. Expansion of non-contributory pension systems in Latin America: 2000 and 2015

Non-contributory pension systems are those that provide benefits (pensions) to persons without preconditions for work history. This means that there are no set contribution requirements, but, in general, conditions of age, years of residence, poverty (income levels) or disability status must be met. There are also systems that provide universal coverage from a certain age. These systems are usually managed by the public sector and financed by general revenues (public treasury).

The first non-contributory pension system in Latin America was established in Uruguay in 1919. This was followed by non-contributory pension systems in Argentina (1948), Brazil (1971), Costa Rica (1974) and Chile (1975) (Bertranou, Solorio and van Ginneken, 2002).²³

²² Information on the coverage of the economically active population comes from administrative data provided by the countries of the region.

²³ In 1971, Brazil established the Rural Workers Support Fund (FUNRURAL), followed by the Monthly Income for Life (RMV) assistance programme in 1974-1975. Since 1993, the rural pension system (established by Laws No. 8.212 and 8.213) has been providing non-contributory old-age and disability benefits (Schwarzer and Querino, 2002).

One of the most notable trends in the social protection of older persons in Latin America in the last two decades has been the establishment of non-contributory pension systems. In 2000, such social protection schemes were present in seven countries which, for the most part, were considered pioneers in the region (Mesa-Lago, 2008).²⁴ In 2015, the number of Latin American countries with non-contributory pension systems or assistance programmes for older persons increased to 16.²⁵ Only the Dominican Republic, Haiti, Honduras and Nicaragua²⁶ are without such systems.²⁷ Thus, the coverage of non-contributory pension systems for persons 65 years or over rose from 3.7% to 23.8% between 2000 and 2015, with 11 million beneficiaries in 2015. When beneficiaries aged 65 years or over in Brazil's rural pension system RGPS (rural) are added, the coverage of non-contributory pension systems increased from 14.2% to 33.7% between 2000 and 2015 for that age bracket (see figure III. 12). In both scenarios, the region's non-contributory pension systems increased the coverage of the population aged 65 and over by about 20 percentage points in the past 15 years.

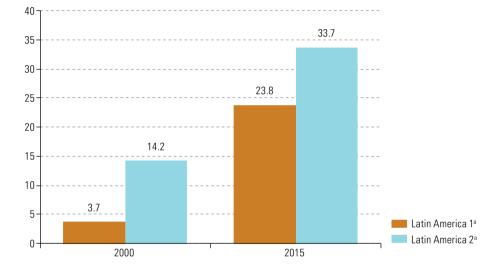


Figure III.12

systems.

One of the most

notable trends in the

older persons in Latin

America in the last two

decades has been the

establishment of non-

contributory pension

social protection of

Latin America^a (14 countries)^b: coverage of non-contributory pensions among the population aged 65 and over^c, 2000 and 2015 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), Non-contributory social protection programmes in Latin America and the Caribbean database [online] http://dds.cepal.org/bpsnc/index-en.php; C. Grushka, J. Gaiada and A. Calabria, *Sistema(s) previsional(es) en la Argentina y cobertura: análisis de las diversas fuentes de datos y de los diferenciales por edad, sexo y jurisdicción*, Buenos Aires, Directorate of Social Security Research, National Social Security Administration (ANSES), 2016; Brazilian Ministry of Finance, Anuário Estatístico da Previdência Social, AEPS 2015, Brasilia, Social Security Institute (INSS)/Empresa de Tecnología e Informaciones de Previsión, 2015; Institute of Social Security Standardization (INP), *Anuario Estadístico 2003*, Santiago, Government of Chile, 2003; Superintendency of Pensions of Chile, *Boletín Estadístico Electrónico*, No. 220, Santiago, 2015; Costa Rican Social Security Fund (CCSS), *Anuario Estadístico 2015, Rágimen no contributivo*, San José, 2015; National Statistics Office (ONE) of Cuba, *Cuba en Cifras, Edición 2007*, Havana, 2008; National Office of Statistics and Information of Cuba (ONEI) (2016), *Anuario Estadístico de Cuba 2015*, Havana, 2016 and Uruguayan Social Insurance Bank (BPS). *Boletín Estadístico, 2015*, Montevideo, Social Security Institute, 2015 and *Boletín Estadístico, 2010*, Montevideo, Social Security Institute, 2015.

^a Latin America 1 does not include the rural pension system of Brazil (RGPS rural), while Latin America 2 does.

^b Weighted average for 2000 and 2015. In 2000, seven countries had non-contributory pension systems: Argentina, Brazil, Chile, Costa Rica, Cuba, the Plurinational State of Bolivia and Uruguay. In 2015, seven more countries included non-contributory pensions in their social security systems, namely: Colombia, Ecuador, El Salvador, Mexico, Panama, Paraguay and Peru.

^c For Colombia, El Salvador and the Plurinational State of Bolivia, the number of beneficiaries over the age of 65 in 2015 are estimates, as local programmes took into account persons over the age of 60 in the Plurinational State of Bolivia and El Salvador and the population over the ages of 54 and 59 years by gender (women and men respectively) in Colombia.

²⁴ Argentina, Brazil, Chile, Costa Rica, Cuba, the Plurinational State of Bolivia and Uruguay.

²⁵ Several countries also provide non-contributory disability pensions.

²⁶ Since 1982, a charitable pension in appreciation for services rendered to the homeland has been available in Nicaragua; it has limited coverage and, in particular, is restricted to beneficiaries who have been recognized for outstanding services to the country.

²⁷ For a comprehensive overview of the non-contributory pension programmes in Latin America and the Caribbean, see annex table I.A1.2 of chapter I.

Beyond these technical discussions, noncontributory pension systems have been remarkably successful in reducing poverty and extreme poverty in some countries in the region.

The reforms of pension systems in the region must seek to: (i) expand coverage; ii) enhance the solidarity of the contributory pillar by means of solidarity-based rules for contributors, which would benefit sectors of the population with insufficient pensions (transfers financed through general revenues or solidaritybased contributions); (iii) integrate contributory and non-contributory systems (from the perspective of universal rights); (iv) maintain incentives to contribute, and (v) ensure financial sustainability.

The huge upsurge in the coverage of the non-contributory pension systems in the region has been stimulated by: (i) country progress in the development of comprehensive social protection systems that include the protection of older persons through contributory and non-contributory pension systems; (ii) the importance countries place on combating poverty and on the consolidation of a rights-based agenda; (iii) the large informal labour market in some countries, which translates into 130 million informal workers in Latin America (ILO, 2016); and (iv) the large proportion of older persons who are not covered by the contributory pension system —it is estimated that about 60% of the population over the age of 65 did not receive a contributory benefit in 2014, although some were covered by non-contributory pension systems (see figure III.12).

There is extensive debate, not unique to the region, on the approaches to the design and functioning of non-contributory pension systems. These systems were initially devised within the framework of State transfers and allowances for certain age groups based on socioeconomic level, specifically for older persons who were not covered by traditional contributory pension systems. The changes and increase in the coverage of non-contributory pension systems have generated debate on whether they should be considered part of the pension system with universal rights that provides social protection for citizens starting at a specific age. Another debate concerns the relationship between non-contributory schemes and classical contributory pension systems within the framework of integrated systems. There are also questions about the impact of these systems on formality and their potential incentives for participation in the labour market and the paying into contributory systems (Rofman and Oliveri, 2001; Bosch and others, 2013).

Beyond these technical discussions, non-contributory pension systems have been remarkably successful in reducing poverty and extreme poverty in some countries in the region.²⁸

Another feature of the non-contributory pension systems in the region is the overrepresentation of women resulting from their predominance in the informal labour market, their low participation in the formal labour market and the inequalities inherent in contributory pension systems, which, in the vast majority of cases, do not incorporate the gender dimension (see chapter IV).

Latin America is ageing rapidly (see the introduction to this chapter) and demographic pressure will determine whether pension system coverage becomes a major focus of public policy in the coming decades. It is projected that in 2065, there will be 196 million people over the age of 65 in the region, a number that will have increased more than fourfold compared to 2015 (CELADE, 2016). With the conservative assumption that the coverage attained by non-contributory pension systems in 2015 remains constant over time, about 25% of the over-65 population would be covered by these systems (49 million people). The potential fiscal impact of this regional demographic pressure would mean that public spending for non-contributory pension systems would be multiplied by 4.5; only the quantity effect can explain such growth without taking into account the possible increases in the level of benefits. In this context, in examining the financial sustainability of pension systems in Latin America, it is necessary to include not only the analysis of classical contributory pension systems, but also the development and design of non-contributory pension systems.

²⁸ See the cases of Brazil (section B.2(a)), the Plurinational State of Bolivia (section B.1(c)) and Chile (section B.1-(b)).

D. Concluding remarks

In recent decades, there have been multiple reforms to the pension systems in Latin America. These reforms have been characterized by progress in the area of rights-based comprehensive social protection systems and the pursuit of solidarity mechanisms, especially in the past 10 years.

The characteristics of the labour market (such as high rates of informality and precarious working conditions, low income and difficulty in maintaining stable careers, significant inequalities based on gender, ethnicity and race and geographical location), deficits in the pension system (coverage, sufficiency and financial sustainability) and the tremendous inequality in the region are conducive to progress on a new social covenant on pensions that would place solidarity-based systems at the centre of the debate on and design of new pension models in the region.

In this context, the reforms of pension systems in the region must seek to: (i) expand coverage; ii) enhance the solidarity of the contributory pillar by means of solidarity-based rules for contributors, which would benefit sectors of the population with insufficient pensions (transfers financed through general revenues or solidaritybased contributions); (iii) integrate contributory and non-contributory systems (from the perspective of universal rights); (iv) maintain incentives to contribute, and (v) ensure financial sustainability.

Given the demographic transition (ageing) in the region, it is particularly important for countries that have a pay-as-you-go system —either as a main scheme or as part of the pension system, as is the case in 15 of the 20 countries in the region)— to establish clear rules for modifying the parameters and periodicity of actuarial studies which, together, would form the basis of future parametric reforms.

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Given the demographic transition (ageing) in the region, it is particularly important for countries that have a pay-asyou-go system --either as a main scheme or as part of the pension system, as is the case in 15 of the 20 countries in the region)— to establish clear rules for modifying the parameters and periodicity of actuarial studies which, together, would form the basis of future parametric reforms.

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Pension systems and women's economic autonomy in old age

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Introduction

Latin American governments have expressed concern about the socioeconomic disadvantages faced by older women —both at sessions of the Regional Conference on Women in Latin America and the Caribbean and in the framework of the Regional Intergovernmental Conference on Ageing and the Rights of Older Persons in Latin America and the Caribbean (ECLAC, 2016b and 2017d). The commitments assumed in the agreements adopted by those forums reflect a rights and citizenship approach to the economic security of older persons and views old age as a critical stage of women's economic autonomy. In that context, social security plays a central role in ensuring that autonomy and for exercising a series of related rights, such as the rights to food, health, leisure and social integration. Social security also has an important part to play in helping the region's societies achieve gender equality.

As discussed in the introductory chapter to this issue of the *Social Panorama*, the demographic changes experienced by the Latin American countries over recent decades have unfolded at different times and speeds. As a result, although the situation across the region is not uniform, the feminization of old age is a trend that is unfolding in all the countries. The main consequences of the decline in fertility and mortality rates have been slower population growth and the transformation of the age pyramid to reflect an ageing population (ECLAC, 2017d, p.48); and this has taken place alongside significant changes in family structures. This ageing process has an inescapable gender dimension: not only because women are a majority among older persons, but also because they are the primary caregivers for the very elderly, and because women are also much more likely to lack economic autonomy in old age then men.

Pension systems are not neutral vis-à-vis gender inequalities in society. At present, they reproduce and intensify discrimination and inequities originating in other areas —the labour market, for example— without substantially contributing to the closure of gender gaps or to the promotion of distributive justice (Rico, 2015). The design of these systems and of pension reforms is of crucial importance because the architecture and resulting decisions, financing mechanisms and guiding principles adopted can either accentuate gender and socioeconomic disparities, or, alternatively, they can mitigate them and guarantee economic and social citizenship in old age for men and women alike (Marco, 2004; Giménez, 2003).

