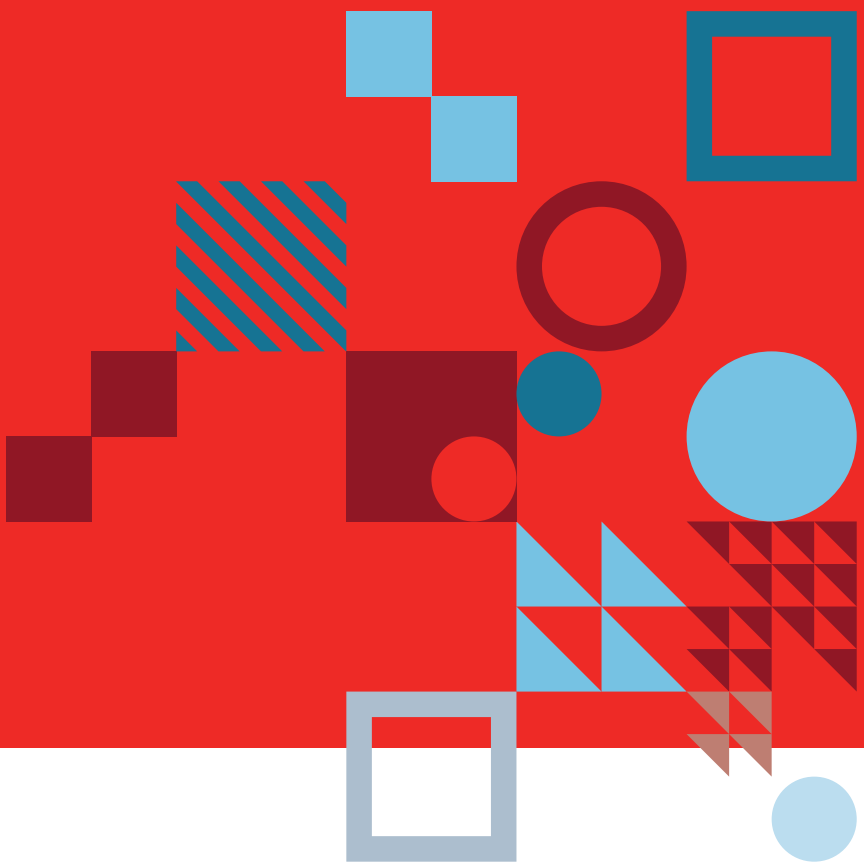
ECLAC Methodologies

Multidimensional poverty index for Latin America



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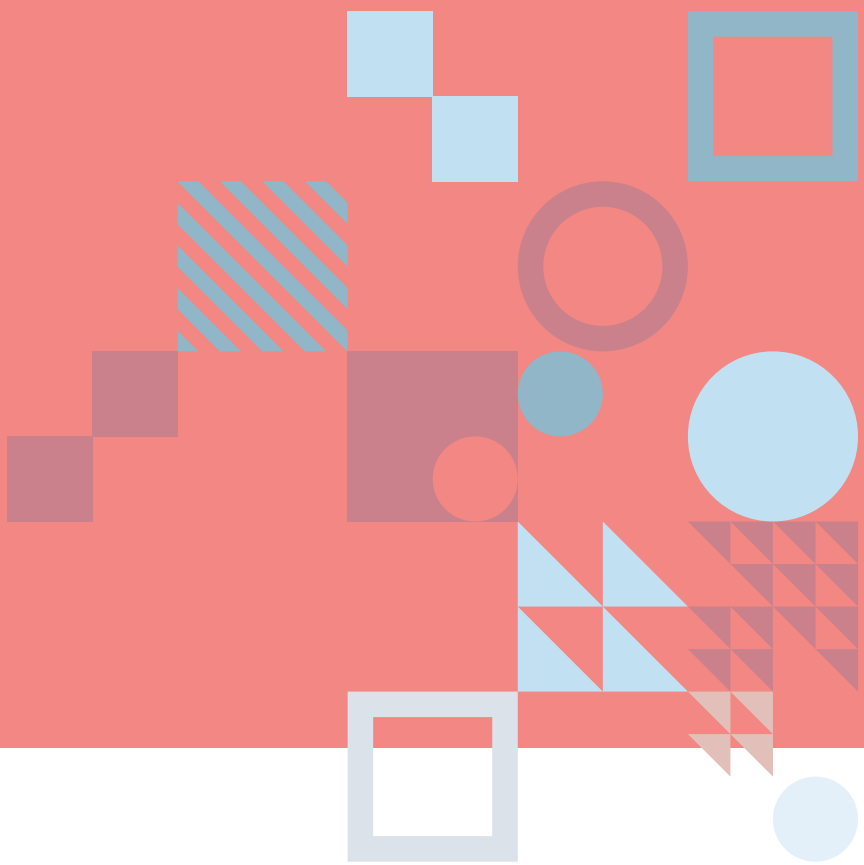

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This publication is the outcome of a research exercise, the first phase of which took place between 2019 and 2022, by the interdivisional working group for the multidimensional measurement of poverty, led by the Statistics Division of the Economic Commission for Latin America and the Caribbean (ECLAC) and including the Division for Gender Affairs, the Social Development Division, the Sustainable Development and Human Settlements Division, the Economic Development Division, the Natural Resources Division and the Latin American and Caribbean Demographic Centre (CELADE)-Population Division, along with the Commission's subregional headquarters in Mexico, subregional headquarters for the Caribbean and national offices in Colombia, Uruguay and Washington D.C. Subsequently, between 2022 and 2024, the Statistics Division reviewed the methodology through consultations with national statistical offices and ministries of social development across the region, technical teams from the World Bank, the Development Bank of Latin America and the Caribbean (CAF), the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI), as well as experts from the various divisions of ECLAC.

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Introduction

In recent decades, the international community has recognized the need to develop a more comprehensive and integrated measurement of poverty —one that is not limited to monetary income but also encompasses different dimensions of well-being. This recognition is expressed in Sustainable Development Goal (SDG) 1, which calls for an end to poverty in all its forms everywhere, and also in SDG target 1.2, which proposes by 2030, to reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions.[1]

Although measurements of the incidence of multidimensional poverty exist in the region, none of these simultaneously ensure cross-country comparability and the use of standards appropriate to the Latin American reality. Both the Global Multidimensional Poverty Index of the United Nations Development Programme (UNDP) (Oxford Poverty and Human Development Initiative and United Nations Development Programme [OPHI and UNDP], 2023, 2024) and the World Bank's multidimensional poverty measure (World Bank, 2018, 2022) are designed to measure acute deprivations in the developing world, so their sufficiency thresholds are not very demanding in the Latin American context. At the same time, 12 of the region's countries have official multidimensional poverty indices that are essential for measuring poverty at the national level and for designing policies to reduce it, but their dimensions, indicators and thresholds are not mutually comparable.

By applying the unsatisfied basic needs (UBN) method, the Economic Commission for Latin America and the Caribbean (ECLAC) pioneered multidimensional poverty measurement in the region. Resuming this vocation, with the aim of developing a multidimensional poverty index that would be appropriate for Latin America, comparable between countries and consistent with its institutional approach, ECLAC formed an interdivisional working group which held an intense debate on the decisions that were needed to construct a

[1] See United Nations. Goal 1: End poverty in all its forms everywhere. https://www.un.org/sustainabledevelopment/poverty/.

multidimensional measure. The discussions drew on institutional experience in measuring multidimensional poverty (Kaztman, 1989; Feres and Mancero, 2001; Economic Commission for Latin America and the Caribbean and United Nations Children's Fund [ECLAC and UNICEF], 2010; ECLAC, 2013, 2014), as well as recent progress in measuring well-being. The index was developed with valuable collaboration from UNDP specialists, and consultations were held with the Oxford Poverty and Human Development Initiative (OPHI), and with statistical offices and ministries in the countries of the region to incorporate their perspectives.

In this document, ECLAC presents a multidimensional poverty index for Latin America (MPI-LA), the dimensions and indicators of which were selected on the basis of the capabilities and rights approaches. This index complements the Commission's income poverty measure, since it reports mainly on deficiencies that the monetary index does not capture. It can also be used to analyse the relationships between both types of poverty, thus providing more comprehensive information that can be harnessed in public policy design. MPI-LA considers deprivations included in the national multidimensional poverty indices, such as those related to the labour market, which are highly relevant to the ECLAC approach to structural heterogeneity. It also considers the entire population of 17 of the region's countries in 2008–2022, using the standardized information available in the ECLAC Household Survey Databank (BADEHOG).

This document is organized as follows. Chapter I presents the background and chief characteristics of MPI-LA, and chapter II provides a description of its general structure, the data sources and the chosen indicators. It also presents the methodology used to identify and aggregate multidimensional poverty, with a description of its structure in terms of dimensions, indicators, weightings and thresholds. Chapter III reports the main empirical results obtained from the application of MPI-LA, considering the incidence and development of multidimensional poverty in the countries of the region, and including statistical breakdowns and decompositions. Chapter IV provides a special analysis of individual gender gaps, and chapter V sets forth the conclusions of this study.

Chapter I
Background and basic concepts

In recent decades, the idea of developing a more comprehensive approach to the measurement of well-being and social progress, which incorporates aspects that are not captured by the monetary metric (Sen, et al., 2009) has gained traction in political and academic agendas. Multidimensionality has become more important because it is recognized that well-being cannot be measured by income or consumption alone, but must also take account of factors such as health, education, housing, employment and social security. In this context, poverty is crucially important in the distribution of well-being, because it represents an extreme to which the deprivations in different dimensions converge and limit the full development of 'individual capabilities.[1]

The Sustainable Development Goals (SDGs) fully reflect the multidimensional nature of well-being, because they include targets and indicators ranging from the eradication of poverty to access to education, health, decent work and environmental sustainability. Dashboards of indicators have been created to monitor the living conditions of populations of different countries, in different dimensions (Organisation for Economic Co-operation and Development [OECD], 2020, 2021; European Commission, 2018). Synthetic indices have also been developed which aggregate information on different domains of well-being into a single value. These latest initiatives include the Human Development Index (HDI), which is a composite measure that assesses a country's progress in three key dimensions: health, education and standard of living (OPHI and UNDP, 2022; UNDP, 2024).

[1] The multidimensional measurement of well-being should cover not only people living in poverty, but also those in the middle-income strata since they can be highly vulnerable to falling into poverty. Although uncertainty affects everyone, exposure to risk and the ability to cope with it vary significantly, depending on different dimensions of well-being and household conditions (Gallardo et al., 2023).

Multidimensional measurements of individual or household poverty are not new in Latin America. In the early 1980s, and in response to the lack of income data in surveys and censuses, ECLAC promoted the UBN method, which, to determine the proportion of the population living in poverty, counted deprivations using direct indicators of household well-being, such as access to basic services, education and housing conditions.[2] Direct measures focus on observable outcomes that indicate whether a person or family has a decent life. In contrast, indirect measures estimate poverty using income or expenditure indicators based on the resources that could be used to meet basic needs.

The UBN method was first applied as a complement to the income poverty line measure, because it was recognized that the latter failed to capture the satisfaction of needs that did not involve expenditure (for example, those satisfied by public goods and services), and that the UBN method could not adequately capture needs that could be satisfied with income. Accordingly, Beccaria and Minujín (1985) and Kaztman (1989) proposed an integrated method that combined the results of the UBN and income poverty line methods to characterize poverty more thoroughly.[3]

In the 1990s, it became common practice in Latin American countries to construct and cross-tabulate two official poverty measures: one based on the income poverty line and the other based on UBN. Over time, some of the sufficiency standards used to measure UBN started to become outdated. Moreover, this method does not fulfil certain axioms that are desirable in poverty indicators, because it does not consider the number of deprivations faced by people living in poverty.[4]

In the early twenty-first century, the spread of the human rights and capabilities approaches rekindled interest in multidimensional methods in Latin America and elsewhere in the world, as these approaches are aligned more closely with direct measures of well-being than with monetary indicators.

The human rights approach has come to occupy a central place on the public policy agenda. In this approach, international human rights law provides a global framework that defines principles, rules and standards for monitoring a State's commitment to guaranteeing the freedoms and capabilities essential for the realization of human dignity (Office of the United Nations High Commissioner for Human Rights [OHCHR], 2007; Ernst and Heilinger, 2012; Abramovich, 2006; Freeman, 2017). Human rights have the following characteristics: (i) they are universal, which means that they are inherent to all persons by virtue of their human condition and must be guaranteed in all contexts and cultures; (ii) they affirm the dignity and equal value of all persons; (iii) they are equal, indivisible and interdependent; (iv) they

2 The empirical literature on multidimensional poverty measurement emerged from the traditions of measuring UBN in Latin America and social and deprivation indicators in Europe (Alkire et al., 2015; Alkire, 2018).

3 In the UBN method, households are considered to be in poverty if their members experience at least one deprivation, a practice known as the "union approach".

4 Although, strictly speaking, the UBN method was not an intensity index, it tended to consider persons with two or more deprivations to be in extreme poverty.

impose obligations on States;[5] (v) they protect individuals and, to a certain extent, specific groups; and (vi) they are not conditional on the behaviour of the right-holder (Tasioulas, 2011; Freeman, 2017).[6]

From the public policy standpoint, the rights-based approach implies an obligation to achieve basic standards of dignity in different dimensions of well-being. The Universal Declaration of Human Rights states that "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control..." (United Nations, 1948).[7] Economic, social, cultural and environmental rights are particularly important in the poverty domain, as they seek to create the basic conditions needed for people to have a decent standard of living. These rights cover food, health, housing, education, a healthy environment, access to work under fair conditions, social security and other elements that are crucial for achieving a more fulfilling life.

Another fundamental way of understanding well-being is the capabilities approach of Amartya Sen, which focuses on people's possibilities for leading a valuable life and on the freedoms they possess to achieve what they value or have reasons to value.[8] Sen defines capabilities as the real opportunities that people have to achieve valuable "functionings". These are understood as personal achievements, such as adequate nutrition, enjoying good physical and mental health, and being well dressed, among others. In the capabilities approach, in addition to opportunities, a fundamental notion is agency, meaning a person's ability to act autonomously, make decisions and achieve functionings in accordance with their own values and aspirations.

According to the capabilities approach, therefore, deprivation of well-being is the lack of freedom to lead a valuable life. For example, a lack of material resources restricts people's opportunities, making it difficult for them to achieve essential functioning, such as feeding or clothing themselves, moving around, or sheltering from the elements. A lack of education can limit a person's employment opportunities and their ability to earn a decent income, and a lack of medical care can limit their ability to enjoy good health and well-being.

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5 In the positive legal tradition, rights are legally enforceable. However, Sen (2005) notes that rights should not be fully realizable, as there are also imperfect duties. For Nussbaum (1997), everyone has rights, even if they live in countries that do not guarantee them. Freeman (2017) notes that the purpose of human rights is to defend the population from authorities that violate their rights; so it is desirable for them to be legally enforceable, although not strictly necessary.

6 Some exceptional situations can lead to certain rights being restricted on the basis of behaviour, usually justified on grounds of security and public order, public health, or the rights and freedoms of others.

7 For further information on economic, social, cultural and environmental rights, see National Human Rights Commission of Mexico. *Derechos económicos, sociales, culturales y ambientales.* https://www.cndh.org.mx/programa/39/derechos-economicos-sociales-culturales-y-ambientales and Office of the United Nations High Commissioner for Human Rights. *Economic, social and cultural rights*. https://www.ohchr.org/en/human-rights/economic-social-cultural-rights.

8 The expression "reasons to value" imposes an external criterion on individual preferences that would be justified by the cognitive biases that affect people's assessments. In the literature on the capabilities approach, these biases are generally presented through the notion of adaptation of expectations (Sen, 1979; 1985;1997). For Alkire (2015), the capabilities approach seeks to broaden the intersection between what people value and what they should value.

The capabilities approach highlights the importance of dimensions of well-being other than income. From this perspective, a measurement of well-being that is limited to resources is insufficient, since it provides no information on what people actually do or achieve with those resources (Sen, 1985, 2003). In other words, two people with the same income will not necessarily achieve the same functionings, as there are interpersonal differences in the factors that convert resources into well-being.[9] Accordingly, the measurement must extend beyond the means available to people and focus on the opportunities they have to achieve well-being outcomes. The rights-based approach adopts a similar stance, by arguing that the availability of income does not ensure that rights are effectively fulfilled. For example, residents in rural areas may have sufficient income but no access to basic utilities, or to education or health services. This approach also recognizes aspects of well-being that cannot be captured by the monetary metric, such as respect for human dignity.[10]

The capabilities and rights approaches have led to the development of new measurement methods. Alkire and Foster (2007, 2011), for example, linked the counting of deprivations to the axiomatic approach, thereby making the measurement of multidimensional poverty sensitive to the number of deprivations experienced by persons living in poverty. Among other advantages, this method makes it possible to visualize the joint distribution of deprivations, and its results can be broken down by deprivations and by population subgroups. This method is used in the global multidimensional poverty index (MPI) adopted by the United Nations Development Programme (UNDP) (Alkire and Santos, 2010, 2014; Alkire et al., 2016; OPHI and UNDP, 2021, 2022, 2023, 2024), and it is used either partially or completely in the national multidimensional poverty indices of the Latin American countries that have them (see boxes I.1 and I.2).[11]

Despite these advances, the monitoring of multidimensional poverty in the region has shortcomings. Firstly, both the global MPI and the World Bank's multidimensional measure capture acute deprivations that are of low incidence in most Latin American countries (see box I.1). Moreover, they were not designed using the information available in the multipurpose surveys conducted by the statistical offices of the region's countries. For example, some global MPI indicators, such as malnutrition and infant mortality, are not captured in most national surveys, whereas employment and social security, which the surveys do largely cover, are not part of the global MPI.[12] Secondly, because national MPIs were designed to reflect the each country's specific characteristics, they differ in terms of their dimensions, indicators, weightings and thresholds, which means they are not mutually comparable (see box I.2).

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9 Conversion factors are the interpersonal and contextual differences that mediate between resources and outcomes in terms of well-being.

10 One area of well-being assessment that has gained visibility is the subjective or psychological dimension (Villatoro, 2012). Recently, the Brazilian Institute of Geography and Statistics included people's assessments of their health and education in its poverty and quality of life measurement (IBGE, 2023). It is also worth mentioning the work on measuring experiences of shame, humiliation and social isolation linked to poverty (Zavaleta, 2007; Mills et al., 2014).

11 Uruguay's official multidimensional poverty index, published in late 2024, has not been included in this review.

12 Although the Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS) capture indicators of infant mortality and other health measures, these instruments are not official country surveys.

■ Box I.1
Multidimensional poverty indices at the world level

The global multidimensional poverty index

The global multidimensional poverty index (MPI) is a measure designed and implemented by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI). This multidimensional index of acute poverty, based on the method of Alkire and Foster (2007, 2011), includes severe deprivations in education, health and living standards affecting people in developing countries. The first version of the global MPI was published in 2010. Then, in 2018, UNDP and OPHI revised 5 of the 10 indicators used, to align the index more closely with the monitoring of Sustainable Development Goal (SDG) 1. In the 2021 measurement, the global MPI covered 111 countries, encompassing 92% of the population in developing regions.

■ Table 1
Structure of the global multidimensional poverty index

Dimension	Indicator	Definition of the indicator	Weight
Health (1/3)	Nutrition	At least one household member aged under 70 years is malnourished.	1/6
	Infant mortality	At least one household member aged under 18 years died in the five years prior to the survey.	1/6
Education (1/3)	Educational attainment	No eligible household member completed six years of schooling.	1/6
	School attendance	At least one school-age child (up to eighth grade) in the household is not attending school.	1/6
Standard of living (1/3)	Cooking fuel	Solid fuels (manure, wood, coal, or waste material) are used in the home.	1/18
	Sanitation	Households either have unimproved sanitation facilities, or else they share facilities with other households.	1/18
Standard of living (1/3)	Water	The household has an unsafe source of drinking water, or else a safe source located more than 30 minutes away on foot, round trip.	1/18
	Electricity	The household lacks electricity.	1/18
	Housing	The floor, roof, or walls of the dwelling are made of makeshift materials.	1/18
	Assets	The household does not own a car or truck, and does not own more than one of the following assets: radio, television, telephone, computer, refrigerator, animal-drawn cart, bicycle, or motorcycle.	1/18

Source: Economic Commission for Latin America and the Caribbean, on the basis of Oxford Poverty and Human Development Initiative and United Nations Development Programme. (2022). *Global Multidimensional Poverty Index 2022: Unpacking Deprivation Bundles to Reduce Multidimensional Poverty.*

In the global MPI, the deprivation score for each person or household is equal to the sum of the (weighted) deprivations affecting them. All dimensions, and all indicators within each one, are weighted equally. People are considered to be in multidimensional poverty if their deprivation score is 1/3 or more. The MPI value for each country is obtained by multiplying the incidence of poverty (the proportion of people in multidimensional poverty) by its intensity (the average number of deprivations affecting persons in multidimensional poverty).

The World Bank's multidimensional poverty measure

In 2018, the World Bank published its first multidimensional poverty measures for 119 countries. This measure is based on the premise that a comprehensive view of well-being, even if limited to consumption, must include goods that cannot be purchased with income. In the World Bank measure, five well-being indicators in two dimensions —education and basic infrastructure— are added to monetary deprivation. The threshold used in the multidimensional poverty measure is 33.3%.

■ Table 2
Structure of the World Bank's multidimensional poverty measure

Dimension	Indicator	Weight
Monetary poverty	Daily household consumption or income below US$ 1.90 per person.	1/3
Education	At least one school-age child (up to eighth grade) in the household is not enrolled in school.	1/6
	No adult in the household (of age to attend ninth grade or above) has completed primary education.	1/6
Basic infrastructure	Household without access to improved water sources.	1/9
	Household without access to improved sanitation.	1/9
	Household without access to electricity.	1/9

Source: Economic Commission for Latin America and the Caribbean, on the basis of World Bank (2018). *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle.*

Both measures capture a low level of poverty in the countries of the region. According to the global MPI, in 11 of 13 Latin American countries the incidence of poverty is less than 10%. According to the World Bank's multidimensional poverty measure, poverty exceeds 10% in just three out of 17 Latin American countries (see table 3).

■ Table 3
Latin America (17 countries): incidence of poverty according to the global multidimensional poverty index of the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative (OPHI), and according to the multidimensional poverty measure of the World Bank

Country	UNDP and OPHI global multidimensional poverty index		World Bank multidimensional poverty measure	
	Year	Incidence	Year	Incidence
Argentina	2019/2020	0.4	2022	0.6
Bolivia (Plurinational State of)	2016	9.1	2021	4.5
Brazil	2015	3.8	2022	4.1
Chile			2022	0.5
Colombia	2015/2016	4.8	2022	6.5
Costa Rica	2018	0.5	2022	1.0
Dominican Republic	2019	2.3	2022	2.0
Ecuador	2018	2.1	2022	4.0

Country	UNDP and OPHI global multidimensional poverty index		World Bank multidimensional poverty measure	
	Year	Incidence	Year	Incidence
El Salvador	2014	7.9	2022	5.5
Guatemala	2014/2015	28.9	2014	22.2
Honduras	2019	12.0	2019	14.8
Mexico	2020	7.4	2022	1.7
Nicaragua			2014	15.6
Panama			2021	2.4
Peru	2019	7.4	2022	4.0
Paraguay	2016	4.5	2022	1.8
Uruguay			2022	0.2

Source: Economic Commission for Latin America and the Caribbean, on the basis of Oxford Poverty and Human Development Initiative and United Nations Development Programme. (2022). *Global Multidimensional Poverty Index 2022: Unpacking Deprivation Bundles to Reduce Multidimensional Poverty*; World Bank. *Multidimensional Poverty Measure*. https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure.

Source: Economic Commission for Latin America and the Caribbean, on the basis of Alkire, S. and Foster, J. (2011). Counting and multidimensional poverty measurement. *Journal of Public Economics, 95*(7-8). Elsevier; Alkire, S. and Foster, J. (2007). Counting and multidimensional poverty measurement. *OPHI Working Paper* (7). University of Oxford; Oxford Poverty and Human Development Initiative and United Nations Development Programme. (2022). *Global Multidimensional Poverty Index 2022: Unpacking Deprivation Bundles to Reduce Multidimensional Poverty*; World Bank. (2018). *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*; World Bank. *Multidimensional Poverty Measure*. https://www.worldbank.org/en/topic/poverty/brief/multidimensional-poverty-measure.

■ Box I.2
National multidimensional poverty indices in Latin America

Eleven Latin American countries have officially adopted a multidimensional poverty index (MPI), which they have used to monitor national development plans, prioritize areas for action and target social programmes. National MPIs have become important for monitoring SDG target 1.2, which aims to reduce by at least half the proportion of men, women and children of all ages living in poverty in all of its dimensions according to national definitions.

The multidimensional poverty indices of the region's countries were created through participatory processes involving a diverse range of public and private stakeholders, with the support of international organizations. These processes made it possible to integrate a wide variety of perspectives and reach agreements on the dimensions, indicators, thresholds and weights used.

Nearly all national MPIs are intended to complement income poverty measures and highlight aspects of well-being that are not captured by the monetary indicator. The instruments in question typically combine a rights-based and a capabilities-based approach and generally consider a larger number of dimensions and more demanding sufficiency thresholds than the global MPI. Nearly all national MPIs have used the household as the identification unit and they have applied intermediate cut-off points in which the multidimensional poverty threshold (k) (that is the number of deprivations a person must have to be considered poor) is greater than 1 and less than the total number of deprivations measured.

Latin America (11 countries): main characteristics of national multidimensional poverty indices

Country	Starting year	Identification unit	Dimensions	Dimension weight	Multidimensional threshold[a]
Mexico	2008	Person	- Income - Educational lag - Health - Social security - Housing quality and space - Basic services in housing - Food	All have the same weight except income (well-being)[b]	At least one non-monetary dimension, and income poverty
Colombia	2011	Household	- Adult education - Children and youth - Work - Health - Housing and services	All have the same weight	33.3% (more than one dimension and more than four deprivations)
Chile	2013	Household	- Education - Health - Work and social security - Housing and environment - Networks and social cohesion	All have the same weight, except networks and social cohesion	22.5% (one dimension or more, except networks and social cohesion, and at least three deprivations)
Costa Rica	2015	Household	- Education - Health - Housing - Work - Social protection	All have the same weight	20% (at least one dimension and at least four deprivations)
El Salvador	2015	Household	- Education - Housing - Work and social security - Health, basic services and food security - Quality of surroundings	All have the same weight	35% (more than one dimension and at least seven deprivations)
Ecuador	2016	Household	- Education - Work and social security - Health, water and food - Habitat, housing environment	All have the same weight	33.3% (more than one dimension and at least three deprivations)
Honduras	2016	Household	- Health - Education - Work - Housing	All have the same weight	25% (at least one dimension and at least three deprivations)
Panama	2017	Household	- Housing and services - Environment and sanitation - Work - Education - Health	All have the same weight	30% (more than one dimension and at least five deprivations)
Dominican Rep.	2017	Household	- Housing and environment - Digital divide and coexistence - Education and childcare - Livelihood and work - Health	All have the same weight	33% (more than one dimension)
Guatemala	2019	Household	- Food security and nutrition - Education - Decent employment - Housing - Basic services	All have the same weight	30% (more than one dimension)

Country	Starting year	Identification unit	Dimensions	Dimension weight	Multidimensional threshold[a]
Paraguay	2021	Household	- Work and social security - Housing and services - Health and environment - Education	All have the same weight	26% (more than one dimension and at least four deprivations)

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2); National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Vice-Presidency of the Dominican Republic. (2020). *IPM-RD: Índice de Pobreza Multidimensional de la República Dominicana*; Organization of American States. (2022). *Compendium on Experiences and Lessons Learned in the Measurement of Multidimensional Poverty in the Americas*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza multidimensional*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

[a] The multidimensional threshold is the minimum weighted percentage deprivation that a household must have in order to be considered poor.

[b] In Mexico, income is treated differently from other dimensions. For a household to be classified as multidimensionally poor, it must also be monetarily poor.