A. The right to pensions and social rights

To achieve equality and guaranteed rights for men and women, a comprehensive pension system is needed that eliminates androcentric biases and includes the hidden domains of people's lives. Moreover, to ensure full enjoyment of social security rights, different life paths need to be recognized and the asymmetries generated by the current sexual division of labour need to be corrected.

As noted above, social security consists of a set of norms and institutions that exist to protect people against certain contingencies. The aim is to avoid the state of need that would be generated by a change in an autonomous person's usual capacities, as occurs in a situation of unemployment, illness, accident, the death of the family breadwinner or old age. At the present time, it also involves avoiding or mitigating the state of necessity that could arise from causes such as a person's full-time dedication to the care of chronically ill or elderly relatives, as a result of which that person —almost always a woman— cannot participate in the labour market.¹This is expressed in the Social

The ageing process has an inescapable gender dimension: not only because women are a majority among older persons, but also because they are the primary caregivers for the very elderly, and because women are also much more likely to lack economic autonomy in old age then men. Protection Floors Recommendation, No. 202 of the International Labour Organization (ILO) of 2012, the preamble to which states that social security is an important tool to prevent and reduce poverty, inequality, social exclusion and social insecurity, to promote equal opportunity and gender and racial equality, and to support the transition from informal to formal employment" (ILO, 2012). To achieve these objectives, social security needs to include a wide-ranging package of social insurance, relying heavily on State capacities in the provision, regulation and financing of the system, to provide a safety net for employment and for social contingencies (Pautassi, 2005).

Social security systems are social covenants, in which citizens agree on how to make sure the needs of the dependent population are satisfied, recognizing that everyone will be part of that population group and will require support at some point in their lives. These systems are generally organized in short and long-term regimes. The first include maternity, health, employment risk and unemployment benefits, while the second group includes the contingencies of old age, disability and death. In analytical terms, a distinction is usually also made between social security and social assistance, to distinguish subsystems according to whether they are predominantly contributory or non-contributory (ECLAC, 2006; Sojo, 2017). In all of these categories, it is possible to identify specific situations that harm women more than men, and they bring into play issues arising from the dominant gender system that have been excluded from those covenants or have not received the necessary emphasis (Birgin and Pautassi, 2001).

New covenants must recognize and remunerate unpaid domestic and care work done in the household, bringing those who do this work within the scope of pension systems, in recognition of the fundamental contribution they make to their countries' economies, sustainability of life and well-being. Accordingly, given the huge inequalities and budgetary constraints that pervade the Latin American economies, a future pension system must be based on a solid social covenant and a new gender contract (ECLAC, 2016a and 2014). The latter must underpin and reconcile the systems' economic sustainability through time with the principles of universality and solidarity, including cross-subsidies from those who have saving capacity, have participated in the labour market or have held quality jobs, towards those that have been denied those options, so as to achieve decent benefits for all people (Uthoff, 2017). Moreover, new covenants must also recognize and remunerate unpaid domestic and care work done in the household, bringing those who do this work within the scope of pension systems, in recognition of the fundamental contribution they make to their countries' economies, sustainability of life and well-being.²

This reflects the fact that a much broader segment of the population is covered by social security than by employment law. Rather than just employees in formal employment relationships and the self-employed, it includes all those living within the territory of a State (Monsalve, 2016). As will be discussed below, that perspective has major gender implications for several reasons: because of the majority presence of women in self-employment, because it recognizes that social security entitlement flows from a person's status as a citizen and that care provided on an unpaid basis is also work.

1. Old age pensions: a right, not a benefit

The right to social security and the right to pensions, dating back to the 1940s, are fundamental rights that have been recognized in international human rights instruments and in the constitutions of the region's States, either explicitly, or else as countries transpose human rights treaties directly into their "constitutional block".³

² Satellite accounts recording unpaid work show that this contribution is large. These accounts have been constructed in Colombia, Ecuador, Guatemala, Mexico and Peru; El Salvador is in the process of creating one, and Costa Rica and Uruguay have made progress on methodologies for valuing unpaid work. These efforts show that unpaid work represents 20.4% of GDP in Colombia, 15.7% in Costa Rica, 15.2% in Ecuador, 18.3% in Salvador, 18.8% in Guatemala, 24.4% in Mexico, 20.4% in Peru and 22.9% in Uruguay (ECLAC, 2017b).

³ This means the set of rights or principles that are considered part of the constitutional order without being expressly included in the Constitution itself.

All of the conventions and statements analysed at the start of this edition of the *Social Panorama of Latin America* assert that States must guarantee the right to social security for women and men on an equal footing, and also for specific population groups, such as persons with a disability (OAS, 1999), migrant workers and their families (United Nations, 1990), and persons belonging to indigenous peoples (United Nations, 2007), as agreed upon in international instruments and established in the opinions and recommendations of the bodies responsible for monitoring treaty implementation, such as General Observations Nos. 16 and 20 of the Committee on Economic, Social and Cultural Rights. The Convention on the Elimination of All Forms of Discrimination against Women also requires States to adopt all appropriate measures to guarantee women the right to social security on a basis of equality with men (United Nations, 1979).

Achieving equality in the exercise of rights means eliminating the direct and indirect forms of discrimination that may arise from policies, programmes, legal norms and government or social practices. The Convention on the Elimination of All Forms of Discrimination against Women and the recommendations of the Committee for the Elimination of Discrimination against Women⁴ view direct discrimination as unequal and prejudicial treatment based on gender, which is specified in a policy, norm, regulation, or any kind of administrative or other provision. In contrast, indirect discrimination can arise from a formally neutral treatment, which, because of its effects or results, is harmful to a specific population or part of it. The analysis of current pension systems and access to social security benefits by men and women shows that both direct and indirect discrimination are to some extent present in most Latin American countries, despite the different types of reforms that have been implemented.

The Regional Gender Agenda, comprising the agreements approved by Governments at the sessions of the Regional Conference on Women in Latin America and the Caribbean held over the past forty years, contains various State commitments on economic and social rights, including the right to social security and fair access to pension systems. The Regional Gender Agenda relates the obstacles faced by women in exercising these rights to the social organization of care, the barriers and discrimination that women experience in employment and in earning sufficient income of their own, and other impediments to their economic autonomy (ECLAC, 2016b). In terms of pension systems, government commitments include the following:⁵

- Universal, comprehensive and efficient coverage, through solidarity-based financing (Santo Domingo Consensus (2013) and Brasilia Consensus (2010)).
- The linking of pension systems to a broad spectrum of public policies that guarantee well-being, quality of life and a decent retirement, thus strengthening the full exercise of women's citizenship (Quito Consensus (2007) and Santo Domingo Consensus (2013)).
- The inclusion of female domestic workers, rural women, female self-employed, informal and contract workers, as well as different family structures (Regional Programme of Action for Women in Latin America and the Caribbean, 1995-2001 (Mar del Plata, 1994)).
- The incorporation of mechanisms to recognize and remunerate unpaid care provided predominantly by women in their homes, by bringing them within the scope of social security systems (Lima Consensus (2000).

The analysis of current pension systems and access to social security benefits by men and women shows that both direct and indirect discrimination are to some extent present in most Latin American countries, despite the different types of reforms that have been implemented.

⁴ For example, in its concluding observations presented at the forty-third session in 2009, the Committee on the Elimination of Discrimination against Women advised the Government of Guatemala to adopt temporary special measures to address women's disadvantaged situation in the labour market. It also recommended other measures guaranteeing access to social security for women domestic and rural workers, and those who work in the *maquiladora* industry and in the informal sector of the economy. In the case of Chile, the same Committee, in its concluding observations to the fifth and sixth periodic reports of that country in 2012, expressed satisfaction at the positive impact of the 2008 pension reform on women, but also concern about the discriminatory calculation system of the pension fund, which, by using life expectancy tables disaggregated by sex, results in a different monthly pension at the time of retirement for those women and men who have equally contributed (Bareiro, 2017).

⁵ For a treatment of these rights in each of the specific instruments, see Economic Commission for Latin America and the Caribbean (ECLAC), *Regional Gender Agenda* [online] http://biblioguias.cepal.org/AgendaRegionalGenero/.

- Increased public investment in social security, so as to comprehensively address women's specific care and social protection needs in situations related to illness, disability, unemployment and the stages of the life cycle, especially in childhood and old age (Brasilia Consensus (2010)).
- The adoption of measures to uphold the right to care and produce a fairer distribution of care between society, the State and families, together with the need to progress labour legislation and social security systems to provide for leave periods for both men and women, leading to a fairer distribution of care duties within families (Santo Domingo Consensus (2013)).

2. Women and social security: an evolving relationship

As noted in the introductory chapter, social security is nurtured on various principles which are dynamic in the sense that they preserve their essence while also adapting to new realities.⁶ Nonetheless, there are at least four principles that endure over time and to some degree take precedence over the others. These are the principles of universality, solidarity, equality and efficiency (ECLAC, 2000 and 2006), in addition to the principle of financial sustainability, which are at the heart of social security.⁷

Feminist and gender studies, proclaim, adopt and apply these principles in their analyses, while also developing them further and lobbying for them to be endowed with inclusive content and meaning to reflect the situation and condition of women. These principles, and social security generally, had an androcentric bias in their inception, since they were presented as neutral and pertaining to the entire population, when, in reality, they were conceived from a male perspective and intended mainly for men. Subsequently, they evolved and were complemented with human rights instruments and doctrine, supported by the contributions of gender studies (Birgin and Pautassi, 2001; Marco, 2002; Pautassi, 2002).

In practice, the principles of social security were designed for the male worker, employed in a stable job, as breadwinner in a family in which an adult woman looks after the children and the elderly who need care, while also performing domestic chores in the household. This arrangement enables the adult male to work full time in the labour market and access social security in his own right, while women's access would be a derived right.

In this way, universality —as originally envisaged in the works of William Beveridge, which made an important contribution in the mid-twentieth century (1942), by considering that societal welfare stems not from the employment relationship but from the State's obligation to its citizens —in practice, excluded the unpaid work that women do in their household. Moreover, the principle of solidarity was limited to the widow's pension, which replaced the income of the male breadwinner. It did not treat women equally, because, while social security implies both an *intra*-generational and an *inter*-generational solidarity contract, involving time-bound and generational reciprocities, these reciprocities have historically been sustained through the care economy run by women. In other words, those who historically guaranteed the continuity of these contracts were women, based on the reproductive work they do within households (Pautassi, 2005), thereby allowing adult males to dedicate themselves full-time to the labour market, while women do domestic work and look after dependent family members. Otherwise, care responsibilities would have to be assumed by the State, and domestic work would have a cost for its autonomous adult beneficiaries, namely men.

⁶ Doctrine establishes principles that include the following: comprehensiveness, sufficiency, efficiency, sustainability, procedural unity, diversity of the funding base, irreducibility of benefits, progressivity, favourability or the most favourable norm, and justiciability (Monsalve, 2016).

⁷ Similarly, Uthoff (2017) mentions six principles without which the pension systems would lose their identity as part of social security: universality; solidarity; financial sustainability; comprehensiveness and sufficiency of benefits; equality, equity or uniformity of treatment, and unity, responsibility of the State and participation in management.

Box IV.1

Social rights are not optional: indicators of compliance with the San Salvador Protocol

Following the guidelines of the Inter-American Commission on Human Rights (IACHR), the Working Group on the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, known as the San Salvador Protocol, developed a series of progress indicators to measure the economic, social and cultural rights referred to therein, which were approved by the General Assembly of the Organization of American States (OAS) on 4 June 2012 (AG/RES. 2713 XLII-O/12).

These gender-mainstreamed indicators must be applied by the States when submitting their San Salvador Protocol compliance reports, and are of three types: (i) structural, which track measures related to institutions, laws or plans; (ii) process, which measure the coverage of programmes and management improvement, for example; and (iii) results, which evaluate the impact of policies on the exercise of the right in question. The indicators are organized in three conceptual categories —reception of the right, State capacities and budgetary commitment— and three cross-cutting principles that are crucial for guaranteeing women's rights and autonomy: equality and non-discrimination, access to justice, and access to information and participation (OAS, 2015).