Some dimensions are included in the vast majority of national MPIs: examples include education, housing, basic services, health, work and social security. Other dimensions, such as the digital divide and coexistence, networks and social cohesion and food security, are considered in only a few countries. There are also indicators that are included in nearly all MPIs but are usually classified under different dimensions. Access to water and sanitation, for example, in some cases is included in the housing dimension and in others under basic services or health; health insurance is assigned to the health dimension in some cases and to employment in others.

The countries have generally assigned the same weight to the dimensions as to their respective indicators. Since national MPIs differ in terms of the number of dimensions and the number of indicators in each case, the same deprivations tend to have different weights in different MPIs. Therefore, although in nearly all national MPIs the value of the multidimensional threshold (k) is equivalent to being deprived in at least one complete dimension, the number of corresponding deprivations varies considerably between countries.

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Vice-Presidency of the Dominican Republic. (2020). *IPM-RD: Índice de Pobreza Multidimensional de la República Dominicana*; Organization of American States. (2022). *Compendium on Experiences and Lessons Learned in the Measurement of Multidimensional Poverty in the Americas*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza multidimensional*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

Given this scenario, in recent years ECLAC has undertaken various initiatives to measure multidimensional poverty in Latin America and the Caribbean. These have included developing a rights-based multidimensional child poverty index (ECLAC and UNICEF, 2010), and conducting various exercises to measure multidimensional poverty covering the entire population of Latin America (ECLAC, 2013, 2014; Santos et al., 2015). Until now, however, it had not succeeded in creating a multidimensional poverty index agreed upon within the Commission that could be used to monitor poverty throughout the Latin American population.

Accordingly, ECLAC launched a process of debate and consensus-building to produce an MPI that was validated by the different areas of the Commission involved in measuring and analysing poverty in the region. The process was undertaken by an interdivisional group of experts, drawing on the Commission's accumulated experience in measuring multidimensional poverty and benefiting from the valuable collaboration of external experts, including specialists from OPHI and UNDP. Various consultations were also held with national statistical offices, which were essential for incorporating the countries' individual viewpoints. MPI-LA was thus the outcome of an intense debate on the various decisions involved in designing such an index —a debate fostered by regional tradition and recent advances in the measurement of well-being.

In conceptual terms, MPI-LA applies both the rights-based and the capabilities approach to determine the dimensions and select the indicators of deprivation. The two approaches are complementary, since both focus on human dignity and freedom.[13] The capabilities approach stresses the importance of opportunities, while the human rights approach advocates for equality and non-discrimination (Vizard et al., 2011). As capabilities are particular freedoms, and human rights are rights to specific freedoms, many human rights can be considered as entitlements to specific capabilities (Sen, 2005; Osmani, 2005).[14]

In MPI-LA, the concept of capacity to achieve a certain level of material well-being acts as a bridge between rights and deprivations and helps to determine which domains of rights (dimensions) and which deprivations, are most closely related to poverty.[15] It is necessary to determine these areas because not all rights violations that affect people are strictly related to, or constitute, poverty (Osmani, 2005; Abramovich, 2006). Accordingly, indicators for MPI-LA were selected as proxies for the capabilities or entitlements that would make it possible

[13] The capabilities approach promotes people's freedom in the economic and social domains, which helps to establish rights that extend beyond negative obligations (Vizard et al., 2011; Sen, 2005). The rights approach, in turn, can foster political processes that increase people's capabilities (Whiteside and Mah, 2012; Vizard et al., 2011).

[14] Van Hees (2013) argues that not all capabilities can be rights. Some can only be affected indirectly and therefore should not imply obligations (for example, the capability to love those who love us, or to use our imagination and have a conception of the good).

[15] The conceptual identity of poverty is assumed to be based in economic insufficiency. In the study *Voices of the Poor: Crying Out for Change*, based on qualitative interviews with 60,000 people living in poverty from 60 countries (including several Latin American ones), persons living in poverty defined poverty as lack of the basic resources, goods and services needed to achieve material well-being (e.g. lack of food, housing, land and other assets and lack of infrastructure). People living in poverty feel that material deprivation leads to hunger and physical deprivation and exposes them to humiliation and abuse, which affects their participation in society and their social ties (Narayan et al., 2002).

to fulfil basic needs (Alkire, 2005; Abramovich, 2006). These include the capabilities to live in adequate housing, receive an education and acquire knowledge, enjoy good health and have a decent job that provides adequate livelihoods.[16] All of these domains of rights are encompassed by economic, social, cultural and environmental rights.

In addition to the conceptual proximity between the capabilities and rights approaches, there are practical reasons for using them in a complementary way. Firstly, some of the deprivations captured in surveys can be interpreted simultaneously as restrictions on the satisfaction of needs, or as rights violations, or as obstacles to the achievement of functionings (ECLAC, 2013; Santos et al., 2015). Secondly, direct measurements of functionings are still scarce in the region (Santos, 2019), and some deprivations that are relevant to the well-being of the regional population have not been recognized explicitly as rights internationally (for example, clean energy and the Internet).

Moreover, many of the indicators considered in MPI-LA have also been included in national MPIs in the region, as proxies for rights and capabilities (further information on each of the indicators is provided in section II.B). As national measurements are often based on the countries' constitutions or development strategies (Organization of American States [OAS], 2022; Burchi et al., 2021), it can be assumed that the indicators and dimensions most commonly used in national MPIs are shared interpretations of the deprivations of capabilities or rights that constitute poverty in the region. Thus, the notion of poverty used in MPI-LA is founded on a common core of meaning given to poverty in the different Latin American countries.

As the Latin American MPI attaches great importance to indicators of the capability to have a decent job, it considers both measures of unemployment and also those of job quality. This is because, from the ECLAC perspective of heterogeneity or segmentation of the productive structure, the occupational structure is a decisive factor in living conditions and opportunities (Bielschowsky and Torres, 2018; Lo Vuolo, 2015; Poy, 2020; Huepe, 2023). Structural heterogeneity means that there are wide disparities in productivity between sectors and branches of economic activity, and it implies that persons employed in low-productivity sectors or branches generally have lower-quality jobs, with smaller labour incomes, no access to social security and no coverage under labour legislation, among other disadvantages.

Moreover, one of the criticisms of conventional measures of poverty, both multidimensional and monetary, is that they are insensitive to gender inequalities in well-being. The gender perspective argues that the traditional sexual division of labour overloads women with domestic and care work and limits their economic, physical and decision-making autonomy (ECLAC, 2022b, 2023). The sexual division of labour within households, which is one of the structural challenges of gender inequality, discriminates against women, because the distribution of resources tends to put those who perform the reproductive work at a disadvantage (ECLAC, 2022b; United Nations Programme for Gender

[16] The capability to live in adequate housing is made up of other capabilities that can be considered, such as having a safe and stable place in which to live, living in a healthy home and environment and living within a reasonable distance from income-generating opportunities. For an application of the capabilities approach to housing, see Kimhur (2020).

Equality and the Empowerment of Women [UN Women] and UNDP, 2023). For this reason, MPI-LA includes an indicator that proxies for the obstacles caused by the overload of unpaid domestic and care work that diminish women's economic autonomy.

However, including an indicator that is sensitive to gender inequalities is not sufficient, because using the household as the identification unit conceals the differences in well-being that exist between its members (UN Women, 2018; Munoz et al., 2018; Bessell, 2015; Klasen and Lahoti, 2021; De Vreyer and Lambert, 2016). As using a household-based measurement poses difficulties when analysing individual gender gaps, a complementary indicator of deprivation at the individual level is proposed, in which the same MPI-LA indicators are used to examine these asymmetries, supplemented by a measure of the lack or insufficiency of own income. This indicator, which does not involve transposing individual deprivation on to all household members, was estimated for 20–59-year-olds, the same reference population that was used to calculate the ECLAC femininity index for poverty. This is also the age group for which the best quality individual information is available in the data sources (see chapter IV for further information).

When designing MPI-LA, the possibility of using an individual identification unit for the entire regional population was analysed, because this would make it possible to detect gender inequalities and would be consistent with the capabilities and rights-based approaches. Ultimately, however, it was decided to use the household as the identification unit.[17] The individual information provided by surveys for some groups, particularly children, has significant shortcomings: for this age group (population under 18 years old), there are fewer indicators, and the adequacy thresholds are less demanding than for the adult population,[18] which affects the comparability of individual measurements.[19] Moreover, just as there are common resources and skills within the household, deprivations among some household members affect the rest —a feature that is not captured adequately in an index that uses an individual identification unit. Using the household as the identification unit allows MPI-LA to be more consistent with the national multidimensional poverty measures, since this unit is used in nearly all cases (see box I.2). It also makes it more consistent with poverty reduction programmes implemented in the countries, as these tend to focus more on households than on individuals.

The Latin American MPI includes extreme material deprivations that have been part of traditional measurements of unsatisfied basic needs (for instance, a dwelling built with makeshift materials, overcrowding or lack of access to sanitation and water). It also considers other "second generation" deprivations (Santos et al., 2015), some of which have

17 See box IV.1 for further information on multidimensional poverty indices that use an individual identification unit.

18 The notion of "requirement" relates to the quality or degree of adequacy of the elements evaluated. A less demanding threshold means that less is required to not be considered poor and therefore describes a very basic standard of living. Conversely, more demanding thresholds require, for example, a higher level of education or better quality job to escape poverty.

19 In the sources available for constructing MPI-LA, the only individual information that exists in relation to children and adolescents relates to the education dimension. Moreover, the incidence of indicators referring to this dimension (non-attendance or lagging behind at school) is very low. Information is said to exist if it is available for the 17 countries analysed and if it allows for comparisons between them.

started to be included in the national MPIs that the countries have implemented over the past 15 years (see box I.2). These deprivations are intended to reflect changes in culture and living standards and are reflected in indicators such as low-quality employment, lack of access to social security and protection, non-participation in the labour force owing to domestic care responsibilities and lack of Internet access. Similarly, MPI-LA updated the deprivation thresholds for some of the more traditional poverty indicators, such as overcrowding and educational attainment.

All of this work was done with very limited information. One of the most demanding requirements for multidimensional measurements is that the information for all dimensions and indicators must come from the same source, which restricts the amount of usable information and its quality. The regional experience helps to illustrate this problem. One of the earliest initiatives in multidimensional poverty measurement was the UBN method, in which the selection of dimensions and indicators was conditioned by the variables that were available in censuses. Currently, the multipurpose household surveys conducted by national statistical offices and other public agencies are the most comprehensive data sources for multidimensional measurement in the region. However, despite progress, the data they provide are still insufficient.

Consequently, MPI-LA is far from a perfect measurement, and there are several areas where the quality and availability of information can be improved. One dimension that needs improvement is health. Multipurpose surveys in Latin America have major shortcomings in terms of anthropometric indicators, infant mortality, chronic diseases, mental health, difficulties in performing basic activities of daily living and access to health services at different levels. In the case of education, these surveys seldom collect data on cognitive skills and abilities, which makes it difficult to assess educational quality. There is also a shortage of data on information and communications technology (ICT) skills, which are essential in the information and knowledge society. It is also crucial that more countries include questions on access to preschool and, above all, early childhood education programmes, which would enhance gender equality. In the latter area, more information is needed on the use of time, domestic violence and the work-life balance. Food insecurity is another fundamental aspect that needs to be considered, since hunger is one of the worst manifestations of poverty. In the case of housing, it would be useful to measure a dwelling's state of repair, since the use of makeshift materials is very uncommon in the region's relatively more developed countries. It would also be desirable to improve the measurement of security of tenure.[20] Environmental quality, access to infrastructure and basic services and citizen security are other critical aspects of the well-being of Latin American populations that are not yet incorporated sufficiently into multipurpose surveys. There are also a number of difficulties in making comparisons between countries owing to the varying frequency with which surveys are conducted.

[20] Although the irregular employment indicator makes it possible to detect extreme deprivation, not all countries ask about such employment. In the case of other forms of insecure tenure, very few countries ask about renting without a contract; and, in some countries, it is impossible to determine whether the dwelling is obtained from work or another source.

Lastly, it should be noted that the results obtained with MPI-LA are not comparable with those obtained from the national multidimensional poverty measures, since the objectives and procedures in each case are different. The ECLAC measurement aims to achieve regional comparability, using data obtained from a single source. In contrast, the country MPIs are intended to provide information that is as relevant as possible to the national context, but they are not designed to be comparable with those of other countries. Although an effort was made to align MPI-LA with the national measurements, the dimensions, indicators and deprivation thresholds are not identical (see box I.2). There are also differences in the weighting of dimensions and indicators and in how individual deprivations are transformed into household deprivations.[21]

[21] The national MPI may be calculated on the basis of information from a source other than that used in MPI-LA. In Colombia, for example, the official index is based on the National Survey of Quality of Life (ECV), while MPI-LA uses the Great Integrated Household Survey (GEIH).

Chapter II
Methodology for calculating the multidimensional poverty index for Latin America

A. Structure and data sources

Measuring multidimensional poverty entails assessing whether individuals meet minimum thresholds of well-being in each of the dimensions considered. Accordingly, these dimensions and the indicators representing them need to be selected, minimum thresholds must be set for each indicator and, lastly, the results obtained with the different indicators have to be combined into a synthetic index.

The structure described above is common to all methods that aim to identify multidimensional poverty relative to each observation contained in the data source, such as a population census or a household survey. For example, in the UBN method used in Latin America mainly in the 1980s and 1990s, the unmet needs were assessed on the basis of certain characteristics of housing and available services, together with specific demographic features of the household. Once the deprivations had been counted separately, households with at least one deprivation were considered to be in poverty.

A similar approach is adopted in constructing MPI-LA. The index is structured around four dimensions of well-being (housing, health, education, and employment and pensions), with indicators and deprivation thresholds being chosen for each one. Then, a synthetic

deprivation index is constructed, based on the double threshold methodology proposed by Alkire and Foster (2007, 2011). To this end, a weighted sum of each person's deprivations is calculated, taking into account the relative importance, for well-being, of each of the deprivations assessed. Persons or households (depending on the identification unit chosen) whose score is equal to or above a predetermined multidimensional threshold are identified as being in multidimensional poverty.