Indicators of equality and non-discrimination in the right to social security are shown in the following table.

Indicators of the right to social security: equality and non-discrimination

Reception of the right Structural indicators	Process indicators	Results indicators
Ratification of: International Covenant on Economic, Social and Cultural Rights (ICESCR) Convention on the Elimination of All Forms of Discrimination against Women ILO Social Security (Minimum Standards) Convention, 1952 (No. 102) 1951 Convention and 1967 Protocol on the Status of Refugees Convention on the Status of Stateless Persons (1954) Inter-American Convention for the Elimination of All Forms of Discrimination against Persons with Disabilities International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families United Nations Declaration on the Rights of Indigenous Peoples, among others Incorporation of the right to social security in the Constitution Specific legislation that contemplates the right to social security Signs of progress: percentage of beneficiaries who consider the level o Equality and non-discrimination	 Average time to gain recognition of the right to pensions by activity status and gender Percentage of the population insured under contributory systems by gender, ethnicity/race and education level Percentage of the population covered under non-contributory systems by gender, ethnicity/ race and education level Percentage of population affiliated to special regimes by gender, ethnicity/race and educational level Percentage of adults aged over 65 covered by old-age care programmes by gender, ethnicity/ race and educational level f social security coverage to be satisfactory 	 Proportion of economically active population by gender, age, education level and income quintiles Population covered by a pension by age group, gender and income quintile Percentage of population insured under a contributory regime, by gender, age and income quintile Number of beneficiaries contributing to the pension system by gender, age and income quintile Total unemployment subsidies for people not affiliated to contributory systems
Structural	Process	Results
 Requirements to access the social security system Requirements for indigenous peoples, Afrodescendants, refugees, asylum-seekers and stateless persons to access the system Requirements for domestic workers to access the system Requirements for rural workers to access the system 	 Basis for calculating social security benefits for men and women Extension and ways of using actuarial tables to calculate the pension benefit (pension credit) Extension, coverage and jurisdiction of inclusion mechanisms for persons performing reproductive or domestic care work 	 Pensioned (retired) population by gender, age and education level, by jurisdiction Percentage of beneficiaries who receive a pension or subsidy, by gender, age, ethnicity and race, by jurisdiction Percentage of migrants, refugees, asylum seekers and stateless persons with social security coverage Percentage of rural workers with social security coverage

Colombia, Ecuador, Mexico, Paraguay, the Plurinational State of Bolivia and Uruguay have all submitted their reports to OAS on the implementation of the first group of rights (social security, health and education) under the San Salvador Protocol, using these indicators. They are also making a major effort to report on progress and pending challenges for mainstreaming gender and incorporating women's rights and autonomy in the regulation and operation of pension systems.

Source: Organization of American States (OAS), Progress Indicators for Measuring Rights under the Protocol of San Salvador, Washington, D.C., 2015.

Currently, international human rights treaties, as interpreted by the bodies tasked with monitoring their application, have extended their influence to encompass various disciplines, thereby contributing to the "resignification" of equality as a principle and as a cross-cutting dimension of human rights. Under these arrangements, the principle of equality was applied between male workers and was seen as linked to the principle of uniform treatment. Currently, international human rights treaties, as interpreted by the bodies tasked with monitoring their application, have extended their influence to encompass various disciplines, thereby contributing to the "resignification" of equality as a principle and as a cross-cutting dimension of human rights. This means that all rights, including the right to social security, must be exercised under conditions of equality.

Thus, although social security principles remain essentially constant, they are also dynamic (Monsalve, 2016), since they adapt to the changes that occur in the conception of the State and its responsibilities, the concept of citizenship and the rights approach. That is why the formulation and application of these principles evolve to become even more congruent with universality, solidarity and equality, and include women (more than 50% of the population) in their different societal roles, while also reflecting the needs and demands of older women.

An example of this is the ILO Social Protection Floors Recommendation, 2012 (No. 202), which identifies the principles that should guide social security systems as: (a) universality of protection, based on social solidarity; entitlement to benefits prescribed by national law; adequacy and predictability of benefits; non-discrimination, gender equality and responsiveness to special needs; social inclusion, including of persons in the informal economy; respect for the rights and dignity of people covered by the social security guarantees; progressive realization, including by setting targets and time frames; solidarity in financing while seeking to achieve an optimal balance between the responsibilities and interests among those who finance and benefit from social security schemes; consideration of diversity of methods and approaches, including of financing mechanisms and delivery systems; transparent, accountable and sound financial management and administration; financial, fiscal and economic sustainability with due regard to social justice and equity; consistency with social, economic and employment policies; consistency across institutions responsible for delivery of social protection; high-quality public services that enhance the delivery of social security systems; efficiency and accessibility of complaint and appeal procedures; regular monitoring of implementation, and periodic evaluation; full respect for collective bargaining and freedom of association for all workers; and tripartite participation.

It is also important to reiterate that new contributions to the construction of social security principles view the right of women and men to pensions as stemming from their status as citizens, rather than depending on paid employment (Giménez, 2003).

3. Women's economic autonomy and the right to contributory pensions

As the Economic Commission for Latin America and the Caribbean (ECLAC) has noted, "the concept of autonomy refers to people's capacity to take free and informed decisions about their lives, enabling them to be and act in accordance with their own aspirations and desires, given a historical context that makes those possible. Today's level of economic, technological and social development makes it possible to state that greater autonomy for women can be achieved. The material conditions in the region do not offer a reasonable explanation for inequality, maternal mortality, adolescent pregnancy, precarious employment, the distinctive concentration of unpaid domestic work in the hands of women, and much less gender-based violence. As has been said previously [...], inequality and, therefore, lack of autonomy are primarily the result of injustice, the poor distribution of power, income and time between men and women and the lack of recognition of women's rights by the political and economic elites" (ECLAC, 2011, p. 9). In the region, women's autonomy in its three dimensions —physical, economic and political— and their interrelations, is a category that ECLAC has developed and disseminated. Women's autonomy was thus constituted and associated with the indicators of the Gender Equality Observatory for Latin America and the Caribbean, as an analytical category to follow up on the international commitments assumed by States on women's rights. Moreover, the concept of autonomy and its components are being used by several governments in the region to structure equality plans, policies and laws, and to perform evaluations.

Economic autonomy is a fundamental pillar of women's autonomy and, by definition, requires them to earn income that enables them to overcome poverty, achieve well-being and use their time freely, without having to depend on others to meet their needs and those of their family, and to make their own decisions and be able to act on them. Time and income are finite resources, and the evidence shows that they are not distributed equally in society or within households. Women receive less income and have less access to other productive and financial resources, such as land, job training and technologies, despite their higher levels of education and the contribution they make to their countries' economy and development. They also have less spare time, because they devote themselves to unpaid care and domestic work to the benefit of other members of their own or other households (ECLAC, 2016a).

Economic autonomy refers to the capacity of women to provide their own sustenance and that of their dependants, and choose the best way to do so. The concept includes access to social security and public services, along with capital and other types of productive resources, since it embraces the conditions of access and capacities that determine a person's real possibility of exercising his/her economic and social rights (Batthyány and Montaño, 2012).

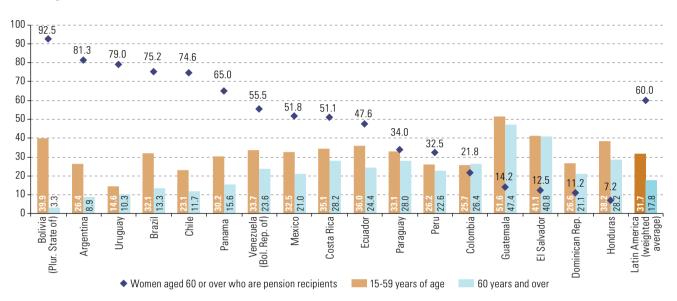
Women's economic autonomy is not merely access to employment. Although paid work is a requirement, it does not guarantee economic autonomy per se, since this depends on a number of variables, such as the quality of employment; the characteristics and scope of social policies, including social security systems along with the types of contingencies they cover and the redistribution that they enable; the public supply of care services and the possibilities for reconciling work and family responsibilities, together with a series of subjective factors, such as the fact that women are willing to subordinate their own lives in favour of their relatives and, ultimately, reduce the range of options available to them (Rico and Marco, 2010).

Although having one's own income forms a basis for economic autonomy, it does not represent full exercise thereof. Having an income is undeniably a basic and necessary condition for any adult within society; but the amount and stability of that income is crucial to his/her degree of autonomy. The indicator of population without their own income has been an ECLAC contribution to gender studies, since it synthesizes deficits in terms of economic autonomy and inequality (Milosavljevic, 2007). The evidence shows that in all countries, regardless of age group, the proportion of women without income of their own is much larger than that of men —29% of women over 15 years of age on average in Latin America, compared to 12.3% in the case of men. The situation varies between countries: the most acute case occurs in Guatemala, where over 50% of women lack their own income, while the smallest proportion is in Uruguay at 13.4% (ECLAC, 2016a).

In some countries, the proportion of women without their own income falls drastically in the 60 and over age group, owing mainly to extended social security systems and income transfer programmes designed especially for old age. When analysing the proportion of women aged 60 or over who lack their own income in countries that have a universal-type social security matrix and in which actions have been undertaken to protect old age, these figures drop in some cases to a third of the proportion of women without Although having one's own income forms a basis for economic autonomy, it does not represent full exercise thereof. Having an income is undeniably a basic and necessary condition for any adult within society; but the amount and stability of that income is crucial to his/her degree of autonomy. their own income in the 15 to 59-year-old age group; and in Argentina, Brazil, Chile, the Plurinational State of Bolivia and Uruguay the proportion of women aged 60 years or over without income of their own is less than 15%. These five countries are also among those with the highest percentages of women receiving pensions (see figure IV.1).

Figure IV.1

Latin America (17 countries): proportion of women without their own income by age groups, and proportion of women aged 60 and over who receive pensions, around 2015^{a b} (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

^a The data refer to 2015, except in the cases of Argentina, the Bolivarian Republic of Venezuela, Guatemala, Mexico and Nicaragua where they refer to 2014.

^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

The data reveal access to own income at some level, but do not assess its sufficiency. Analysis of the amounts of contributory and non-contributory pensions yields estimates that indicate a subsistence level. They have the advantage of being a regular income for women and contributes to the family economy; but the amounts are generally not part of the debate on the sufficiency principle. Consequently, this reaffirms the need to uphold the principle of benefit sufficiency, typical of social security.

Women's economic autonomy needs to be understood through their links to employment and caregiving and, ultimately, their access to the pension system and their status in it. Women's labour market participation is of the utmost importance, although autonomy and employment are not synonymous. Figures for 2015 show that women's economic participation rates in Latin America and the Caribbean, average 51.5% compared to men's 78.4%. This asymmetry reaches very high levels in Guatemala, Honduras and Mexico, where the economic participation rates of men and women differ by more than 30 percentage points (ECLAC, 2017c).

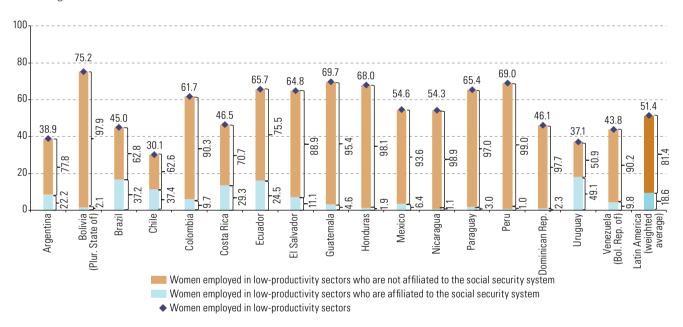
These data give an idea of women's overall situation in pension systems, since those who do not participate in the labour market also have no possibility of participating in social security in their own right. They can only participate in the system by association with a man, and receive derived entitlements, such as a widow's pension.