This method of constructing multidimensional indices makes it possible to detect the concurrence of deprivations affecting individuals. It has an advantage over synthetic indices constructed from national averages, such as the human development index (HDI), because it makes it possible to identify the most vulnerable populations and is therefore consistent with the SDG mandate of leaving no one behind. However, the feature also places greater demands on information sources, since all relevant variables must originate from the same survey. Although the region's household surveys have made progress by including questions on various types of deprivation, the thematic coverage of the surveys and the specific nature of the deprivations they measure remain limited, especially in relation to health and nutrition (Santos, 2019).

The data used in MPI-LA come from the multipurpose household surveys conducted periodically by the national statistical offices or other public institutions in the countries of the region, which are used in official measurements of poverty and income inequality.[1] Table II.1 lists the names and waves of the surveys used, which form part of the Household Survey Data Bank (BADEHOG). ECLAC has harmonized the different surveys to make the variables comparable across countries.

The dimensions, indicators and deprivation thresholds included in MPI-LA are shown below, alongside the arguments justifying their selection. The steps taken to construct the synthetic index are then described, which, among other decisions, involved assigning a weight to each dimension and indicator and defining the multidimensional threshold.

[1] These surveys may not coincide with those used to measure multidimensional poverty in each country. For example, in Colombia, multidimensional poverty is estimated using the National Quality of Life Survey and not the Great Integrated Household Survey, which is the source for the official measurement of monetary poverty.

■ Table II.1

Latin America (17 countries): household surveys used to calculate the multidimensional poverty index for Latin America, 2008–2022

Country	Survey	Year conducted														
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Argentina	Permanent Household Survey	X	X	X	X	X	X	X		X	X	X	X	X	X	X
Bolivia (Plurinational State of)	Continuous Household Survey	X	X		X	X	X	X	X	X	X	X	X	X	X	
Brazil	National Household Sample Survey (PNAD)	X	X		X	X	X	X	X	X	X	X	X			
Chile	National Socioeconomic Survey (CASEN)		X		X		X		X		X			X		X
Colombia	Great Integrated Household Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Costa Rica	Multipurpose Household Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dominican Republic	Continuous National Labour Force Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ecuador	Employment, Unemployment and Underemployment Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
El Salvador	Multipurpose Household Survey		X	X		X	X	X	X	X	X	X	X	X	X	X

Country	Survey	Year conducted														
		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Guatemala	National Employment and Income Survey							X								
Honduras	Multipurpose: Permanent Household Survey		X	X	X	X	X	X	X	X		X	X			
Mexico	National Household Income and Expenditure Survey (ENIGH)	X		X		X		X		X		X		X		X
Nicaragua	National Household Survey on Living Standards Measurement		X					X								
Panama	Multipurpose Survey							X	X	X	X	X	X		X	X
Paraguay	Permanent Household Survey	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Peru	National Household Survey on Living Conditions and Poverty	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uruguay	Continuous Household Survey	X	X	X	X	X	X	X	X	X	X	X	X		X	X

Source: Economic Commission for Latin America and the Caribbean.

B. Selected dimensions and indicators

1. Housing

The right to housing was recognized as part of the right to an adequate standard of living in the 1948 Universal Declaration of Human Rights and in the International Covenant on Economic, Social and Cultural Rights of 1966.[2] It has also been defined as a component of the right to live in peace, security and dignity (OHCHR, 1991). Living in adequate housing is both a functioning in itself and also a means of developing other capabilities (Kimhur, 2020). The importance of housing is reflected in SDG target 11.1, which proposes, by 2030, to ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums.[3]

International agreements and declarations have stated that, to be adequate, housing must be habitable, safe, accessible and of good quality. To be adequate, a dwelling must provide sufficient space, lighting, ventilation and infrastructure for its occupants, as well as access to services such as clean energy and Internet connectivity. There are other factors that also contribute to housing adequacy, but are not included in MPI-LA owing to data shortcomings. These include the location of the dwelling in terms of access to schools and health centres, workplaces, recreational spaces, green areas and shops, among other facilities.[4]

(a) Housing conditions

(i) Materiality of the dwelling

The materiality of the dwelling is an indicator of the degree of protection it provides against health, environmental, climatic, social and other risks. The health risks associated with living in a dwelling built with makeshift materials are well documented in the literature. A review by Santos (2019) noted various adverse health outcomes, such as acute respiratory infections, allergies, asthma, intestinal parasites and Chagas Disease. In terms of environmental factors, housing built with makeshift materials is highly prone to collapse or flooding in the event of earthquakes or adverse weather conditions, which threatens the health and lives of its occupants.

From the materiality perspective, a dwelling consists of three elements: floor, walls and roof. The type of materials used to construct these elements partly determines the quality and adequacy of the dwelling. The key properties of the materials used include durability, thermal and acoustic insulation, and water and fire resistance (Santos, 2019).

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2 See article 25 of the Universal Declaration of Human Rights (United Nations, 1948) and article 11 of the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966).

3 See United Nations, Goal 11: Make cities inclusive, safe, resilient and sustainable. https://www.un.org/sustainabledevelopment/cities/.

4 Several of these elements are mentioned from the capability's perspective, particularly the capability to live in healthy and safe housing and surroundings and the capability to live within a reasonable distance from employment opportunities (Kimhur, 2020). Some of these factors are incorporated into Chile's MPI. For further information, see Ministry of Social Development of Chile (2016).

In Latin America, people have been considered deprived if they live in dwellings built with non-recoverable materials that do not provide sufficient insulation from the natural and social environment (Kaztman, 1995). Typical categories of deprivation have been earthen floors, and walls or ceilings made of natural fibres or waste materials. This widely accepted standard in the international community is used, for example, in the global MPI (Alkire and Santos, 2010 and 2014) and in the MPIs of Saudi Arabia (floor and ceiling), Nepal (floor and ceiling) and Bhutan (floors, walls and ceiling) (Santos, 2019).[5] In addition, the Multidimensional Poverty Peer Network distinguishes between finished, rudimentary and natural materials.[6] Natural materials are included among non-recoverable materials, whereas rudimentary materials represent a somewhat better quality and may be either adequate or inadequate.

Most national MPIs in the region currently define deprivation as the use of non-recoverable or natural materials. In some countries, rudimentary materials are also considered a deprivation, for example, wattle-and-daub walls, known as *bajareque* in Honduras and Guatemala or *quincha* in Panama. In some countries, materials such as adobe and asbestos have been added and assessments of the state of repair of the dwelling have been included, either as a whole or for each element separately (see table II.2).[7]

■ Table II.2
Latin America (11 countries): indicators of deprivation related to housing materials in national multidimensional poverty indices

Country	Floor materials	Roof materials	Wall materials	State of repair of the dwelling
Colombia	Land	Not taken into account	Urban area: rough wood, boards, planks, bamboo, other plant materials, zinc, fabric, cardboard, debris, or no walls	Not included
Costa Rica[a]	Bad state of repair	Bad state of repair	Bad state of repair	Included
Chile[b]	Bad state of repair or makeshift materials	Bad state of repair or makeshift materials	Bad state of repair or makeshift materials	Included
Dominican Republic	Earth, wood (board)	Asbestos cement, yagua or cane or other	Palm, wattle and daub (*tejamanil*), zinc, or other	Not included

5 Owing to data shortcomings, the global MPI only considers flooring material.

6 The Multidimensional Poverty Network considers earth, sand, or dung floors to be natural material floors; and it classifies wooden planks, palm, or bamboo floors as rudimentary. In the case of roofing, natural materials include thatch, palm fronds and grass, while rudimentary materials include rustic mats, palm, bamboo, wooden planks and paperboard. Walls made of palm, logs, or trash are considered natural materials, while bamboo with mud, stone with mud, uncovered adobe, paperboard and scrap wood are classified as rudimentary. For further information, see Oxford Poverty and Human Development Initiative. *Multidimensional Poverty Peer Network (MPPN)*. http://www.mppn.org/wpcontent/uploads/2016/11/MPPN_SDG-Pov_QuexPost2015_Sept-14a-1.pdf.

7 Adobe is a material that has disadvantages in areas of high humidity or seismic risk; but it also offers advantages, such as low energy consumption owing to its insulating qualities. Asbestos, in contrast, has very harmful health consequences. In the latter case, there are data problems and few countries collect information on this material as a separate category.

Country	Floor materials	Roof materials	Wall materials	State of repair of the dwelling
Ecuador[c]	Earth or other	Palm, straw, leaf, or other	Cane or other	Included
El Salvador	Earth	Straw, palm, cardboard, plastic, or waste material	Metal sheet, wood, straw, palm, waste material, cardboard or plastic	Included
Guatemala	Earth	Not taken into account	Adobe, metal sheeting, wattle and daub, thatch, wood, cane, or other	Not included
Honduras	Earth or other	Straw, palm, or similar, waste material, or other	Wattle and daub (*bahareque*), sticks, cane, or waste material	Not included
Mexico	Earth	Cardboard or waste material	Mud or wattle and daub, reed, bamboo or palm, metal sheeting, cardboard or asbestos, or waste material	Not included
Panama	Earth, wood, or other	Wood, palm, straw, leaves, or other	Wood, thatch, adobe, metal, palm, straw or palm fronds, cane, bamboo or sticks, other materials (cardboard), or no walls (urban area)	Not included
Paraguay	Earth	Straw, palm trunk, cardboard, rubber, packing wood, or other	Stakes, adobe, palm trunks, cardboard, rubber, packing wood, no walls, or other	Not included

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). Medición multidimensional de la pobreza (2016); National Council for the Evaluation of Social Development Policy of Mexico (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

[a] The report for Costa Rica does not provide information on how the dwelling's state of repair is assessed, nor indicate whether the type of material used is a factor in determining deprivation in this domain.

[b] In Chile, an assessment of the dwelling's state of repair is combined with its materiality. Official documents do not specify which materials constitute deprivation.

[c] In Ecuador, a combined assessment is made of the dwelling's quantitative and qualitative shortcomings. The materials indicated in the table determine deprivation irrespective of the dwelling's state of repair.

The multidimensional poverty index for Latin America defines deprivation on the basis of non-recoverable materials, as these are clear expressions of inadequacy, and there is extensive information on them in the data sources. In general, national surveys provide information on the flooring, walls and roof of the dwelling and the categories used to identify non-recoverable materials are similar across countries. To finesse the estimation, the information was supplemented with data on the type of dwelling and people living in shacks or huts, which are usually built with non-recoverable materials, were considered deprived.

To make the adequacy threshold somewhat more demanding, some unfinished non-rudimentary materials (such as unclad walls, or rough or untreated wood floors) were considered deprivation.[8] Since not all countries collect sufficient information to determine whether rudimentary materials have been treated or not, the ranking of country deprivation based only on non-recoverable materials was compared with the ranking that included untreated materials, and the two were found to be highly correlated (Spearman's correlation coefficient = 0.93).[9] The feasibility of using information on the lack of ceilings was also analysed, but as it produced significant changes in the ranking of countries owing to data gaps, it was rejected.

Nonetheless, the measurement described above is based on very basic standards of adequacy, which could result in underestimation of deprivation in terms of a dwelling's habitability (Villatoro, 2017). Several alternatives to make the threshold more demanding were considered, but all were ruled out because of data availability and comparability problems. For example, few countries collect data on the state of repair of dwellings, and those that do so vary in how the data are collected and produced (response categories, interviewer discretion in assessing the state of repair of the dwelling and other differences).[10]

(ii) Access to energy

Although the international community has not recognized access to clean energy explicitly as a human right (Ambihaipahar, 2014; García and Mundó, 2014), various resolutions and declarations have emphasized its instrumental importance in guaranteeing rights related to employment, health, food and the environment (ECLAC, 2019b).[11] The importance of access to energy has been recognized in SDG 7, which proposes universal access to affordable, secure, sustainable and modern energy.[12] Given its relationship with income, education, health, the environment, productivity and gender equality, access to energy affects virtually all of the Sustainable Development Goals (Santos, 2019).

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8 Untreated or unwoven palm or bamboo flooring is unsuitable. Plywood, cardboard, or reused wood are also unsuitable if they lack external covering (Santos, 2019).

9 The comparison was made using surveys conducted around 2017, corresponding to 18 countries in the region.

10 For further information, see Villatoro (2017).

11 In its General Comment No. 4 (1991) on article 11 of the International Covenant on Economic, Social and Cultural Rights, the Committee on Economic, Social and Cultural Rights affirms, in the context of the right to adequate housing, the need to have access to energy for cooking, heating and lighting (OHCHR, 1991). Article 14(h) of the Convention on the Elimination of All Forms of Discrimination against Women (United Nations, 1979) states that States Parties shall take all appropriate measures to eliminate discrimination against women in rural areas by ensuring, among other things, access to electricity in rural zones.

12 Given its importance, it has been argued that access to clean energy is an implicit right (Ambihaipahar, 2014; Candia, 2015).

Combined with the ownership of durable goods, access to energy facilitates many household activities: without electricity, it is impossible to use certain essential appliances for preserving food, washing clothes, heating water, cooking and heating the home. Lack of electricity prevents schoolwork from being done after dark (Njoh et al., 2018) and hinders the use of information and communications technologies (ICTs). Moreover, persons under 18 years of age (especially girls) may spend a lot of time gathering fuel and carrying it home over long distances (Ortiz-Correa, et al., 2016). Thus, energy deprivation often has a significant impact on persons engaged in unpaid domestic work (Santos, 2019) and on children.

Fuels such as electricity, gas and alcohol (ethanol) are recognized Internationally as clean, because they produce very low levels of pollutants (Practical Action, 2010). Those not considered clean include coal, firewood, waste and manure (United Nations, 2003a). The classification of kerosene is subject to debate. During the period of the Millennium Development Goals (MDGs), this fuel was considered acceptable, but more recently its use has been discouraged because it produces particulate matter and other pollutants (World Health Organization [WHO], 2014a).[13]

In the global MPI, which was designed with the MDG definitions in mind, the lack of electricity and the use of biomass fuels, including firewood and coal, was considered deprivation. Subsequently, SDG indicator 7.1.2 discouraged the use of kerosene for cooking, but only when paired with inefficient technologies.[14] The region's national MPIs use definitions similar to those of the international indices, but with adaptations (see table II.3). In Guatemala and Mexico, for instance, the use of firewood is considered deprivation in the absence of a chimney, which means that use this fuel is not a deprivation in itself (Hiemstra-van der Horst and Hovorka, 2008).[15] With regard to electricity, the Dominican Republic and Guatemala include regularity of supply, which is a key issue. However, the country surveys usually do not collect the information needed to include this.

■ Table II.3
Latin America (6 countries): energy deprivation indicators in national multidimensional poverty indices

Country	Electricity		Cooking fuel	
	Deprived	Not deprived	Deprived	Not deprived
Guatemala	Does not have electricity, or has electricity but was without it for more than one day in the last month		Uses firewood and does not have a chimney to remove smoke	
Honduras	Uses candle, oil lamp, gas lamp, *ocote* pine resin or other source	Uses public service, a private shared service, its own generator, or solar energy	Uses firewood	Uses gas (kerosene), propane gas (*chimbo*), electricity, or other source

[13] For information on the current assessment of kerosene, see World Health Organization. *Household air pollution*. https://www.who.int/es/news-room/fact-sheets/detail/household-air-pollution-and-health.

[14] See United Nations. *SDG indicators: metadata repository*. https://unstats.un.org/sdgs/metadata/?Text=&Goal=7&Target=7.1.

[15] Gómez-Lobo (2005) states that most households in southern Chilean communities use firewood, and that the best way to protect air quality is to promote good practices for drying and using it.

Country	Electricity		Cooking fuel	
	Deprived	Not deprived	Deprived	Not deprived
Mexico	No electric light in the dwelling	Uses public service, a private generator, solar panel or other source	Uses firewood or coal, without a chimney to remove smoke	Uses coal with a chimney to remove smoke, bottled gas, natural or mains gas, electricity, or other source
Panama	Uses kerosene or diesel, gas, candles, or other fuel	Uses electricity from a distribution company, the community, its own source, or a solar panel	Not included	
Paraguay	Not included		Uses firewood or charcoal	Uses gas, electricity, kerosene, alcohol, or other fuel, or does not use any fuel (no cooking stove)
Dominican Republic	Uses propane or kerosene lamp, or a public or private utility service, but receives supply for less than 14 hours per day	Uses a public or private utility service and receives supply for at least 14 hours per day	Uses firewood, coal, or other	No information

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Dev.elopment and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

The information available in most countries' surveys is insufficient to distinguish between households that use firewood with or without a chimney, or to ascertain whether kerosene is used with technologies that reduce pollution inside the dwelling. Considering both fuels as deprivation reduces the risk that persons exposed to indoor pollution from the use of toxic cooking fuels will be identified as not deprived. Moreover, in poorly ventilated urban

areas, the widespread use of firewood with chimneys can cause pollution that is harmful to health. Accordingly, MPI-LA considers people deprived if they live in dwellings without electricity or belong to households that cook with toxic fuels, such as coal, waste material, firewood, or kerosene.

(iii) Deprivation indicator related to the conditions of the dwelling

The Latin American MPI considers persons to be deprived in terms of housing conditions if they live in dwellings made of makeshift materials, or if they are energy-deprived either because they use toxic fuels or because they lack electricity. In theory, combining these two elements into a single indicator makes it less sensitive to the number of deprivations and does not make it possible to identify the specific policies that should be implemented to reduce the deprivation. However, it was decided to consolidate them because the incidence of deprivation in terms of electricity and housing materiality is very low, which means that, in the vast majority of Latin American countries, deprivation in terms of housing conditions is heavily dominated by the use of toxic fuel.[16] Nonetheless, ignoring information on housing materiality and access to electricity runs the risk of excluding very extreme deprivation.

(b) Overcrowding

An adequate dwelling must provide sufficient space (OHCHR, 1991). Overcrowding diminishes privacy and independence (Kaztman, 1995), fosters the transmission of infectious diseases and contributes to mental health problems (Ruiz-Tagle and Urria, 2020), violence and sexual abuse (Kaztman, 2011). Insufficient space in the dwelling makes it difficult for children to do their homework (Kaztman, 2011; Zhang and Navejar, 2018), impairs their learning (Contreras et al., 2019) and encourages them to socialize with peers in public spaces without adult supervision, thereby exposing them to various types of risk (ECLAC, 2022a). Overcrowding impinges on people's intimacy and compromises their safety, physical and mental health, cognitive development and relationships with others.[17]

The construction of an overcrowding indicator entails making a normative judgment on the minimum level of space and privacy that a dwelling should provide. Currently, there is no globally accepted standard for assessing overcrowding and how demanding a country's overcrowding threshold is reflects its development level (Santos, 2019). In practice, developed countries tend to set the threshold at more than one person per room (Goodyear et al., 2012), while developing countries use less stringent thresholds.

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[16] Keeping these indicators separate would be of little use as a source of information on which to base policies, given the low incidence of indicators relating to housing materiality and access to energy (around 2020, less than 1% of the population in eight out of 14 Latin American countries lacked grid electricity), and also because their explicit weight would be less than that of the other indicators. If the indicators were considered separately, deprivation in terms of electricity, fuel and housing materiality would have a weight equal to one-third of the weight of the other indicators included in MPI-LA.

[17] In some developed countries, there is evidence that women living in overcrowded conditions are more likely to suffer from depression, while men in similar conditions tend to exhibit more aggressive behaviour (Mangrio and Zdravkovic, 2018).

In Latin America, overcrowding is usually measured by the number of people in the household or dwelling relative to the space available in it. This can be made operational in several ways, such as by counting bedrooms (rooms used for sleeping), rooms in general (any room in the dwelling), or square metres. In national MPI calculations, the overcrowding threshold is set at around three people per room, although some countries apply a more stringent threshold of around two and a half people per room (or bedroom) (see table II.4). Kaztman (1995) recommended using a threshold of more than two people per room, since this means that a couple with a child sleeping in the same room would be considered overcrowded. The same would be true if there were five or more people in the household occupying two rooms.

Prior to MPI-LA, ECLAC (2010, 2013, 2014) had usually measured overcrowding by the number of persons in the household relative to the number of bedrooms. The denominator included all rooms used for sleeping or available for that purpose, even if they were multipurpose —in other words, even if they were used for living, eating and sleeping, or for cooking and sleeping. Overcrowding thresholds were set without considering differences in household demographics. This ignored the fact that households of different compositions had different space requirements and it resulted in excessive discretion in setting the threshold.

Unlike earlier approaches, MPI-LA adopts the conceptualization used by the European Union and the Organisation for Economic Co-operation and Development (OECD), which propose overcrowding thresholds that address the space requirements in the dwelling according to the sex and age composition of the household members.[18] A household is considered overcrowded if there is less than one room available for each of the following: each couple in the household; each single person aged 18 or over; every two of the same sex between 12 and 17 years of age; each single 12–17-year-old not classified in the previous category; and every two children under 12 years of age, regardless of sex. Bedrooms and multipurpose rooms, such as the living room or dining room, are considered rooms, but the kitchen is not.

■ Table II.4
Latin America (11 countries): indicators of overcrowding in national multidimensional poverty indices

Country	Indicator[a]
Colombia	At least three people per bedroom (urban area) More than three people per bedroom (rural areas)
Costa Rica	Two residents in dwellings with less than 30 m^2 of floor space Three to six residents in dwellings with less than 40 m^2 of floor space At least seven residents in dwellings with less than 60 m^2 of floor space Single-person households are not considered overcrowded
Chile	At least two and a half people per bedroom

[18] See Organisation for Economic Co-operation and Development. *Housing overcrowding*. https://www.oecd.org/en/data/indicators/housing-overcrowding.html; European Commission. Glossary: overcrowding rate. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Overcrowding_rate.

Country	Indicator[a]
Dominican Republic	At least three people per bedroom or room
Ecuador	More than three people per bedroom
El Salvador	At least three people per bedroom
Guatemala	More than three people per room (excluding bathrooms, kitchens, hallways, garages and rooms used for business purposes)
Honduras	At least three people per room
Mexico	At least two and a half people per room
Panama	More than three people per bedroom
Paraguay	More than three people per bedroom

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87)(LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

[a] The term "bedroom" refers specifically to the space in the dwelling used for sleeping. "Room" can refer to any room in the dwelling, although bathrooms and kitchens are generally excluded.

To calculate the overcrowding indicator, the minimum number of rooms needed by each household was estimated according to its sex and age composition, and this number was then compared with the total number of rooms actually available to the household.[19] In countries in which surveys asked about the number of rooms in the dwelling rather than the number available to the household, overcrowding was calculated on the basis of information on the persons and rooms in the entire dwelling.[20] In general, the ranking of countries by

[19] For example, a household consisting of a cohabiting adult couple and two adolescents of different sexes needs at least three bedrooms (one for the adult couple and one for each adolescent). If the dwelling has fewer than three bedrooms, all members of the household will be considered deprived.

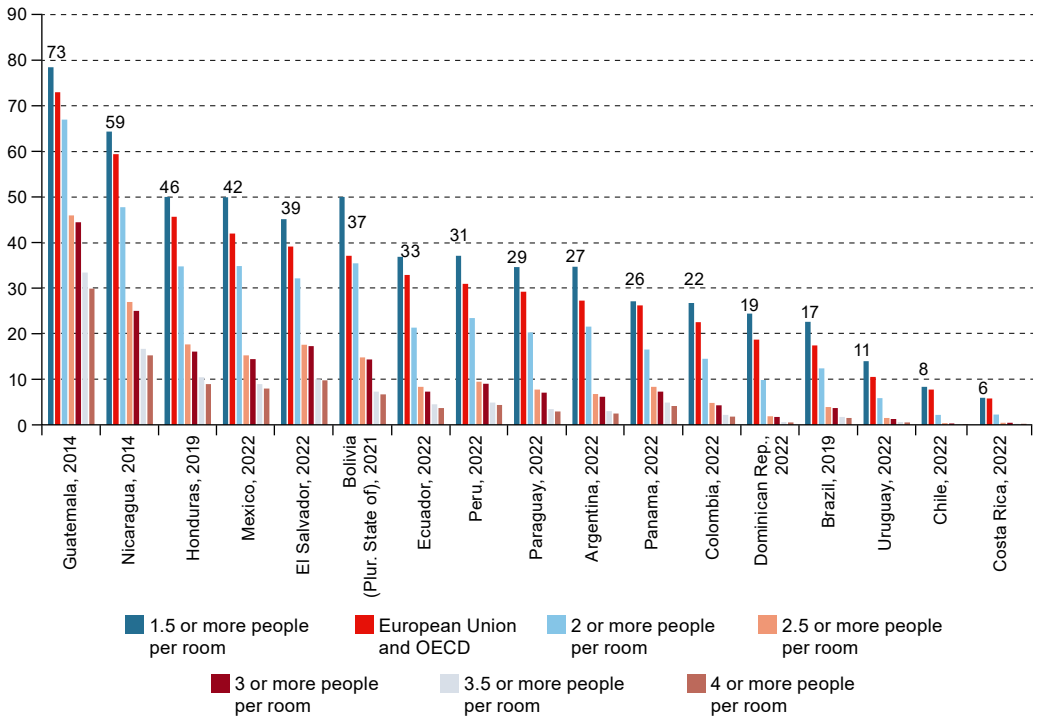
[20] The countries in which surveys ask about the number of rooms in the dwelling are Costa Rica, Honduras, Mexico, Paraguay and Peru.

incidence of overcrowding obtained with the new indicator is very similar to that using thresholds based on the number of rooms per person, ignoring household demographic composition (see figure II.1).[21]

■ Figure II.1

Latin America (17 countries): incidence of overcrowding in the total population, according to different thresholds, around 2022

(Percentages)



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

Note: The countries are ordered by the incidence of overcrowding, based on the European Union and OECD definition, which is shown in red.

(c) Internet access

The technological revolution has generated new Internet-based digital communication and data applications, which are increasingly important for education, employment and social inclusion (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2018). Enabling the population to participate effectively in the

[21] Around 2022, a series of country rankings were obtained using seven different thresholds, which were highly correlated (Spearman's correlation coefficient = 0.98).

information and knowledge society requires expanding Internet connectivity and nurturing the skills needed for people to take advantage of the educational, employment and social integration opportunities that arise in the digital world.

Although access to ICTs has not been guaranteed as a right in any binding international treaty, Internet access is mentioned in 246 recommendations by United Nations treaty bodies (Szoszkiewicz, 2018). In addition, the instrumental role that the Internet plays in freedom of expression has been emphasized (United Nations, 2011, 2016), and this can be very important for the poorest people, who often do not have access to traditional media to give voice to their demands (Narayan et al., 2002).[22]

The social distancing measures adopted during the coronavirus disease (COVID-19) pandemic underscored the importance of the new ICTs even more clearly. Lack of Internet connectivity was a barrier for large segments of the population, especially the most vulnerable, in terms of being able to telework, study remotely and access essential goods and services. Internet availability provided the opportunity to undertake educational or work activities using online platforms and applications based on digital information.

Indicators of access to ICTs —whether new or conventional— have been incorporated into various international poverty measurements. In the global MPI (Alkire and Santos, 2010), the computer and the telephone were included among indicators of living standards. In Latin America, ECLAC and the United Nations Children's Fund (UNICEF) considered that having a radio, television, or telephone (whether landline or mobile) were proxies for the right to information (ECLAC and UNICEF, 2010). These two measurements, adopted at the start of the last decade, did not consider the Internet, perhaps because it was not yet widespread in many developing countries and also because of problems with the availability of information. A recent UNDP study on multidimensional deprivation among women in 10 of the region's countries included two ICT indicators: one relating to Internet availability in the home and the other tracking the number of computers and mobile phones in the home relative to the number of people living there (Madrigal et al., 2023).

Internet access was included in the official MPIs for Costa Rica (in 2015) and for the Dominican Republic and Panama (both 2017). In Costa Rica, households that do not use the Internet are considered deprived. In Panama, persons belonging to households that do not have Internet access via a mobile or fixed network and who cannot access it elsewhere, are defined as deprived.[23] In the Dominican Republic, a household is considered deprived if the following two conditions are met: (i) no household member between the ages of 8 and 55 years used the Internet at least once a week; and (ii) the household does not have a computer or cell phone with an Internet connection. Although Mexico's MPI does not include any ICT-related indicators, the country does include the Internet in a list of complementary indicators. Paraguay's official MPI evaluated the possibility of including an Internet access indicator (Department of Statistics, Surveys and Censuses [DGEEC], 2018), but ultimately

[22] Nonetheless, the role of the Internet as a democratizing mechanism has been questioned, owing to the proliferation of fake news and hate speech on social media (Nielsen, 2020).