Women who are in employment are not guaranteed access and permanency in social security systems, owing to the segmentation of labour markets and the gender-based occupational segregation that prevails within them. This means that women tend to be confined to certain sectors and job hierarchies, generally those that have lower

levels of protection. They are thus overrepresented in low-productivity sectors (where 51.4% of the total number of women in a group of 17 Latin American countries are employed), which offer poor working conditions and are generally excluded from pension systems.⁸ Although the proportion of male employers in microenterprises is twice that of women, men are practically absent from domestic employment, a subsector that accounts for 11% of female employment in the region (ECLAC, 2016a). As shown in figure IV.2, the social security affiliation rate among persons employed in low-productivity sectors continues to pose a coverage challenge; only 18.6% of women employed in low-productivity sectors are affiliated to social security.

Figure IV.2

Latin America (17 countries): proportion of women aged between 15 and 64 years working in low-productivity sectors relative to the total number of women in employment, and proportion of women who are affiliated or contribute to the social security system, around 2015^{a b} (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries. Note: The household surveys in each country report on affiliation in or contribution to a pension system. Those that present data on affiliation are: the Bolivarian Republic

of Venezuela, the Dominican Republic, Ecuador, El Salvador, Guatemala and the Plurinational State of Bolivia. ^a The data refer to 2015, except in the cases of Argentina, the Bolivarian Republic of Venezuela, Guatemala, Mexico and Nicaragua, where they refer to 2014.

^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

Partly as a result of occupational segregation, but also because of discriminatory practices and the undervaluing of women's work, average labour incomes among women are still below those of men. This indicates that their higher levels and achievements in education and training have not been enough to close the gender gaps.

Gender wage gaps persist as an obstacle to women's economic autonomy and have a perverse effect not only on their working life, but also on the income levels they attain by retirement age and the amount of pensions to which they will be entitled, mainly in the systems in which this amount is directly related to the wages of the last few years' contributions. Women in the region currently receive 84% of the amount Gender wage gaps persist as an obstacle to women's economic autonomy and have a perverse effect not only on their working life, but also on the income levels they attain by retirement age and the amount of pensions to which they will be entitled, mainly in the systems in which this amount is directly related to the wages of the last few years' contributions.

⁸ The figure refers to the urban population employed in jobs that are precarious in terms of wages, duration and social security. Employment in the low-productivity (informal) sector means a person is an employee or wage-earner (professional or technical) in a firm with up to five employees (microenterprise), or else works in domestic service, or is an unskilled self-employed worker (own-account or unpaid family worker without a vocational or technical qualification) (ECLAC, 2017c; Milosavljevic, 2007).

earned by men per hour worked in a full-time job, which displays a structural inequality in the labour market that has not been reversed. This disparity widens as women reach higher levels of schooling, since those who have more than 13 years of education receive just 74% of what their male colleagues earn (ECLAC, 2016a).

As noted above, affiliation or contribution rates among persons employed in lowproductivity sectors are lower than that of the remainder of the employed in all cases. Moreover, in the vast majority of countries the social security coverage of women working in these sectors is even lower, and in some cases they are practically excluded. Argentina, Brazil, Chile, Costa Rica, Ecuador and Uruguay display particularly high coverage rates, even in these sectors, having increased significantly in the last decade. In Uruguay, the coverage rate among women employed in low-productivity sectors is actually higher than that of men, probably resulting from efforts made in the last few decades to formalize employment and thus enable women in domestic service to enrol in social security.

If the average age at which a person enrols in the social security system is compared to the minimum number of years' contributions required to obtain a pension from paid work under each country's legislation, the result is alarming. In the Plurinational State of Bolivia, only a quarter of the women currently employed would be entitled to a pension under the legal requirement for 15 years of contributions, according to the affiliation rates in the 25-29 age group and among 30-34-year-olds. Likewise, in Paraguay, where 25 years of contributions are required by law to qualify for a pension, rates of affiliation in the 30-34 age group that would suffice to fulfil this requirement fall short of 34%. Moreover, even this calculation assumes that the women in question have no interruptions in their employment records, and that this pattern of affiliation or contribution will not be affected by labour market outcomes related to reproduction or to changes in the economy, crises or setbacks in gender-based cultural patterns. Figure IV.3 shows that there are countries in which most women will be unable to meet the pension requirements, because they will not have been affiliated or contributing for long enough, unless steps are taken to guarantee them the right to a decent pension, such as those proposed in the final section of this chapter.

Figure IV.3

Latin America (11 countries): proportion of employed women affiliated or contributing to the social security system, by age group, around 2015^{a b c}

(Percentages)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: the household surveys in each country report affiliation or contribution to a pension system. Those that present data on affiliation are: the Dominican Republic, Ecuador, El Salvador, Guatemala, Panama and the Plurinational State of Bolivia.

^a The data refer to 2015, except in the cases of Guatemala and Mexico, where they refer to 2014.

^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

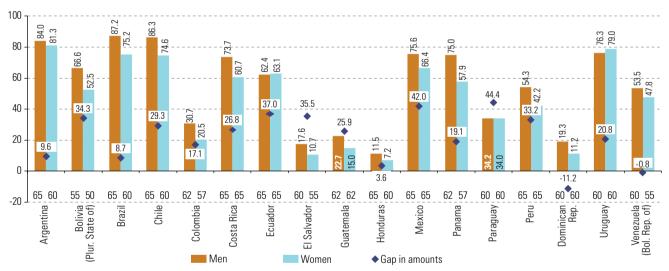
^c In the case of Guatemala, the data refer to the proportion of women wage-earners.

In addition to observing the labour market and the situation of women who are currently in paid employment, it is also important to analyse the situation of women who reached the legal retirement age. The following paragraphs provide information on the proportion of men and women who receive pensions, and the gender gap that exists between the amounts in question. Figure IV.4 shows coverage at the legal retirement age, which varies across countries; but, in most cases, the legal retirement age differs between men and women. Figure IV.5 then shows coverage in the case of individuals aged 65 or over, and the gap between the amounts of the pensions received, considering that in this age group both men and women may have retired from the labour market.

Figure IV.4 firstly shows the coverage levels of the pension system for men and women at their legal retirement age. Women have systematically lower levels of coverage, which means they are less likely to receive social security benefits in old age. The only exceptions are Ecuador and Uruguay, where women actually enjoy a slight coverage advantage (albeit less than 3 percentage points).

Figure IV.4

Latin America (17 countries): proportion of men and women receiving contributory and non-contributory pensions as from the legal retirement age, and gender gap in the amounts received, around 2015^{a b} (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in average income received in contributory and non-contributory benefits by women and men at the respective legal retirement age.

The figures shown above the country names indicate each country's legal retirement age for men and women respectively. In constructing the graph, 65 years of age was used as the retirement age in the case of Ecuador, where there is no mandatory retirement age.

^a The data refer to 2015, except in the cases of Argentina, the Bolivarian Republic of Venezuela, Guatemala and Mexico where they refer to 2014.

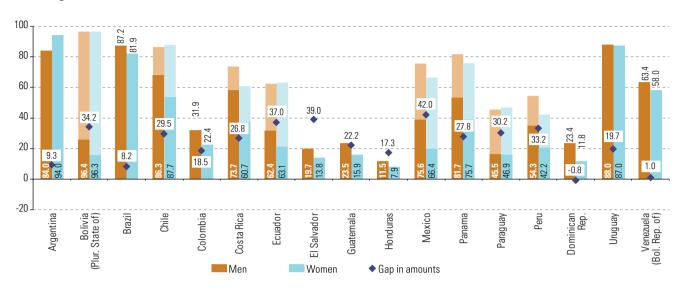
^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

Figure IV.5 reports higher coverage rates than those of figure IV.4, especially in the case of women, since in most countries non-contributory pensions are received at an older age than that specified by law for ordinary contributory pensions.

Figures IV.4 and IV.5 also show that fewer women receive pensions than men, when contributory and non-contributory benefits are considered jointly.

Figure IV.5

Latin America (17 countries): proportion of men and women aged 65 years or over receiving contributory and non-contributory pensions, and gender gap in the amounts received, around 2015^{a b} (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in average income received in contributory and non-contributory benefits by women and men of 65 years of age or over.

The area shown in a lighter shade represents the additional coverage of non-contributory pensions. The darker area includes survivor pensions in cases where they can be distinguished in the data source.

^a The data refer to 2015, except in the cases of Argentina, the Bolivarian Republic of Venezuela, Guatemala and Mexico where they refer to 2014.

^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

In the cases of Chile and Uruguay, it was possible to distinguish between contributory, widow's and non-contributory pensions. In Chile, one fifth of women who receive pensions receive a widow's pension, and more than a third receive a non-contributory pension. In other words, half of all older women with benefits of this type receive a non-contributory or widow's pension and less than half receive a contributory pension. In Uruguay, nearly half of the women who receive these benefits do so in their capacity as widows, while a smaller proportion (6%) receive a non-contributory benefit (Amarante, Colacce and Manzi, 2016).

If contributory and non-contributory pensions are considered jointly, the coverage rates for men and women increase significantly (see figure IV.5); but the gaps between the amounts of the benefits widen. This is because women are overrepresented as recipients of non-contributory benefits, and the amounts of these pensions are a lot smaller than those of contributory pensions.

The available information shows the following: the region's pension systems have not paid great attention to the situation of women; measures have not been adopted that would allow them to face old age with autonomy and sufficient monetary resources; and they have been limited to receiving a type of benefit usually linked to a male provider, mainly the spouse, with an employment record that allows a survivor's pension to be paid to his wife in the event of his death.

Nonetheless, the situation of women who are participating in the labour market requires the adoption of measures to take account of their employment and reproductive careers, viewing unpaid work not as an exclusively female burden that forces women out of the labour market, but as a whole-society responsibility, which must find collective solutions that do not penalize a majority group, namely women.

B. Pension reforms in Latin America and gender equality

The neoliberal policies that predominated in Latin America in the late twentieth century represent a persistent element that in many cases fails to incorporate gender equality and reproduces the different ways in which women are excluded from the pension system. Moving from a fully funded pension system to one based on solidarity and redistribution is a current challenge for several countries in the region. This would make it possible to reverse the inequalities (with different intensities, according to race, ethnicity and, economic level, among other factors) that are embedded in the current fully funded pension systems.

As discussed in chapter III, a series of pension reforms were introduced in Latin America as part of a neoliberal policy package in the 1990s and in the first decade of this century.⁹ In most cases, structural reforms were implemented with the aim of establishing different versions of fully funded pension schemes, to wholly or partially replace pay-as-you-go (PAYG) systems. This process was mainly driven by fiscal sustainability problems, which in turn reflected a set of factors —mainly demographic, the dynamics of the labour market, aspects of the design of the schemes, problems of administrative efficiency and, in some cases, a diversity of regulations which caused legal confusion as to the benefits specified for different worker categories.

These reforms were largely ideologically driven, at a time when neoliberal models based on the Washington Consensus held sway, under which the objectives of pension systems were to revitalize capital markets and promote national savings. Insuring against contingencies which until then had been the raison d'être of social security, was relegated to the background (Birgin and Pautassi, 2001).

This is how Argentina, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Mexico, Nicaragua, Panama, Peru, the Plurinational State of Bolivia and Uruguay each introduced a fully funded component or converted all of their pension systems to this type of scheme. Subsequently, some of these countries altered the parameters used to calculate benefits, while others confined themselves to parametric reforms which, without making structural changes, had significant effects on women's rights, as will be discussed below.

1. Reforms aimed at fully funded pension systems: the stamp of privatization

As noted above, structural reforms entail a change in the type of system. In the region, two kinds of reform can be identified, according to the direction they have pursued: first those that implemented fully funded pension systems and, later, those that involved a return to redistributive schemes. Structural reforms aimed at implementing fully funded pension systems or components impaired social justice and gender equality, basically for the reasons summarized in the following sections (Amarante, Colacce and Manzi, 2016; Birgin and Pautassi, 2001; Bertranou and Arenas, 2003; Marco, 2004).

(a) The coupling of discriminations: paid employment and pensions

Fully funded pension systems reproduce the differences that already exist in the labour market. That is why large groups of workers, particularly those in informal, temporary and discontinuous jobs, have little chance of joining and staying in the system.

⁹ An exception is the case of Chile, where the reform was introduced in 1981 as an innovation that would later be imported by several countries in the region and beyond.