[23] Households whose members do not use the Internet because they are not interested in it are excluded.

decided against it (National Institute of Statistics of Paraguay, 2021). Digital literacy skills have not been considered in national MPIs, and few attempts have been made to include this area in the surveys.[24]

The Latin American MPI includes the lack of a fixed or mobile Internet connection in the home as an indicator of deprivation. This indicator is widely available in household surveys and is comparable between countries and over time (see table II.5).

■ Table II.5
Latin America (17 countries): questions designed to capture Internet access in national surveys, 2006–2021

Country	Question	Years
Argentina	Does this household have Internet access?	2016–2021
Bolivia (Plurinational State of)	Does the household have access to the Internet in the dwelling?	2008–2021
Brazil	Does any resident have access to the Internet at home via a personal computer, tablet, cell phone, television, or other device?	2008–2020
Chile	Do you or any member of your household have access to any type of paid Internet connection at home, regardless of whether it is used or not?	2006–2017
Colombia	Which of the following services or goods does this household use? Internet service?	2008–2021
Costa Rica	Does this household have an Internet service? This includes landline telephone, coaxial cable, fibre optics, mobile or other devices.	2008–2021
Dominican Republic	Do you or any member of your household have Internet access?	2013–2021
Ecuador	Does this household have Internet access? This includes connection via computer, tablet, cell phone or some other device.	2008–2017
El Salvador	Do you use the Internet or mobile Internet?	2008–2019
Guatemala	Does the household have an Internet service?	2014
Honduras	Where did you have access to the Internet? At home?	2009–2019
Mexico	Does this household have Internet access?	2008–2020
Nicaragua	Does this household have an Internet service?	2009 and 2014
Panama	Does this household have access to the Internet via a mobile or fixed network?	2014–2019, 2021

[24] Digital literacy refers to the ability to access information safely and appropriately through digital technologies, as well as to manage, understand, integrate, communicate, evaluate and create it (Law et al., 2018). Digital literacy is considered in the National Household Survey (ENAHO) of Peru, which includes a module dedicated to this area. The skills assessed include the ability to copy or move files and folders, use copy and paste tools, send emails with attachments, use basic arithmetical formulae in spreadsheets, connect and install devices, locate, download, install and configure software, create electronic presentations using specific programmes, transfer files between computers and other devices and create computer programmes using programming languages. Responses are recorded as "yes" or "no".

Country	Question	Years
Peru	Does your household have an Internet connection?	2008–2021
Paraguay	Does this household have Internet access? (cable, Wi-Fi, USB modem)	2008–2021
Uruguay	Does this household have an Internet connection (fixed or mobile)?	2008–2021

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

2. Health

The right to health has been recognized in various international covenants and declarations. For example, article 12 of the International Covenant on Economic, Social and Cultural Rights (United Nations, 1966) states that all human beings have the right to the highest attainable standard of physical and mental health.[25] The right to health should not be interpreted as the right to be healthy (United Nations, 2000), since many factors that affect health are beyond human control. The right to health is closely linked to the right to food, water and adequate sanitation, an unpolluted environment, decent housing, decent work, quality education, non-discrimination, protection from violence, access to information and other rights.

Health is one of the dimensions in which the region's multipurpose surveys have the most data shortcomings. Very few national MPIs in Latin America contain direct measures of health outcomes, such as infant mortality or malnutrition, or related ones, such as food insecurity. In countries without an MPI, these outcomes are measured even less frequently.[26] National MPIs typically use access indicators, such as the possibility of receiving health care when needed and health insurance coverage. Data constraints explain why some countries' MPIs make use of proxies (see table II.6).

■ Table II.6
Latin America (11 countries): health indicators in national multidimensional poverty indices

Indicators	Countries that use the indicator in the health dimension
Access	
Health insurance	Chile, Colombia, Costa Rica, Dominican Republic, Mexico,
Access to health care in case of need	Chile, Colombia, Dominican Republic, El Salvador, Guatemala, Panama, Paraguay
Preventive checkups during pregnancy	Guatemala, Panama
Distance to the nearest health centre	Chile, Guatemala

25 The right to health is also recognized in other international instruments, such as the Convention on the Rights of the Child (articles 23, 24 and 25) and the Convention on the Elimination of All Forms of Discrimination against Women (articles 11 and 12).

26 In June 2021, surveys in just six of the 17 countries included in this regional measurement collected information on food insecurity; and the information was only available for the most recent survey rounds.

Indicators	Countries that use the indicator in the health dimension
Functionings	
Malnutrition	Chile
Food insecurity	Dominican Republic, El Salvador, Guatemala, Mexico
Infant mortality	Dominican Republic
Adolescent pregnancy	Guatemala
Proxies	
Access to water	Costa Rica, Ecuador, El Salvador, Honduras, Panama, Paraguay
Access to sanitation	Costa Rica, El Salvador, Honduras
Access to waste disposal services	Costa Rica
Cooking fuel	Honduras, Paraguay
Extreme income poverty	Ecuador

Source: Economic Commission for Latin America and the Caribbean, on the basis of Santos, M. (2019). Indicadores no monetarios para el seguimiento de las metas 1.2 y 1.4 de los Objetivos de Desarrollo Sostenible: estándares, disponibilidad, comparabilidad y calidad. *Statistical Studies Series* (99) (LC/TS.2019/4). Economic Commission for Latin America and the Caribbean; Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and**:** Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

Among the indicators used as proxies, access to water and the availability of sanitation are essential for guaranteeing the right to health, as recognized by the General Assembly of the United Nations in its resolution 64/292 of 2010 (United Nations, 2010b). There is robust empirical evidence that inadequate water and sanitation facilitate the spread of vector-borne diseases, such as malaria and dengue fever, and contribute to the spread of diarrhoea, typhus, hepatitis and cholera (World Health Organization [WHO], 2014b).[27]

[27] Diarrhoea accounts for approximately 3.6% of the total global disease burden and causes 1.5 million deaths each year. Unsafe water supply, sanitation and hygiene is estimated to be responsible for 58% of this burden and cause the deaths of 361,000 children under five years old each year, mainly in low-income countries (WHO, 2014b).

(a) Health insurance

A condition for people to attain the highest possible standard of health is access to quality services that enable them to meet their health-care needs. This is reflected in SDG target 3.8, which promotes universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all. In addition, target 3.7 aims to ensure universal access to sexual and reproductive health-care services.

The fact that people can receive medical care when needed is a direct measure of access to health. However, this indicator raises several difficulties. Firstly, only a subgroup of the population has health problems at any moment in time, which reduces its representativeness. Secondly, the indicator is based on people's self-reported health needs, which may be related to age, education, occupation and income (Santos, 2019). Thirdly, the indicator does not adequately capture the lack of access to preventive health care, because people do not usually perceive preventive services as a necessity. Fourthly, there are data gaps and comparability issues in the region, particularly with regard to the reference time period (see table II.7).

■ Table II.7
Latin America (17 countries): measurement of access to health care when needed, around 2020

Country	Question available	Applicability of the question	Reference time period	Deprivation indicator
Argentina	No	-	-	-
Bolivia (Plurinational State of)	Yes	Contagious or chronic diseases, disabilities	12 months	Did not consult or did not receive medical care
Brazil	No	-	-	-
Chile	Yes	Illnesses or accidents	3 months	Did not receive medical care
Colombia	Yes	Illnesses	12 months	Did not consult or go to hospital
Costa Rica	No	-	-	-
Dominican Republic	No	-	-	-
Ecuador	No	-	-	-
Guatemala	Yes	Illnesses or accidents	Last month	Did not consult
Honduras	Yes	Illnesses or accidents	3 months	Did not consult or did not receive care
Mexico	Yes	Illness or accident that affected functioning	Most recent health problem	Did not consult or did not receive care
Nicaragua	Yes	Illnesses or accident	Last month	Did not consult or buy medication
Panama	Yes	Illnesses or accidents, even if temporary	6 months	Did not consult a specialist or visit a hospital/health centre

Country	Question available	Applicability of the question	Reference time period	Deprivation indicator
Peru	Yes	Diseases	Last month	Did not consult
Paraguay	Yes	Illnesses or accidents	3 months	Did not consult
El Salvador	Yes	Illnesses or injuries	Last month	Did not consult
Uruguay	Yes	Persons without rights in any health institution	Does not use	Not treated at any institution

Source: Economic Commission for Latin America and the Caribbean, on the basis of the Household Survey Data Bank (BADEHOG).
Note: The information for Guatemala and Nicaragua corresponds to 2014, and for Honduras and Panama it refers to 2019.

Health insurance is a legal guarantee of coverage for various health-related risks and benefits. However, not all health insurance provides equivalent protection, as evidenced by the diversity of policies that exist in different countries and even within them. Moreover, the fact that people do not have health insurance does not necessarily mean that they have no protection from the State should they require emergency or other types of care.[28] Access to health insurance is moderately correlated with receiving medical care when ill, in most of the region's countries for which data are available, and information on such access is available for 16 Latin American countries between 2008 and 2021. In all countries, except for Brazil and Honduras, health insurance is consulted in relation to the entire population (see table II.8).[29]

■ Table II.8
Latin America (16 countries): measurement of health insurance coverage, around 2020[a]

Country	Population covered	Definition of deprivation
Argentina	Entire population	Does not have social health insurance, mutual plan, private prepaid plan, emergency service, or public health insurance
Bolivia (Plurinational State of)	Entire population	Does not have health coverage (public, private or other)
Chile	Entire population	Does not have health insurance (National Health Fund (FONASA), health insurance institutions (ISAPREs), Armed Forces, or other)
Colombia	Entire population	Is not affiliated or contributing to any social security health entity (Social Security Institute (ISS), primary health care (APS), subsidized regime administrators (ARS), nor a beneficiary of any of them.
Costa Rica	Entire population	Does not have social security

[28] Around 2020, in 10 of the 11 countries in the region with information on health care, the percentage of people who were ill and did not receive care was higher among those without health insurance than among those with it. As a simple average for the 11 countries, 26.8% of people who were ill and did not have health insurance did not receive care; compared to 18.6% of those who did have insurance. Source: estimations by the authors on the basis of information obtained from BADEHOG.
[29] Brazil has universal health insurance that covers the entire population.

Country	Population covered	Definition of deprivation
Dominican Republic	Entire population	Is not affiliated to any health insurance
Ecuador	Entire population	Does not have health insurance (Ecuadorian Social Security Institute (IESS), Social Security Institute of the Armed Forces (ISSFA), Social Security Institute of the National Police (ISSPOL), private insurance, Universal Health Insurance (AUS), municipal insurance, or insurance from the Ministry of Public Health)
Guatemala	Entire population	Is not affiliated to, or covered by, any health insurance system (Guatemalan Social Security Institute (IGSS) or private insurance)
Honduras	Working population	Is not covered by the Honduran Social Security Institute (IHSS) or by any private health insurance
Mexico	Entire population	Does not have health insurance (Mexican Social Security Institute (IMSS), Institute for Social Security and Social Services for State Workers (ISSSTE), Petróleos Mexicanos (PEMEX), voluntary insurance, Institute of Health for Well-being (INSABI), Seguro Popular (Popular Insurance, or other)
Nicaragua	Entire population	Is not covered by any health insurance (Nicaraguan Social Security Institute (INSS), private or military)
Panama	Entire population	Does not have social security
Paraguay	Entire population	Does not have health insurance (Social Security Institute (IPS), private insurance, Armed Forces, Police, or other)
Peru	Entire population	Is not affiliated to any health insurance (Social Health Insurance (EsSalud), Armed Forces/Police, Integrated Health Insurance (SIS), university or school insurance, private insurance, or other)
El Salvador	Entire population	Does not have health insurance (Salvadoran Social Security Institute (ISSS), Salvadoran Teachers' Welfare Institute (ISBM), Military Hospital, group insurance, private insurance, or other)
Uruguay	Entire population	Does not have current rights in any health institution (Ministry of Public Health (MSP)/ State Health Services Administration (ASSE), group medical assistance institutions (IAMC), private insurance, Armed Forces/Police, Social Security Bank (BPS), municipal polyclinic, or mobile emergency services)

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

[a] The information for Guatemala and Nicaragua corresponds to 2014, while that for Panama refers to 2019.

Accordingly, access to health insurance is a minimal but relevant element for exercising the right to health and the right to social security. Article 25 of the Universal Declaration of Human Rights states that everyone has the right to insurance in case of illness, and the United Nations Economic and Social Council (2000) notes that States have an obligation to establish a public, private, or mixed health insurance system for the entire population. Nonetheless, the indicator on access to health insurance has limitations, since it does not measure effective and timely access to care in a direct way, and there is also considerable variability in the scope and adequacy of the coverage of different insurance plans. Furthermore, some respondents may not know whether

they have health insurance, or they may be unclear as to whether their health insurance coverage extends to other members of their household. Given these problems, it was decided to consider all members of households as uninsured if none of its members reports having health insurance.

(b) Water

The water deprivation criteria have been set by considering simultaneously the targets defined in international agreements and the quality of information available in developing countries.[30] Initially, the threshold set by the WHO/United Nations Children's Fund (UNICEF) Joint Monitoring Programme for Water Supply, Sanitation and Hygiene was access to an improved source, understood as one in which water was protected from faecal contamination (see table II.9). Later, the Programme proposed a structure of levels of access to water, the highest of which (safely managed water) required, in addition to protection from faecal contamination, that the source be accessible, that water be available when needed, and that it not be affected by other contaminants (see table II.10). This highest level corresponds to SDG indicator 6.1.1, which UNICEF uses to monitor the Water, Sanitation and Hygiene for All (WASH) initiative.[31] To measure this indicator, UNICEF combines different sources and makes estimations, which cannot be done with MPI-LA, since it is based on indicators obtained from a single source.