Moreover, women's employment careers, which are heavily affected by the care obligations that society assigns to them, involve more movements and changes than those of men; and this has a significant impact on their contribution density. This involves not only periods of absence from employment for maternity reasons, but also changes in the type and quality of their labour market participation caused by motherhood and caregiving, such as when women move from being formal wage earners to being own-account workers or even informal employees.

Unemployment, which is systematically higher among women, also detracts from the continuity of their social security contributions; and wage gaps are also transferred to the pension system, since contributions are based on pay. These inequalities are also present in PAYG systems, but to a lesser extent, since solidarity mechanisms of redistribution attenuate inequalities between different income levels, between women and men, or between generations.

(b) Contribution to the economy but without benefits: domestic work and caregiving

Women's access to pension systems is not based on citizenship rights or on the contributions they make to their countries' development. Owing to the persistent sexual division of labour, women continue to be primarily responsible for unpaid care, which means they participate in economic activity to a lesser extent than men. Moreover, those who do not participate in the labour market remain outside pension systems, except as widows of male beneficiaries or through non-contributory pensions. Thus, in principle, pension systems shun those who devote themselves exclusively to reproductive work, which means that around 50% of women have no access or can only receive a widow's or welfare pension. This reality again underscores the need to apply the principle of universal social security, as discussed above.

Women not only provide care as mothers; they also do so as grandmothers or, more generally when they are older; and apart from looking after their own children and grandchildren, they also provide care to elderly parents and parents-in-law. They work as care givers throughout their lives; and, as they do this for free, they subsidize social protection systems. Nonetheless, precisely for this reason, pension systems punish them, by exclusion, for providing unpaid care. This is the paradoxical relationship that exists between care and social protection, including social security.

One of the phenomena to emerge from longer life expectancy is the simultaneous coexistence of different generations, which, in conjunction with women's greater participation in the labour market, has meant that families adopt different arrangements to cover the care needed in the home. These include care provided by grandmothers or older women to meet the needs of younger generations and thus free-up time to enable other women (daughters, daughters-in-law, nieces or neighbours) to enter the labour market. This activity is often considered voluntary, but it reflects society's high expectations regarding the use of time by these women and the suitability of their role as caregivers, as they have experience in these activities. This is a clear example of how inequalities in the distribution of time are accentuated in the case of women at this stage of their lives; they may have spent less time in the labour market during their adult life and, thus, are entitled to fewer employment-related social benefits, which makes it harder for them to access care services (ECLAC, 2017b).

Owing to the persistent sexual division of labour, women continue to be primarily responsible for unpaid care, which means they participate in economic activity to a lesser extent than men. Moreover, those who do not participate in the labour market remain outside pension systems, except as widows of male beneficiaries or through non-contributory pensions.

(c) Biology as a punishment: differentiated mortality tables

A set of biological conditions, associated with women's greater physical resistance, combined with social conditions, such as being less called upon to perform dangerous or unhealthy tasks, mean that women on average live longer than men (Durán, 2008). The region's fully funded pension systems punish women's greater longevity, by using formulas for calculating pensions that imply direct discrimination, according to the definition of discrimination and the commitments and measures specified in the Convention on the Elimination of All Forms of Discrimination against Women. All countries calculate pension benefits using mortality tables that differentiate between male and female life expectancy.

This means that women's longevity becomes a loss, which is further aggravated in countries, such as Chile, where they have a lower retirement age, since a smaller accumulated amount has to be spread over a longer period, resulting in a lower pension.

This method of calculating pensions has been widely criticized and even banned, as noted below, in the legislation of the Plurinational State of Bolivia in 2010; and it was a subject of debate in the National Social Security Dialogue held in Uruguay (in 2006), for the 2008 reform, in the Presidential Advisory Council for the Pension Reform of Chile (in 2014 and 2015) and in El Salvador's pension system which was reformed in September 2017 (see chapter III).

These latter countries have initiatives aimed at differentiating between population groups, either by income levels (in the case of Chile) or by groups of male and female workers (for example, between administrative and construction workers in Uruguay). The rationale behind these initiatives is that sectors that have better living conditions and higher income are being subsidized by the lower-income sectors, which have a shorter life expectancy. Nonetheless, proposals to establish tables that make no gender distinction have not found favour (Marco, 2016).

The European experience has shown the heavy use of differentiated tables for calculating benefits, both in individual, public and private capitalization systems, and in PAYG schemes. Harmful impacts were identified for women, so differentiated mortality tables have been considered openly discriminatory and have been banned in private insurance plans by the Court of Justice of the European Union,¹⁰ while public pension systems were already using tables without gender distinction (Arza, 2017).

2. New wave of reforms: the inclusive stamp

The low coverage of benefits in some cases, compounded by their insufficiency in many countries, and fiscal pressure caused to some extent by gender inequalities (since most of the recipients of non-contributory pensions are women), added to the low legitimacy of the pension systems, made it necessary to design reforms that addressed these new issues. This was how Costa Rica, in 2005, and, later, Argentina, Chile, the Plurinational State of Bolivia and Uruguay between 2008 and 2010, enacted either structural or parametric reforms.

¹⁰ See Court of Justice of the European Union, "Judgment of 1 March 2011: Case C-236/09. Judgment of the Court (Grand Chamber) of March 1, 2011 "[online] http://eur-lex.europa.eu/legal-content/ES/TXT/PDF/?uri=CELEX:62009CJ0236&from=EN.

All of these processes occur in a very different context from the privatization reforms. The era of military dictatorships or structural adjustment policies has passed; and a rights approach has become established in the countries' social policies, together with a significant change in the social protection matrix. The fundamental drivers of these actions have a very different orientation from the pension reforms of the 1980s and early 1990s. While that period was characterized by a marked withdrawal of State social action, the new century is witnessing an expansion of State intervention in the social domain (Cecchini, Filgueira and Robles, 2014) (see chapter III).

Women and their organizations were absent from the reforms of the late twentieth century, either because there was no possibility for them to express an opinion and participate, or else because they were unaware of the potential effects of pension reforms on their autonomy and rights. In contrast, the most recent processes draw on greater cumulative knowledge, since evidence of these impacts now exists. At the same time, in some cases, the participatory processes promoted by the State, together with the work of the national mechanisms for the advancement of women and the commitments of the Regional Gender Agenda, have made it easier to respond to demands for gender equality and take account of the specific situations that affect women.

(a) Argentina (2008)

Argentina's structural reform of 1994 added a fully funded component to the public PAYG system. Both in practice and in law, this reform excluded numerous population groups, such as domestic workers, rural workers and the large universe of informal workers, all of which were predominantly women (Pautassi, Giacometti and Gherardi, 2011). Although this system was maintained for over a decade, the model's public PAYG component meant that its effects on gender equality were less marked than in other countries, at least in terms of coverage.

A decade after the implementation of the fully funded component, a number of measures were adopted such as the possibility for beneficiaries to make their contributions to the PAYG component only, for a six-month period. Similarly, in the Pension Inclusion Programme, where more than 80% of the beneficiaries were women, the fully funded and private management component was closed, to be replaced by a PAYG system, with tripartite financing and State administration and management. The return to a PAYG system and the previous measures both had clearly positive impacts on women's coverage. This experience is an example of the importance of pension system design for women's inclusion and gender equality.

The results of the "moratorium" pension provide a convincing example of how disparities in the labour market are reproduced in the pension system unless compensatory measures are adopted —87% of individuals who applied to the "moratorium" pension in 2009 were women, with an average age of 72 years; and three quarters of them did not have any previous pension benefit. For these reasons, this moratorium is commonly referred to as "housewives' pension," although it did not specifically target this sector of the population. Similarly, following the return to the PAYG system, the proportion of women receiving pensions increased, and the gaps between benefit amounts narrowed (see figure IV.6). Nonetheless, gender considerations were absent from the debate, as also were inequalities in employment and the recognition of reproductive and care work (Pautassi, Giacometti and Gherardi, 2011).

As shown in figure IV.6, women's coverage expanded substantially, as did the gender gap in the average pension amount, which clearly shows the importance of the type of pension scheme for gender equality.

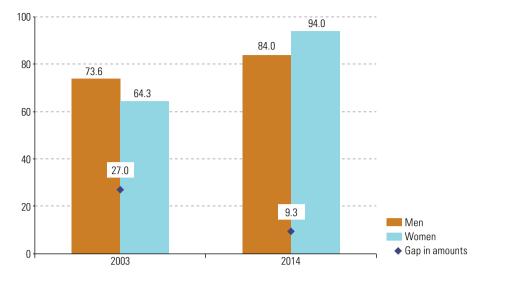


Figure IV.6

Argentina: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2003 and 2014 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

The gap between the amounts represents the difference in average income received in contributory and non-contributory benefits by women and men of 65 years of age or over.

The proportion of all employed persons contributing to the social security system rose by 2.3 percentage points between 2008 and 2014 (from 51.4% to 53.7%), with the proportion of women rising by 4.7 points —0.5 points more than men in the same period. This means that the proportion of women contributing to social security (54.8%) exceeded that of men (52.8%) in 2014.

(b) Plurinational State of Bolivia (2010)

As discussed in chapter III, the solidarity fund and the resulting pension, which were implemented following the 2010 reform, represent progress for the Bolivian pension system, which is expected to favour women in particular. Moreover, a maternity bonus was introduced for recipients of the solidarity pension, for whom an additional 12 contributions are credited for each child (up to a maximum of 36 contributions), or else they are offered a reduction of up to three years in the age for claiming this pension.

The benefit only covers low-income women who are unable to fully finance a pension and are entitled to the solidarity pension. The initial demand made by women's organizations was for the contributions not to be credited according to the number of children, but extended to all women as a universal entitlement. The rationale for this was that it is well known that all women provide care —not only to their own children, but also to their parents, younger siblings and elderly couples— and they devote themselves to household chores, which in some cases harms their employment career and, in others, restricts the type of job they can obtain.

There are also two other measures which are not included in the section of the law on gender protection policies, but nonetheless directly affect them. One is the explicit decision to calculate pension amounts using the same mortality tables for both sexes. This provision was subsequently ratified in the regulations to the law.¹¹ The other is the payment of an additional minimum wage to the invalidity pension for persons classified as having "major disability". This measure is considered to benefit women indirectly, given their role in caring for persons in situations of dependency.

Note: The data refer to 31 urban agglomerations.

¹¹ The regulation also provides that the calculation will assume four years' shorter life expectancy in the case of mine-workers.

On the other hand, the challenge of including domestic employees remains, since the law ignores workers in this category. Another challenge is to find a way to calculate the reference wage, in other words the years considered for calculating the pension, that is consistent with women's earnings history. Evidence shows that the gender wage gap widens in the years leading up to the age of retirement,¹² yet the reform specified the last two years of a person's employment record to be used to calculate the basic wage.

Figure IV.7 shows the coverage of contributory and non-contributory benefits. The proportion of persons receiving contributory pensions is still remarkably low; and for women it has not improved since the reform. Nonetheless, the coverage rate of non-contributory benefits is high, and, in this case, the challenge is their sufficiency.¹³

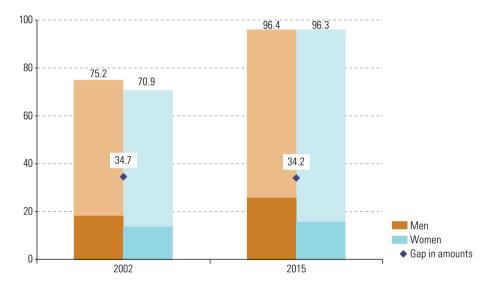


Figure IV.7

Plurinational State of Bolivia: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2002 and 2015 (*Percentages*)

> Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries. Note: The gap between the amounts represents the difference in average income received in contributory and non-contributory benefits by women and men of 65 years of age or over.

The area shown in a lighter shade represents the additional coverage of non-contributory pensions. The surveys make it possible to specifically distinguish the receipt of income through the *Bolivida* system in 2002 and through the basic old-age pension, *Renta Dignidad*, in 2015.

The coverage of non-contributory old-age benefits has increased significantly, although their amount poses a major challenge for applying the benefits sufficiency principle, and there is no sign that the gap between the amounts received by men and women is closing.