■ Table II.9
WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene: improved and unimproved water sources

Source	Current classification	Previous classification
Piped water in the dwelling or on the property	Improved	Improved
Public standpipe	Improved	Improved
Borehole/tubewell	Improved	Improved
Protected well or spring	Improved	Improved
Rainwater	Improved	Improved
Bottled water	Improved	Case-by-case classification
Delivered water: water truck, small truck, water carrier, water tanker	Improved	Unimproved
Unprotected well or spring	Unimproved	Unimproved
Surface water (river, lake, lagoon, or other)	Unimproved	Not improved

Source: Economic Commission for Latin America and the Caribbean, on the basis of United Nations Children's Fund and World Health Organization. (2019). *Progress on Household Drinking Water, Sanitation and Hygiene 2000-2017: Special Focus on Inequalities.*

30 General Comment No. 15 (2002) of the Committee on Economic, Social and Cultural Rights proposed that everyone should have access to sufficient, safe, acceptable, accessible and affordable water (United Nations, 2003b).

31 For further information on the WASH initiative, see United Nations Children's Fund (UNICEF). *Water, Sanitation, and Hygiene (WASH).* https://www.unicef.org/wash

■ Table II.10
Joint WHO/UNICEF Monitoring Programme for Water Supply, Sanitation and Hygiene: the water service ladder

Level of service	Definition
Safely managed	Improved source on-site, available when needed and free from faecal contamination and chemical pollution
Basic	Improved source located off-site, provided that a round trip plus waiting time to collect water does not exceed 30 minutes.
Limited	Improved source located off-site, when a round trip plus waiting time to collect water takes more than 30 minutes
Unimproved	Unprotected wells or springs
Surface water	Rivers, dams, lakes, ponds, streams, canals

Source: Economic Commission for Latin America and the Caribbean, on the basis of World Health Organization and United Nations Children's Fund. (2017). *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines*.

In the UBN tradition a recommendation has been to combine information on type of source, mode of supply and distance to source (Feres and Mancero, 2001), since water quality can deteriorate during conveyance to the dwelling or because of the way it is stored. This tradition has suggested establishing different thresholds by zone of residence, since it is infeasible to extend water and sanitation networks to rural areas (Kaztman, 1995), and because of the geographical comparability problems that could arise if national thresholds are used (Feres and Mancero, 2001).

National MPIs often combine the guidelines of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene with UBN, adapting the latter to different local realities, which gives rise to a heterogeneous situation. In some countries, for example, different thresholds are used for different zones, but in others they are not. In several countries' MPIs, some sources that are considered improved in the Programme, such as rainwater, mobile sources and bottled water, are considered deprivation. Very few national MPIs consider regularity of supply, distance to source or water transportation (see table II.11).

■ Table II.11
Latin America (10 countries): water-related deprivation indicators in national multidimensional poverty indices

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Colombia	- Aqueduct or other piped source	- Well with or without pump - Cistern, reservoir, or borehole - Water truck or water carrier - Rainwater - Bottled or sachet water - River, spring, or water source - Public standpipe	- Aqueduct or other source by pipe - Well with pump - Bottled water	- Well without pump - Cistern, water tank, or borehole - Tank truck or water carrier - Rainwater - River, or natural spring - Public standpipe

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Costa Rica	- Water from the aqueduct inside the dwelling or land	- Pipeline outside off-site or without piped water - Well, river, lake, spring or rainwater	- Same as in the urban area	- Same as in the urban area
Chile	- Public water supply - Tap inside in the dwelling	- Tap outside the dwelling or without mains water - Well or pond (noria) - River, spring, lake, or estuary - Cistern - Other	- Public water supply public network - Well or pond (noria) - River, spring, lake, or estuary - Cistern	- Other
Ecuador	- Mains water through pipes	- Delivery cart or tricycle - Well - River, spring or irrigation ditch - Other	- Same as in the urban area	- Same as in the urban area
El Salvador	- Piped water inside the dwelling or land - Flexible piping (poliducto)	- No piped water - Has piped water, but dry for over a month	- Same as in the urban area	- Same as in the urban area
Guatemala	- Piped water and service for more than 15 days in the last month	- Water from a public standpipe, drilled well, river, lake, spring, tanker truck, rainwater, or other source - Piped water, but no service for at least 15 days in the last month	- Piped water with service for more than 15 days in the last month - Water from a public fountain or drilled well	- Water from a river, lake, spring, tanker truck, rain, or other source - Piped water, but without service for at least 15 days in the last month
Honduras	- Pipes inside the home or on the property	- Pipes outside the property - Any other source	- Water through pipes - Public water tap less than 100 metres away	- Well with manual winch - Well with pump - River, spring, or natural spring - Tanker truck or pickup truck with barrels - Public standpipe more than 100 metres away - Water from neighbour
Mexico	- Piped water inside the home or the land - Rainwater	- Public tap - Piped water from another dwelling - Pipe (cistern) - Well, river, lake, stream or other	- Same as in the urban area	- Same as in the urban area

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Panama	- Private water supply, from an aqueduct belonging to the National Water Works and Sewerage: Institute (IDAAN) or from a public community aqueduct - Protected well - Bottled or sachet water	- Unprotected well - Shallow well - Rainwater - Water tanker - River, stream, lake or other	- Same as in the urban area	- Same as in the urban area
Paraguay	- Tap water from the Paraguayan Sanitation Services Company (ESSAP), a sanitation board, the National Environmental Sanitation Service (SENASA), a shared network, or a private network - Artesian well	- Well with pump - Well without pump - Water carrier - Rainwater - Spring, river, stream, reservoir, or other source	- Same as in the urban area	- Same as in the urban area

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

Water collection is relevant to the gender perspective, as it is a task performed mainly by women and girls (UNESCO World Water Assessment Programme [WWAP], 2019) that takes up time that they could otherwise devote to other activities (Walker et al., 2014). Estimations by ECLAC (2022a), based on time-use surveys in five countries for which information was available (Ecuador, El Salvador, Guatemala, Mexico and Peru), found that women spend more

time than men collecting water, particularly in rural areas. However, most Latin American countries do not ask about water collection, possibly because it is not a very widespread activity in the region, especially in the relatively more developed countries.

Moreover, there are still few country surveys that enquire about the regularity of water supply, which makes it impossible to include an indicator of this type in a regionwide measurement. Compounding this difficulty is the fact that country measurements are generally not mutually comparable. This constraint is very important given the increased frequency of events associated with global warming in the region, such as droughts and extreme precipitation (World Meteorological Organization [WMO], 2022).[32]

Considering all of these factors, MPI-LA defines the threshold for urban areas as access to piped or mains water, or access to another improved water source (such as a protected well) on the property. In rural areas, the threshold is access to improved sources, not necessarily on the property. Thus, urban households that obtain their water either from a grid outside the household premises, or else from unprotected wells, mobile sources, rainwater, or surface water, are considered deprived. In rural areas, the categories that indicate deprivation are the same, except that households that obtain their water from a grid outside the premises are not considered deprived.[33]

Unfortunately, survey data in many countries do not make it possible to determine whether well water is protected from external contamination. As the proximity and slope of pit latrines (*pozo negro or pozo ciego*) relative to water wells can be linked to the contamination of the latter (Claret et al., 2005), rural households that obtain water from a well and use pit latrine sanitation are considered deprived. In countries where there is insufficient information to make the correction, the ECLAC (2014) procedure continues to be applied, such that wells for which no information is available are considered deprivation in urban zones, but not in rural ones.

Another difficulty is the classification of sources such as rainwater, mobile sources and bottled water, some of which have been undergone recent changes in the taxonomy of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (see table II.9). In the case of MPI-LA, it was decided to consider rainwater and mobile sources, but not bottled water, as deprivation.

Rainwater is considered deprivation in both rural and urban areas because its supply is rainfall-dependent —a situation that is aggravated by the increased frequency of drought events associated with climate change and by the water deficits typical of some climates.[34]

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[32] Lack of information on water supply may result in persons who belong to households that have piped water inside the dwelling or on the property being considered as not deprived, even if their water supply is in practice very irregular.

[33] As noted above, the results of this indicator are not comparable with those obtained from SDG indicator 6.1.1.

[34] In Latin America and the Caribbean, approximately 17 million people were affected by droughts between 2000 and 2019, with Guatemala, Haiti, Paraguay, Honduras and El Salvador the countries most affected (United Nations Convention to Combat Desertification [UNCCD], 2022). Drought events are becoming increasingly common in the Amazon region, owing to climate change and land use practices (Aragão et al., 2018). In 2020 and 2021, widespread precipitation deficits were recorded throughout South America; and, since July 2020, northwestern Mexico has been suffering widespread drought (Barbosa et al., 2021). The megadrought in central Chile, meanwhile, continued into 2021 (World Meteorological Organization [WMO], 2022). In terms of water deficits, sub-humid climates experience seasonal deficits, semi-arid climates experience deficits for much of the year and arid climates experience deficits throughout the year (FAO, 2013).

In very wet climates it is not necessary to store water, but in all other climates it is (Food and Agriculture Organization of the United Nations [FAO], 2013). Rainwater must also be filtered and boiled before consumption.[35]

Water supplied via tanker trucks provides a temporary response to droughts or other disasters. Mobile sources can serve as the main means of access to water for entire communities for years, making it likely that sanitary controls are applied. However, the quality and sufficiency of water supply from mobile sources can be compromised in emergency situations, owing to logistical difficulties or because the authorities may suspend application of the health regulation.[36] In any event, the need to resort to mobile sources indicates that water is not readily available.

The distribution and sale of bottled water must comply with the health regulations, so this type of water should be safe for consumption.[37] However, if households depend on bottled water for all of their activities (cooking, hygiene and others) and do not have means of transport to obtain supplies, they could face shortages. Nonetheless, most surveys do not differentiate between water for drinking and water for other uses, and the available information does not make it possible to determine whether the bottled water available to households is insufficient for their members.

(c) Sanitation

The entire population should have sanitary facilities that provide privacy and dignity and are accessible, safe, hygienic and socioculturally acceptable (United Nations Human Settlements Programme [UN-Habitat] et al., 2014). Having sanitation services in the home reduces the inconveniences associated with the retention of bodily waste and its odours (Kaztman, 1995). The absence of sanitation within the home forces people to use shared latrines or open spaces, exposing girls, boys and women to harassment, violence, or sexual assault (UN-Habitat, 2010).

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene developed one of the first international measurements of sanitation. It proposed improved sanitation as the standard, which involves the existence of treatment facilities that keep faeces separate from human contact (see table II.12). The Programme later developed a more rigorous structure of service levels (see table II.13), of which the highest level, safely managed sanitation, was included as an indicator for SDG 6. UNICEF also uses this indicator to monitor the WASH initiative by combining data from different sources on improved sanitation, emptying, conveyance and waste treatment. The information provided by multipurpose surveys in the region's countries does not enable a comprehensive measurement of safe sanitation to be made.

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35 See Ministry of Health and Social Protection of Colombia. *Agua para consumo humano* https://www.minsalud.gov.co/salud/publica/ambiental/Paginas/agua-para-consumo-humano.aspx.

36 In the case of Chile, see Ministry of Health of Chile (2016).

37 The case of sachet water is different: only one country's survey considers sachet water a type of bottled water.

■ Table II.12
WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene: improved and unimproved sources of sanitation

Source	Current classification
Toilets connected to sewers	Improved
Septic tanks or pit latrines	Improved
Ventilated improved pit latrines	Improved
Composting latrines	Improved
Single pit latrines with slab	Improved
Single pit latrines without slab or open pit	Unimproved
Hanging latrines	Unimproved
Bucket latrines	Unimproved

Source: Economic Commission for Latin America and the Caribbean, on the basis of United Nations Children's Fund and World Health Organization. (2019). *Progress on Household Drinking Water, Sanitation and Hygiene 2000-2017: Special Focus on Inequalities.*

■ Table II.13
Joint WHO/UNICEF Monitoring Programme for Water Supply, Sanitation and Hygiene: the sanitation service ladder

Level of service	Definition
Managed safe	Use of improved facilities, not shared with other households, and where excreta are safely disposed of on-site, or else transported and treated elsewhere
Basic	Use of improved facilities, not shared with other households
Limited	Use of improved facilities, but shared with other households
Unimproved	Facilities without treatment to separate human faeces from human contact
Open defecation	Human faeces deposited in fields, forests, rivers, lakes, beaches, or other open spaces, or together with other solid waste

Source: Economic Commission for Latin America and the Caribbean, on the basis of World Health Organization and United Nations Children's Fund. (2017). *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines.*

In the UBN tradition, it was customary to distinguish between two characteristics of sanitation: the availability of toilet facilities in the dwelling and the wastewater disposal system (Kaztman, 1995). This tradition recommended establishing different thresholds for different areas, given the difficulties of expanding sewerage networks to rural zones and the differential acceptability of sources such as pit latrines and septic tanks in urban and rural areas. Thus, in UBN-based measurements, the use of pit latrines was only considered deprivation in urban areas (Feres and Mancero, 2001).

In the national MPIs currently in force in the region, sanitation deprivation is determined on the basis of the availability of sanitation services and the type of drainage, in line with the UBN tradition. Most countries, however, do not differentiate thresholds by geographical

area and in nearly all cases, pit latrines are defined as deprivation, irrespective of zone (see table II.14). Unlike the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, latrines of any type constitute deprivation in nearly all national measurements (except in Honduras for rural areas). The greatest differences relate to septic tanks in urban areas, since these are considered deprivation in a few countries even if they are not shared between several households.

When they meet sanitary standards, septic tanks are constructed of impermeable materials and provide waste treatment, although the information collected by multipurpose surveys does not make it possible to be sure that the standards are met in all cases.[38] Meanwhile, pit latrines provide a sanitation alternative that poses greater health risks than septic tanks (Kaztman, 1995). In pit latrines, the liquid part of the waste seeps through the walls, potentially contaminating the environment.