The reform has resulted in a slight increase in affiliation by both men and women, which rose overall from 15.4% in 2009 to 18.9% in 2015. The coverage increases recorded between 2009 and 2015 were exactly the same (3.4 percentage points): from 17.0% to 20.4% for men and from 13.4% to 16.8%) in the case of women. Increasing affiliation rates remains a key challenge, since a majority of the population that participates in the labour market (81.1%) remains outside the pension system.

¹² According to the data of the Quarterly Survey of Employment of 2009, the year prior to the reform, women between 40 and 49 years of age received an average income equivalent to 63% of that received by men; in the 50-59 age bracket the proportion was 54%, and among 60-69-year-olds it was 41% (Marco, 2016).

¹³ The basic old-age pension, *Renta Dignidad*, pays 250 or 300 bolivianos (\$b) per month, depending on whether or not a contributory pension is available. The national minimum wage is \$b 2,000.

(c) Chile (2008)

The case of Chile is particularly relevant, since it is an "exporter" of the fully funded pension system and because there has been a new reform on the governmental and political agenda since 2015. As noted above, the performance of this system over more than two decades did not produce the promised results; and there were negative impacts on the entire population, not only on women. In 2006, when discussions began on the reform that was finalized in 2008, only 59% of the labour force was contributing to the pension system. Poor coverage and small pension amounts affected those who, being affiliated and having made contributions, obtained very low benefits; and also those who, being affiliated, did not contribute on a regular basis, along with those who simply were never affiliated . Moreover, women accumulated funds equivalent to 50% of the amounts accumulated by men, and the female replacement rate fluctuated between 52% and 57% of the male rate. As a corollary, at one point it was concluded that, in the medium term, over half of all the persons affiliated and nearly three quarters of the women affiliated would be unable to meet the minimum pension requirement, making them potential beneficiaries of the welfare pension (Yáñez, 2010).

The reform that would be passed in 2008 was defined in response to these factors and after an intense political dialogue process. The key changes included the introduction of a solidarity pillar and measures to enhance gender equity and expand coverage for self-employed workers. The solidarity pension and contribution were seen as a key way to reduce gender inequalities, since the minimum contributions requirement is eliminated. This benefits those who are not in the labour market and perform care and domestic services, informal and seasonal workers, and all workers, who, in general, have lower contribution densities and a smaller accumulated fund. In view of this, a bonus was also established for each child, whether born or adopted, equivalent to 18 contributions at the minimum wage. This is a universal right, so the woman's level of income, or whether or not she has made contributions, is irrelevant.

Compensation of care work has had significant effects on women's replacement rate. Provision is also made for the balances accumulated in spouses' individual accounts to be divided in the event of divorce or marriage annulment. In such cases, the judge in question is empowered to make this division when one of the parties has a disability, if —as a consequence of taking care of his/her children and performing household chores— the person in question could not undertake a paid activity or did so to a lesser extent than he/she might have wished. The compensation can involve up to 50% of the accumulated pension funds (Yáñez, 2010).

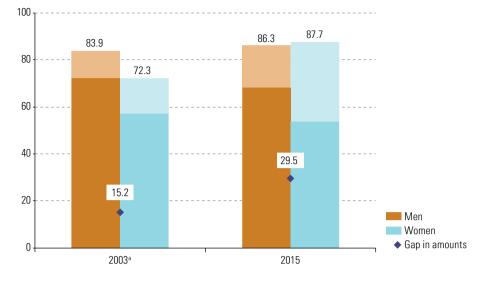
Separation by gender was also established in bidding for disability and survival insurance, since women's longer life expectancy means they are less likely to be survived by beneficiary widowers; and, given their lower accident rate, they are less likely to make a claim on disability insurance. This resulted in a lower premium for women. Similarly, the minimum taxable income for female domestic service workers was made equal to that of other workers, and the commissions charged by pension fund management companies (AFPs) for the deposit of contributions and for the transfer of funds between AFPs were eliminated.

The net outcome of the reform augurs well for improving gender equality and achieving greater economic autonomy for older women. The data reveal a positive trend in the employed population's contribution rates between 2009 and 2015, which rose from 63.7% to 70.7%. Contribution rates increased both for men (from 66.0% to 71.9%) and for women (from 60.3% to 69.1%), and the gender gap narrowed. Most notably, coverage increased even in low-productivity sectors, where women's coverage grew by 6.3 percentage points between 2009 and 2015.

The coverage of benefits also trended positively, although to a greater extent in the non-contributory component (see figure IV.8).

Figure IV.8

Chile: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2003 and 2015 (*Percentages*)



Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in the average income received from contributory and non-contributory pensions by women and men of 65 years of age or over.

The area shown in a lighter shade represents the additional coverage of non-contributory pensions. The surveys make it possible to specifically distinguish the receipt of income through the Old Age Welfare Pension in 2003 and the Basic Solidarity Old-age Pension in 2015.

The gap between the amount of the benefits received by women and men doubled, thereby posing a major challenge, which apparently requires additional instruments to correct the profound inequality.

The draft law for a new pension reform, in which a public collective savings scheme is created with intergenerational and intragenerational solidarity transfers, is currently making its way through the National Congress. The project also includes a compensation bonus for women, to make up for the negative effect of the gender-differentiated mortality tables used to calculate pensions in the fully funded component that would be maintained by AFPs. Nonetheless, the compensation is only partial, since all of this benefit is accessed at 65 years of age rather than at the legal retirement age of 60.

3. More than parametric reforms, good practices

Parametric reforms involve changes to make the systems more sustainable, since they alter the benefit calculation parameters and make other adjustments. Nonetheless, some countries have gone further than this, by using parametric reforms to include measures targeting redistribution, inclusion and gender equality.

(a) Brazil (1999)

Although a pension system reform is currently under discussion in the Brazilian Parliament, the characteristics and possible effects of which were described in chapter III, it is important to analyse the 1999 reform, which is still in force, since it can be considered as representing good practice for guaranteeing women's rights and furthering gender equality. This reform was the result of the 1998 Constitution, which enshrines social security as a right and provides that social security benefits cannot be lower than the minimum wage. It also instituted mandatory coverage for rural women workers (previously social security covered the male head of the family) and for domestic workers. The resulting pension system is a PAYG scheme.

The pension reform of the late 1990s was formally parametric, as it did not change the type of system, which remained pay-as-you-go; but in practice it meant a significant change in social and gender justice. In this system, people can retire for reasons of age (different for women and men) or length of contribution period; in the latter case, women need to make five fewer years of contributions, as an affirmative action measure to compensate for inequalities (Schwarzer and Costanzi, 2011).¹⁴

The benefits calculation in the general regime applies a welfare factor (*fator previdenciário*). This is a mandatory calculation formula for pensions based on the contribution period and it uses a gender-neutral mortality table. In the case of retirement for age reasons, the pension factor can be applied if the beneficiary so wishes. The reference value for calculating the pension is 80% of the best monthly earnings (and not those of the last, or last few, months). This is especially important for women, because, as noted above, they usually display a declining wage trend.

A special regime (*Previdência Rural*) is applied in rural areas, which has lower retirement ages for men and women than those in force in urban areas to take account of the different realities of work and living conditions in these areas. This is a formally semi-contributory regime with a high State contribution, which has also had significant effects on gender equality (Schwarzer and Costanzi, 2011).

The characteristics described above mean that Brazil is the first country in the region to include affirmative action measures for women in its pension system, apart from the differentiated retirement age.

The direct and most significant impacts of the reform in Brazil predate the years indicated in figure IV.9; nonetheless, the current coverage rate stems from the measures implemented throughout the period. Moreover, the gap between the pension amounts received by women and men continues to close, having narrowed from 23.6% in 2002 to 8.2% in 2015.

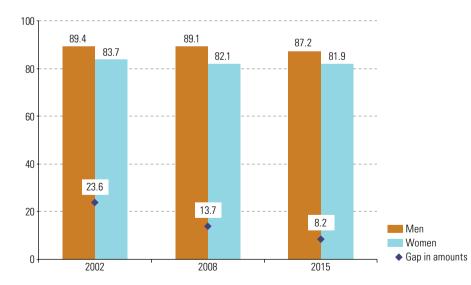


Figure IV.9

Brazil: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2002, 2008 and 2015 (*Percentages*)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in the average income received from contributory and non-contributory pensions by women and men of 65 years of age or over.

¹⁴ Subsequently, the parametric reform of 2015, described in chapter III, added the "85/95" rule, whereby the sum of the number of years of contribution and years of age must be 85 in the case of women and 95 in the case of men.

Brazil has also made significant progress in respect of employed persons, with the proportion of 15-64-year-olds contributing to the social security system rising from 29% in 2002 to 64% in 2015. The magnitude of the increase in those 13 years was practically the same for men and women: the proportion of men contributing increased from 27.5% in 2002 to 62.9% in 2015, while the figure for women rose from 31.0% to 65.4%. The process of increasing contribution also benefited the low-productivity sectors, where women's affiliation rate rose from 15.9% in 2002 to 36.2% in 2015.

(b) Costa Rica (2004-2005)

As discussed in chapter III, a mixed pension system was created in Costa Rica in 2001, in which the PAYG system was maintained, but a mandatory fully funded component and a third, voluntary and complementary component were added. Shortly after the structural reform, it was found necessary to propose a reform to make the system more sustainable, by changing some of its parameters. Thus, in 2004 a social dialogue process was launched to design the reform, based on a cross-sector commission created from government institutions and civil-society organizations.

In this context, the National Institute for Women (INAMU) drew attention to the sources of gender inequality present in the system, both those stemming from inequalities in employment and those that were due to the design of the system (for example, the fact that the widow's pension was equivalent to 60% of a pension received by a person registered with the system in their own right); and they demanded facilities to include self-employed workers, together with affirmative action measures and recognition of the unpaid care work done by women (INAMU, 2005).

Although the resulting reform changed the benefit access parameters, it is considered more than merely parametric, because of the participatory process through which it was developed and two types of measures that are considered good practices: affirmative action in favour of women and the tiered replacement rate based on income level. The most important changes were an increase in the contribution rate (for the worker, the employer and the State); a change in the reference wage; a change in the replacement rate, from a fixed proportion (60%) to a tiered rate (between 43.0% and 52.5%)¹⁵ based on income level and the density of contributions; and the establishment of the same replacement rate for disability and old-age pensions. There was also affirmative action enabling women to take early retirement, since six contributions are credited to them, both in the case of early retirement on a reduced pension and if there are sufficient contributions for a full pension.

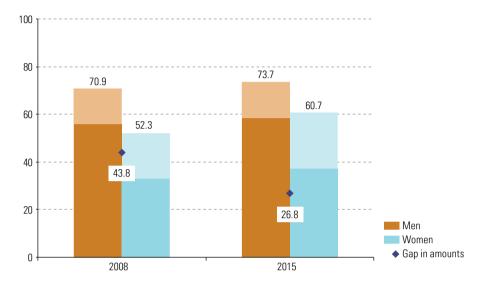
In the specific case of Costa Rica, this early retirement possibility is useful for individuals who started working very early and in formal jobs, who have a high density of contributions and reach 60 or 62 years of age with many more contributions than those required at age 65 (Martínez, 2006). In other words, although the affirmative action measure included in this reform was not significant, since it only involved six months of contributions and only affected women with a long and continuous employment career, it represented the second time in the region that measures of this type were included in a pension system (the first was in Brazil).

The tiered replacement rate has also been considered positive, since it has direct redistributive effects —the higher the income level, the lower the replacement ratio; and, vice versa, the lower the labour income, the higher the percentage of earnings that the pension replaces.

also keeping some relationship with the density of contributions.

The replacement rate is 43.0% for the higher income brackets and rises to 52.5% for individuals with lower incomes, while

This reform had a positive effect on equality indicators for women and men. The proportion of women receiving a contributory pension increased, although later it declined; and contribution by both men and women in low-productivity sectors also increased. The gender gap between benefit amounts also narrowed considerably, despite still posing a challenge (see figure IV.10).





Costa Rica: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2008 and 2015 *(Percentages)*

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in the average income received from contributory and non-contributory pensions by women and men of 65 years of age or over.

The area shown in a lighter shade represents the additional coverage of non-contributory pensions.

In 2016, as part of a debate on the system's financial and actuarial sustainability, it was decided to phase out the possibility of retiring early with a proportional or reduced pension, which had been introduced by the affirmative action measure for women. In 2017, a decision by the Board of Directors of the Costa Rican Social Security Fund raised the contribution rate by 1 percentage point to 12.16% (Marco, 2017).¹⁶

(c) Uruguay

In Uruguay, the effects of the 1996 privatization reform were less negative than in other cases owing to the hybrid nature of the system. Despite the high coverage rate achieved, the country's demographic structure —where there is marked population ageing and a majority presence of women— and the fiscal pressure that this represents, meant that ways had to be found to sustain and even increase coverage rates and, at the same time, achieve a better match between the system's income and liabilities. There was also the challenge posed by contingents of male and female workers, mainly informal, who were excluded from the system. Gender inequality was reflected in the type of benefits available to men and women, since the latter had greater access to widow's pensions and benefits from the Social Security Bank, which administers the PAYG and defined-benefit component of the system and pays non-contributory pensions, while men tended to receive pensions in their own right through pension fund managers, which usually pay higher amounts.

¹⁶ In the case of wage earners, the employer's contribution is 5.75%, the worker pays 4.50% and the State contributes 1.91%. In the self-employed sector, the worker pays 10.25% and the State contribution is 1.91%.

In this context, the Government launched the National Social Security Dialogue in 2007 with the aim of evaluating the social security system and agreeing on criteria for modifying it. The path previously travelled was particularly important for gender equality and social justice. Measures that preceded this reform and would affect its achievements included the following: Law No. 18065, which regulated wage-earning domestic work in 2006, recognizing all social security benefits; Law No. 18246, the (hetero-affective and homo-affective) Concubinary Union Act of 2007, which equated the rights of widowers and widows with those of male or female cohabitants (with five years of cohabitation), and a wide-ranging campaign to disseminate acquired rights. This produced a considerable increase in coverage, especially among the working poor. Lastly, the 2008 reform modified the parameters for accessing the benefits, making conditions more flexible by reducing the required number of years' service and other changes referred to above.

As recognition and compensation for unpaid care work, all mothers are credited with a year's contributions for each child, up to a maximum of five. A recent evaluation already shows that the main effect for women of an additional one year's contributions for each child was an improvement in the size of their labour-market-related pension. In the case of women who qualified for "ordinary" retirement¹⁷ and received additional contributions per child, 44% got a higher pension; while 47.7% of women who retired at a more advanced age and were credited with contributions for each child also received higher amounts. Women who retire at 65 or who earn lower incomes are more likely to have contributions for each child included in their pension calculation than those who are entitled to ordinary retirement. In the first four income deciles, 86% of women are credited with contributions for each child mean that women who reach retirement age with meagre pension pots are able to draw a pension, while those who were able to make more contributions receive higher pensions (Lavalleja and Tenenbaum, 2017).

The effects on the contributions made by individuals employed in low-productivity sectors are substantial, especially in the case of women, where the rate increased from 30.6% in 2002 to 48.8% in 2015. This 18.2 percentage point rise in the rate for women, is closely related to the regularization of domestic employment, which is almost entirely female.

The proportions of men and women receiving pensions remain high and gender differences are small in this respect; but disparity in the amounts received, as in other cases, is more resistant to change, as shown in figure IV.11.

A recent evaluation of the effects of the reform in Uruguay found major impacts on reducing gender inequalities. In 2009, 77% of the benefits received by women corresponded to pension amounts below the poverty line, compared to 56% among men. In 2015, these percentages had fallen to 28% and 15%, respectively. Moreover, following the reform, the gender breakdown of persons receiving pensions in their own right became more equal, having previously been predominantly male (Lavalleja and Tenenbaum, 2017).

¹⁷ Ordinary retirement applies once the legal requirements (60 years of age and 30 years' contributions) have been met. If the required years of contributions have not been met by the legal retirement age, retirement is postponed for a further five years, after which retirement is mandatory even if the requisite number of years of contribution under the ordinary system have still not been met.

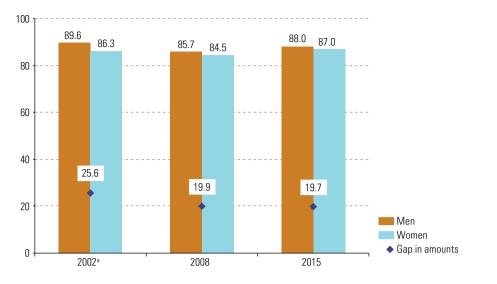


Figure IV.11

Uruguay: proportion of men and women aged 65 years and over who receive contributory or non-contributory pensions, and gender gap in the amounts received, 2002, 2008 and 2015 (Percentages)

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of household surveys of the respective countries.

Note: The gap between the amounts represents the difference in the average income received from contributory and non-contributory pensions by women and men of 65 years of age or over.

^a Urban area.

4. Recognition of unpaid care work in pension systems

Affirmative action consists of differentiated treatment in laws, policies or other initiatives to compensate for disparities in the exercise of rights and thus address the inequalities that exist between the realities facing specific groups or populations. This differentiated treatment has international legal support in the Convention on the Elimination of All Forms of Discrimination against Women and has been widely recommended in the Regional Gender Agenda to achieve women's advancement in areas that are particularly resistant to change. Measures to recognize unpaid care work through care bonds or credits are one of the affirmative-action modalities that can be adopted in pension systems.

To make sure the relationship between care and social protection ceases to be unjust and paradoxical, in the aforementioned sense (see subsection B1 on the coupling of discriminations), social protection and pension systems, as part of this, should integrate care as one of the contingencies to be covered and should recognize or compensate unpaid care work.

Some of the region's countries have taken steps in this direction: Brazil, Chile, Ecuador, the Plurinational State of Bolivia and Uruguay all explicitly incorporate a mechanism to recognize unpaid care work, or else implement some other form of compensation or inclusion for women who make this contribution to their societies' well being.

As noted above, the legislation in the Plurinational State of Bolivia adds one year of contributions for each child, up to a maximum of three, for recipients of the solidarity pension (persons who have made 120 contributions and have attained 58 years of age). In addition, recipients of this semi-contributory pension can bring their labour-market-related retirement forward by three years, although this is not compatible with the per-child bonus.

Brazil's affirmative action for women entails a five-year reduction in the required contribution, relative to men, with the difference being funded by the system. The affirmative action was maintained with the incorporation of the "85/95" rule in 2015, which was explained in chapter III. The aim was to compensate for labour market inequalities originating largely in the unpaid care work that all women do in their households.

Basic benefits and credits for care in Europe

Many European countries have universal pensions that are not connected to the labour market, such that receiving them does not depend on an individual's employment record; and even individuals who never had a job can access them. These are basic benefits that can be classified as universal, minimum-contributory and welfare pensions. They are usually paid as a lump sum financed out of general tax revenue. The amounts in question may be below the minimum wage (for example, 70% in the Netherlands), or else they may depend on the person's income (as in Denmark, Finland and Sweden). In any event, this benefit represents a significant proportion of older people's income; for example, in Denmark it is equivalent to two thirds of average total pension income received.

Pension systems in nearly all European countries recognize or provide some form of compensation for caregiving. This may be the State payment of contributions for a given period; it may be a benefit granted during a leave period to provide care, often for children and less frequently for other family members; or else it may be granted on a longer-term basis, or it may involve the payment of a sum at a given time, such as a birth, or an amount for each son or daughter.

The success of "care credits" depends, among other factors, on how they are calculated. The State's contribution does not always replace 100% of the contribution of the caregiver, usually the mother. The calculation base on which the State pays the caregiver's contribution may be his/her wage at the time of interruption of employment, as in Finland, although here the State's contribution is based on 80% of the person's earnings, or else it may be based on the minimum wage, or an amount that is equal for all people who are entitled to pensions owing to their provision of care, as in Germany and Austria.

In some countries, care credits are incompatible with paid employment; but this is not the case in France and Sweden, for example, and some countries even encourage the combination of care and employment credits by providing an additional credit for those who choose part-time employment.

Source: C. Arza, "El diseño de los sistemas de pensiones y la igualdad de género: ¿qué dice la experiencia europea?", *Asuntos de Género series*, No. 142 (LC/L.4298), Santiago, Economic Commission for Latin America and the Caribbean (ECLAC), 2017.

Also, as described above, the 2008 reform in Chile included a bonus for each child, equivalent to 18 months of contributions at the minimum wage. This State contribution is extended to all women, with no income conditions and no requirement for prior contributions to the pension system.

In Ecuador, the 2008 Constitution establishes that unpaid work done in households is a contribution to the country's economy and that persons who do this must be covered by social security. This constitutional recognition has given rise to special legislation, which was preceded by citizen demands and parliamentary debates.¹⁸

To enable the integration of these workers into the pension system, beneficiaries are classified in four socioeconomic levels. The contribution of the person who works unpaid in the household is calculated on the income of the family economic unit, and there is also a State contribution depending on the family's socioeconomic situation.

The rates differ according to the socioeconomic level of the affiliated women's households. Replacement rates also range from 90% to 62.5%, with the aim of implementing the principle of solidarity between the different socioeconomic levels. These contributions are mandatory and are paid to the Ecuadorian Social Security

Between 2009 and 2014, eight draft laws were presented to incorporate individuals who do unpaid work in the household into social security. This allowed the Government to gauge the interest existing in the country for the State to guarantee full and effective exercise of the right to social security for all people, regardless of their employment status, including those who perform unpaid work in homes and provide care (Maldonado and Vallejo, 2015).

Institute. Similarly, recipients of the Human Development Bond¹⁹ are automatically affiliated to the social security system for unpaid work in the household; and a small amount (US\$ 2) is deducted as a contribution, while the State contributes another larger amount.

In Uruguay, the 2008 reform included a bonus for each child, as previously mentioned, since the law establishes that women will be entitled to claim an additional year of services for each biological or adopted child, up to a maximum of five.

5. Inclusion of domestic service in social security: an historic debt

In Latin America, the fact that domestic service is a predominantly female activity is the clearest expression of gender-based occupational segregation and the sexual division of labour. It also reveals the limitations of the principles of universality and solidarity, since the workers in question have traditionally been excluded from social security in general, including pension systems.

Domestic service workers have historically been discriminated against even in specific laws pertaining to them. Although the relationship of dependency between the employer and employed parties, which is the criterion on which an employment relationship is included in the labour laws, has always been present in this profession, female domestic workers have been excluded from these legislations' general regimes. As a result, they have been discriminated against and excluded from a series of labour and social rights, including their pension rights.

Steps are now being taken to settle this historical debt, and progress is being made in the region, albeit slowly. The ILO Domestic Workers Convention, 2011 (No. 189) marked a milestone in this process. The Convention commits States to extend social security protection to domestic workers, under conditions that are "not less favourable than those applicable to workers generally." A total of 13 Latin American and Caribbean countries have now ratified the Convention, the largest number in any region of the world.²⁰ Nonetheless, several countries still have pension systems that exclude domestic workers, and their reforms have not made progress on that front; whereas others (including Brazil, Chile, Costa Rica, Ecuador and Uruguay) have settled their debt to these women by making their pension rights legally equivalent to those of other workers.

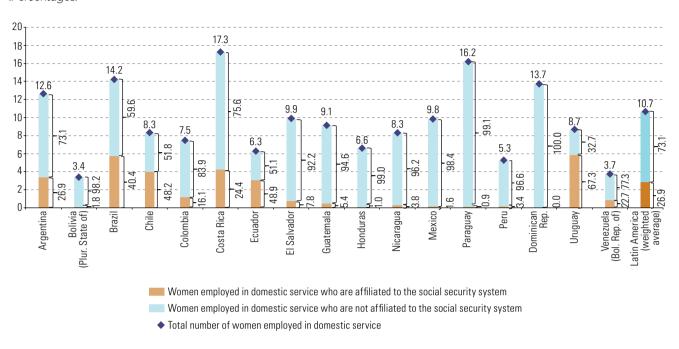
Despite this, the coverage of wage-earning domestic workers poses major challenges. Another concern is that the affiliation rate of workers in this category is extremely low, owing to the widespread absence of a formal employment contract and the prevailing labour informality. Unless measures are adopted to correct this situation, the trend of their exclusion from social rights in old age will persist, and even worsen. Figure IV.12 shows the percentage of women employed in domestic service and the proportion of women who are affiliated or contributing to the pension system. On average in Latin America, 10.7% of employed women work in domestic service and of this group, only 26.9% have social security coverage. Domestic service workers have historically been discriminated against even in specific laws pertaining to them.

¹⁹ Since 2009, the Human Development Bond has provided a grant of US\$ 35 to older people and persons with disability. This transfer was initially created in 1998 as the *Bono Solidario* [Solidarity Bond] for mothers in households living in poverty, and it was subject to health-care and education conditionalities. Subsequently, over the years, the programme has been broadened in terms of recipients and purposes.

²⁰ The ratifying countries are Argentina, Chile, Colombia, Costa Rica, the Dominican Republic Ecuador, Guyana, Jamaica, Nicaragua, Panama, Paraguay, the Plurinational State of Bolivia and Uruguay.

Figure IV.12

Latin America (17 countries): proportion of women aged 15 and over employed in domestic service, with respect to the total number of employed women, and proportion of women affiliated or contributing to the social security system, around 2015^{a b} (*Percentages*)





Note: The household surveys in each country provide information on affiliation or contribution to a pension system. The countries that present data on affiliation are: Bolivia (Plurinational State of), Ecuador, El Salvador, Guatemala, Dominican Republic and Venezuela (Bolivarian Republic of).

^a The data refer to 2015, except in the cases of Argentina, Bolivarian Republic of Venezuela, Guatemala, Mexico and Nicaragua, where they refer to 2014.

^b The data report the national total, except in the case of Argentina, where they represent 31 urban agglomerations.

The situation across countries varies widely. In Uruguay, the formalization of domestic service employment, which includes affiliation to the pension system, covered three out of every 10 workers a decade ago, whereas by 2017, the proportion had been reversed and now seven out of every 10 women employed in domestic employment are registered with the Social Security Bank (Galli, 2017). In contrast, countries such as the Dominican Republic, Honduras, Mexico, Paraguay and the Plurinational State of Bolivia, display an alarming situation with affiliation rates lower than 2% of paid female domestic workers.

In Costa Rica, on the other hand, a recent initiative of the Costa Rican Social Security Fund made it possible to attract a large contingent of new beneficiaries, following an amendment that specifies a minimum contributory floor and a simplified affiliation process, which is the employer's responsibility, including the possibility of online affiliation. These changes were widely publicized.

6. An open debate: differentiated retirement ages

It is clear that in fully funded pension systems the early retirement age harms individual welfare and is a situation that mainly affects women. In contrast, PAYG systems have mechanisms that protect women with earlier retirement than men.

Ten Latin American countries currently maintain differentiated retirement ages for women and men. In cases where the intention is to provide some form of compensation for care work, this would represent affirmative action, since women workers could at least choose to retire a few years early; but earlier retirement needs to be accompanied by measures to make up for the fewer years of contribution, as happens in Brazil, for example.

It is clear that different retirement ages for women and men originated as a protection mechanism, stemming from labour law protectionism in the face of women's exploitation at the time of the European industrial revolution. The difference was also intended to enable heterosexual couples, in which men were usually older, to share their retirement years.

Nonetheless, legal mechanisms clearly evolve and acquire new connotations; and this happened with the essential principles of social security, as noted in earlier points of this chapter. Thus, in a context of longer life expectancy and problems in financing the system, the retirement age difference has come to be seen as compensation for the unpaid work done by women of all ages.

Retirement ages vary widely across Latin American and Caribbean countries, not only between men and women, but also between those of special regimes and those established to access solidary and non-contributory pensions (see chapter I). Table IV.1 sets out the retirement ages for women and men, as specified in general or ordinary and non-contributory pension schemes.

Lastly, in many cases it is the market that determines the opportunities and restrictions on the age of retirement for women and men, since older people find it difficult to stay in their jobs or obtain new ones. The retirement age also depends on the level of the pension available at the time and the person's expectations in terms of welfare and autonomy. There will be cases of workers who do not want to retire but are pressured to do so by the retirement-age argument, while others, men or women, will look forward to retirement to start a new phase of their lives. Moreover, although from the system sustainability standpoint it is desirable to prolong working life, this aspiration clashes with discrimination against older people, and especially older women.

The number of years of autonomous life that women and men have at the time of retirement is increasing. Yet there are gender differences in how this phase is lived through, and women seem able to adapt better; they are more secure and better prepared for it in a very familiar space, their home and in private, even though this is clearly not the only domain in which women live their lives. In contrast, men tend to be less prepared for this change, suffer greater physical deterioration and face difficulties existing in a domestic space that is foreign to them (Durán, 2008).

On the other hand, retirement age does not have to be uniform and rigid. Different ages can be adopted according to the area of residence, rural or urban, as Brazil did with its *Previdência Rural* pension scheme; or else by type of work. Arrangements that enable active ageing are also possible, such as partial retirement, in which a reduced pension is combined with working on a part-time basis or on certain days of the week only. This option can also make the transition to retirement more bearable for many people for whom the change is traumatic. In any event, retirement should not be mandatory (ILO Older Workers Recommendation, 1980 (No. 162)); and governments should support measures that help people to make a gradual transition (Inter-American Convention on Protecting the Human Rights of Older Persons of the Organization of American States – OAS).

Table IV.1

Latin America (19 countries): retirement ages

Country	Retirement ages	
	Men	Women
Argentina	65 years	60 years
	65 years for non-contributory pension	65 years for non-contributory pension
	70 years for advanced age pension	70 years for advanced age pension
Bolivia (Plurinational State of)	55 years	50 years
	58 years for solidarity pension	58 years for solidarity pension
	60 years for Renta Dignidad	60 years for Renta Dignidad
Brazil	65 years in urban areas	60 years in urban areas
	60 years for rural pension	55 years for rural pension
	65 years for non-contributory pension	65 years for non-contributory pension
Colombia	62 years	57 years
Costa Rica	65 years	65 years
	62 years for early retirement	60 years for early retirement
	65 years for non-contributory pension	65 years for non-contributory pension
Cuba	65 years	60 years
Chile	65 years	60 years
	65 years for solidarity pension	65 years for solidarity pension
Dominican Republic	60 years	60 years
Ecuador	Retirement age depending on contributions	Retirement age depending on contributions
	65 years for non-contributory pension	65 years for non-contributory pension
El Salvador	60 years	55 years
Guatemala	62 years	62 years
Honduras	65 years	60 years
Mexico	65 years	65 years
Nicaragua	60 years	60 years
Panama	62 years	57 years
	70 years for non-contributory pension	70 years for non-contributory pension
Paraguay	60 years	60 years
Peru	65 years	65 years
Puerto Rico	67 years	67 years
Venezuela (Bolivarian Republic of)	60 years	55 years

Source: Economic Commission for Latin America and the Caribbean (ECLAC), on the basis of official data from the respective countries.

C. Proposals based on lessons learned

Guaranteeing financial sustainability, recognizing unpaid care work, analysing women's labour income paths, and legally recognizing paid care-providers are among the proposals that are considered indispensable from a gender equality perspective, to enable a pension system to ensure the rights of both men and women and form part of policies that foster democracy and sustainable development.

To take account of the new age structure of Latin American societies and move towards the realization of economic and social rights, a new gender contract is required, involving participation by governments and markets, and reflected in the social security systems. This new contract should:

- Include a gender perspective in the analysis of pension systems.
- Recognize care work as a contribution by women that makes pension systems and the rest of social protection viable.
- Be based on the principles of universality, solidarity, equality, efficiency and financial sustainability.
- Develop fiscal covenants to underpin the resource base that makes pension systems sustainable.
- Reconcile the principles of universality, equality and non-discrimination with that of financial sustainability, so that none of them is subordinated to the others.
- Eradicate all forms of discrimination that are endemic in the labour market.
- Recognize the right to social security as an entitlement for the entire population, and establish this right as a standard for all society, the public domain and the market.
- Create mechanisms of participation and social dialogue involving various social stakeholders, such as trade unions and women's movements, both to discuss possible reform processes and to exercise citizen oversight functions.

As discussed above, the structural reforms of the twenty-first century in Latin America, together with parametric reforms that represent good practices, have had positive impacts on access to pensions and women's affiliation, and to a lesser extent on the gender disparity in pension amounts. In some cases, these effects have been negligible, in others very considerable.

Moreover, an analysis of the coverage of the population receiving pensions, considering both contributory and non-contributory benefits, reveals an improvement in nearly all cases. Nonetheless, the situation in terms of non-contributory pensions is diverse, since in some of the region's countries the amount is equivalent to the minimum wage (Brazil) while in others it is closer to an unconditional transfer programme. The situation also differs between countries when pensions are considered separately, according to their contributory or non-contributory nature.

The evidence reveals the effect that different types of system have on gender equality, which means that pension system design is extremely important for the exercise of women's rights and their economic autonomy. As discussed above, the effects on women's autonomy and the exercise of their right to social security differ according to whether the system is PAYG or fully funded.

In view of the above, comparative experience leads to the following lessons and proposals:

- Guaranteeing the financial sustainability and legitimacy of pension systems means ensuring that large population groups are included in the contributory component, in particular women of different occupational profiles and men in the informal sector. This poses a set of challenges:
 - Striking the difficult balance between the contributory and non-contributory components of the systems, always remembering that their main purpose is to guarantee the economic and social rights of older persons; so, while also strengthening contributory components, non-contributory ones should be used to guarantee these rights. This is particularly important in the case of women, since their pension coverage has increased mainly through the non-contributory component.

To take account of the new age structure of Latin American societies and move towards the realization of economic and social rights, a new gender contract is required, involving participation by governments and markets, and reflected in the social security systems. Pension system design is extremely important for the exercise of women's rights and their economic autonomy.

- Applying incentives to attract self-employed workers, among whom women are overrepresented, preferably under regimes of progressive compulsory affiliation.
- Addressing women's low contribution density with mechanisms that encourage permanency in the system following a change of occupational category. Thus, affiliation must have the flexibility to encourage workers to move between alternative jobs, and ensure that the contribution rate supports sufficient benefit levels (Uthoff, 2017).
- Equalizing the rights of wage-earning domestic workers in countries where they are still excluded, and ratifying the ILO Domestic Workers Convention, 2011 (No. 189) in the case of States that have not yet done so.
- Measures to recognize unpaid care work performed by women in households are positive and possible in any scheme, although they will have more impact under those that pursue redistributive rationales.
- Tiered replacement rates, differentiated by income levels, have a significant redistributive effect, so they can benefit individuals who have managed to contribute less and, thus, have a positive impact on women.
- Which years are used to determine average reference earnings is a relevant factor for gender equality. Using the last few years' earnings can harm women, because the gender wage gap tends to widen at the end of their working lives. Moreover, considering only the last few years' earnings can encourage underreporting in earlier periods; so each women's labour income history needs to be analysed individually.
- The division of spouses' accumulated funds in the event of separation or divorce, to compensate those who postponed or altered their employment career to devote themselves to unpaid domestic and care work, is a remedial measure.
- It is necessary to integrate paid care-providers, specifically women employed in caring for children, the sick, persons with disabilities or the elderly, as part of the programmatic supply of care services by public institutions in the region (Rico and Robles, 2016), since they do not always have a defined legal status (as civil servants, for example), and are therefore not always affiliated to pension systems.

Another unresolved issue involves the collection of survey data and the correct management of administrative records, to provide relevant information for policy-making and for evaluating pension systems. Information should be available to distinguish between types of pensions (contributory, non-contributory, widow's, or own-right), and clarify the operation of special programmes or regimes, such as those intended for own-account workers.

Lastly, any measure intended to expand coverage and improve benefits needs specific resources to meet those objectives, together with clear fiscal rules that specify levels and sources of financing. This investment needs firm political backing, together with the corresponding budgetary prioritization. Achieving equality requires the Ministries of Economy, Treasury or Finance, along with the Ministries of Labour and Social Development and the mechanisms for the advancement of women, to make public funds available to guarantee women's economic autonomy in old age.

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