■ Table II.14

Latin America (10 countries): sanitation deprivation indicators in national multidimensional poverty indices

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Colombia	- Toilet connected to sewerage system	- Toilet connected to septic tank - Toilet without connection - Latrine - Direct disposal into water body (bajamar) - No sanitation services	- Toilet connected to sewerage system - Toilet connected to septic tank	- Toilet without connection - Latrine - Direct disposal into water body (bajamar) - No sanitation services
Costa Rica	- Connected to sewerage system - Connected to septic tank - Connected to septic tank with treatment (bio-septic tank)	- No sanitation services - Hole in the ground, pit latrine - Other system	- Same as in the urban zone	- Same as in the urban zone
Chile	- Toilet connected to sewerage system - Toilet connected to septic tank	- Sanitary latrine connected to a pit - Toilet box over pit latrine - Toilet box over drainage ditch or canal - Toilet box connected to another system - Chemical toilet onsite - No system available	- Same as in the urban zone	- Same as in the urban zone

[38] When built according to technical specifications, a septic tank is a closed cement chamber into which wastewater flows, and where decantation and putrefaction occur. These tanks drain by overflow into an absorption well.

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Ecuador	- Toilet and sewerage system	- Toilet and septic tank - Toilet and pit latrine - Latrine - None	- Toilet and sewerage system - Toilet and septic tank	- Toilet and pit latrine - Latrine - None
El Salvador	- Toilet connected to sewerage system - Toilet connected to septic tank	- Sewers or septic tank shared with other households - Private latrine - Shared latrine - Private composting latrine - Shared composting latrine - Private solar latrine - Shared solar latrine	- Same as in the urban zone	- Same as in the urban zone
Guatemala	- Connected to a wastewater collection network	- Not connected to a wastewater collection network - Flush toilet - Pit latrine - No sanitation services	- Has a system for eliminating excreta	- Latrine - Pit latrine - No sanitation services
Honduras	- Toilet connected to sewer - Toilet connected to septic tank	- Toilet that discharges into a river, lake or the sea - Latrine that discharges into a river, lake or the sea - Latrine with water seal - Latrine with septic tank - Pit latrine - Composting latrine - Other type	- Toilet connected to sewer - Toilet connected to a septic tank - Hydraulic flush latrine - Latrine with septic tank	- Toilet that discharges into a river, lake or the sea - Latrine that discharges into a river, lake or the sea - Pit latrine - Composting latrine - Other type
Mexico	- Public network - Septic tank or pit	- No drainage - Pipeline to river, lake or sea - Pipeline to a ravine or crevice	- Same as in the urban zone	- Same as in the urban zone
Panama	- Connected to sewers - Connected to septic tank	- No sanitation services - Hole in the ground or latrine - Sewerage system or septic tank shared with other households	- Same as in the urban zone	- Same as in urban zone

Country	Urban area		Rural area	
	Not deprived	Deprived	Not deprived	Deprived
Paraguay	- Sanitary sewerage system (sewer) - Septic tank and pit latrine - Pit latrine without septic tank	- No toilet - Toilet not connected to sewer network and without septic tank or pit latrine	- Same as in the urban zone	- Same as in urban zone

Source: Economic Commission for Latin America and the Caribbean, on the basis of**:** Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

In the Latin American MPI, urban households are considered deprived if they occupy dwellings without sanitary facilities, or else have toilets that are not connected to a sewerage system or septic tank, or share a bathroom with other households. In rural areas, households are considered deprived if they do not have sanitation facilities, or if they share a bathroom with other households, use untreated latrines, or discharge wastewater directly on to the ground, or into a river or the sea.[39]

3. Education

Education is fundamental for human beings, because it contributes to expanding human capabilities and freedoms and enables people to lead fuller lives (UNESCO, 2004). As a reflective and relational process, education is essential for developing complex capabilities, such as practical reason. This requires a conception of the good and critical reflection about one's personal life project and affiliation, which encompasses empathy, solidarity and feelings of self-worth and dignity (Nussbaum, 2003). In practical terms, a lack of schooling is a major disadvantage for individuals, given the impact that academic skills and credentials have on obtaining a decent job and a good wage.

[39] The results of this indicator are not comparable with those of the WASH (UNICEF) safe sanitation indicator.

The right to education has been ratified in various international conventions and agendas. The Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights and the Convention on the Rights of the Child argue that everyone has the right to education with equal opportunities, and that educational activities should develop human potential to the fullest extent and also promote tolerance and respect for human rights.[40] As stated in SDG 4, everyone should benefit from quality education and have opportunities for lifelong learning.

Universal primary education has been advocated in international covenants, declarations and agendas for decades. The Universal Declaration of Human Rights (1948) proposed universal elementary education. The signatory countries to the International Covenant on Economic, Social and Cultural Rights (1966) undertook to guarantee compulsory and free primary education, and that commitment was ratified by the States that acceded to the Convention on the Rights of the Child (1989). SDG target 4.1 is to ensure, by 2030, that all children complete a free, equitable and quality primary education.

In the case of secondary education, the signatory countries to the International Covenant on Economic, Social and Cultural Rights (1966) and the Convention on the Rights of the Child (1989) committed to making this level of education accessible to all and progressively free. Furthermore, the Framework for Action for the implementation of SDG 4 proposed ensuring that all children and young people complete secondary education, but only the grades corresponding to the initial cycle, or lower secondary, were considered compulsory. SDG target 4.1 is to ensure, by 2030, that all children complete secondary education, which should be free, equitable and of good quality.

Preschool and early childhood education have been incorporated into international development agendas. This responds, firstly, to the abundant empirical evidence on the short- and long-term benefits associated with participation in this stage of education and secondly, to the need to alleviate the burden of unpaid domestic work and the opportunities for economic autonomy that the existence of such education provides for women.[41] UNESCO et al. (2016) proposed providing at least one year of free and compulsory preschool education. SDG target 4.2 aims to ensure that, by 2030, all children have access to early childhood care and development services and preschool education.

(a) School attendance

School attendance is an indicator that has frequently been included in multidimensional poverty measurements, both in Latin America and in other regions of the world. Responses to questions about attendance provide a better proxy for effective access to education than enrolment-based measurements, since the latter merely capture children's registration in the school system (Villatoro, 2007).

[40] See article 26 of the Universal Declaration of Human Rights, article 13 of the International Covenant on Economic, Social and Cultural Rights and articles 28.1 and 29.1 of the Convention on the Rights of the Child (1989)(UNICEF, 2006).

[41] In a meta-analysis of 22 experiments and quasi-experiments conducted in the United States between 1960 and 2016, McCoy et al. (2017) found that early education reduced repetition rates and increased the proportion of students graduating from high school. For a review of studies conducted in contexts other than the United States, see Ruhm and Waldfogel (2011).

The construction of a school attendance indicator entails selecting educational levels and reference populations. In the UBN tradition, it was customary to restrict the measurement to primary education (Feres and Mancero, 2001). However, the rise in primary school attendance rates across the region in recent decades, together with legislative changes that have expanded the coverage of compulsory education in individual countries, call for more stringent criteria to be established.

In 17 Latin American countries, compulsory education currently encompasses the last grade of preschool, all of primary school and the first cycle of secondary school (see table II.15). In addition, most of the region's countries require secondary school completion. Consequently, as shown in table II.16, all national MPIs include indicators of primary school attendance; 9 out of 10 consider all or part of secondary education; and 8 out of 10 consider attendance in the final preschool grades. Early childhood education is included less frequently and not always as part of the education dimension.

■ Table II.15
Latin America (17 countries): age of commencement and completion of compulsory education

Countries	Age of commencement (years)	Age of completion (years)
Argentina	4	17
Bolivia (Plurinational State of)	4	17
Brazil	4	17
Chile	5	17
Colombia	5	14
Costa Rica	4	16
Dominican Republic	5	17
Ecuador	4	17
El Salvador	4	15
Guatemala	4	15
Honduras	5	16
Mexico	4	17
Nicaragua	5	11
Panama	4	14
Paraguay	5	17
Peru	4	16
Uruguay	4	17

Source: Economic Commission for Latin America and the Caribbean, on the basis of United Nations Educational, Scientific and Cultural Organization. *Information System on Educational Trends in Latin America (SITEAL)*. https://siteal.iiep.unesco.org.

■ Table II.16
Latin America (10 countries): indicators of school attendance by educational level and reference populations in national multidimensional poverty indices

Country	Indicators by education level				Reference population
	Early childhood	Preschool	Primary	Secondary	
Chile		X	X	X	4–18-year-olds
Colombia	X	X	X	X	0–16-year-olds
Costa Rica	X	X	X	X	0–17-year-olds
Ecuador		X	X	X	5–17-year-olds
El Salvador	X	X	X	X	1–17-year-olds
Guatemala (urban)			X		7–12-year-olds
Guatemala (rural)			X		7–10-year-olds
Honduras		X	X	X	3–14-year-olds
Mexico		X	X	X	3–15-year-olds
Panama		X	X	X	4–17-year-olds
Paraguay			X	X	6–17-year-olds

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

Taking these elements into account, ECLAC (2014) considered non-attendance at school by 6–17-year-olds to be deprivation, thus covering all primary and secondary levels. Owing to data limitations, the final preschool grades were not considered in this measurement. However, advances in household surveys, which have incorporated questions designed to capture access to preschool and early childhood education, now make it possible to construct an indicator of school attendance encompassing the 4–17-year-old population.

The attendance indicator considers persons attending school or preschool, regardless of the grade or level they are attending, to be non-deprived and it takes as its reference population children of the appropriate age to attend the last two grades of preschool or to attend primary or secondary school.

In MPI-LA, school attendance was measured differently in 2020 and 2021. In those years of the COVID-19 pandemic, face-to-face classes in the countries of the region were suspended for an average of 70 weeks (ECLAC, 2022a), which led to educational activities being conducted mainly via the Internet. Since very few countries adapted their questionnaires to capture non-attendance in distance education programmes, those who reported attending school in 2020 and 2021, but did not have an Internet connection at home, are considered to be education-deprived.[42] While it is true that some countries implemented distance learning programmes through channels other than the Internet (such as television or radio), these are not considered adequate substitutes for face-to-face classes.[43]

(b) Educational lag

Surveys in the region's countries do not provide direct measurements of learning among the school population, so educational lag is the only indicator available in these surveys to proxy for deprivations in this domain. As children and adolescents who progress according to their age achieve learning objectives in a timely manner, it can be assumed that those who lag behind their age group fail to acquire those objectives within the time frame envisaged by the education system. Moreover, grade repetition is a predictor of school dropout (Bridgeland et al., 2006; De Witte et al., 2013; Uekawa et al., 2010), which is associated with long-term problems of social integration (Reingle et al., 2016).

Some of the region's countries have incorporated indicators of educational lag into their MPIs, either as proxies for learning gaps or as measures of vulnerability among the school population. In all national MPIs that consider it, educational lag is measured as the difference between the age of children or young people attending a given grade and the appropriate age for that grade (official age of attendance). National MPIs vary in how they define the thresholds and reference populations (see table II.17).

The usefulness of the lag indicator as a proxy is subject to biases. Delays in the age at which children enter the school system, owing to illness or national policies, can affect the lag indicator,[44] and differences in teaching practices between and within countries (for example, in terms of academic standards or ways of dealing with school failure) can affect the comparability of the indicator. Another problem that cannot be resolved in the framework of a multidimensional poverty measure is that learning does not always reflect differences

[42] In Colombia's 2020 MPI, deprivation was defined as the lack of access to devices or accessories needed to interact with teachers on virtual platforms. For further information, see National Administrative Department of Statistics [DANE] (2022).

[43] The internet could also be considered an unacceptable substitute, especially in the case of younger children; but in that case deprivation rates would be too high.

[44] Policies that aim to avoid repetition at all costs, even if students have not achieved the necessary skills to move up a grade, greatly reduce rates of falling behind.

in educational quality, since individual factors also play a role. Furthermore, household surveys in the region do not usually record students' date of birth, which inevitably leads to erroneous estimation of the educational lag indicator.

■ Table II.17
Latin America (7 countries): threshold and reference population for educational lag indicators in national multidimensional poverty indices

Country	Indicator	Threshold	Reference population
Chile	Lag	Two years or more	6–21-year-olds
Colombia	Lag	One year or more	7–17-year-olds
Costa Rica	Lag	Two years or more	7–19-year-olds
El Salvador	Lag	More than two years	10–17-year-olds
Guatemala	Lag	More than two years	8–17-year-olds
Panama	Grade repetition	One year or more	6–17-year-olds
Paraguay	Lag	Two years or more	8–19-year-olds

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

The ECLAC (2014) educational lag indicator was based on children or adolescents (6–17-year-olds) who were more than two years behind in school. This definition is not applicable to children under nine years of age, since the lag must be greater than two years to be identified as deprivation. The Latin American MPI maintains the threshold of more than two years to reduce the possibility of considering educational lag for reasons unrelated to learning as deprivation. This threshold avoids the problem of not having each child's date of birth, since a threshold of one year could lead to some children being classified as lagging behind their age grade when in fact they are not.

(c) Educational attainment

In multidimensional poverty measurements, educational attainment thresholds for the adult population are usually based on the completion of a certain number of years (grades) of schooling. These are equivalent to total or partial attainment of a given educational level (for example, the years of schooling corresponding to the completion of primary education or the initial cycle of secondary education). The measurements are made relative to the population of an appropriate age to have completed that level.

In the UBN tradition, the educational attainment of the head of household was used as a proxy for the household's economic capacity and the thresholds did not usually extend beyond a number of years equivalent to incomplete primary education (Feres and Mancero, 2001). In the current national MPIs, schooling indicators are part of a specific educational dimension and generally apply to all adults in the household. These measurements use specific thresholds for each age group, taking into account differences stemming from the period in which individuals attended school (for example, the scope of compulsory education at that time). As a result, thresholds for partial or complete secondary education attainment are used for younger adults (see table II.18).

■ Table II.18
Latin America (10 countries): indicators of low educational attainment among adults in national multidimensional poverty indices

Country	Reference population	Indicator	Household aggregation
Chile	Born between 1930 and 1966	Less than six years of schooling	At least one member of the household
	Born between 1967 and 2002	Less than eight years of schooling	
	Born in 2003 or later	Less than 12 years of schooling	
Mexico	Born before 1982	Primary school incomplete	Not applicable, individual measurement
	Born in or after 1982	Secondary school incomplete	
Colombia	Aged 15 years and older	Less than nine years of schooling	Average educational attainment of adults who do not reach the threshold
	Aged 15 years and older	Cannot read or write	At least one member of the household
Costa Rica	Aged 18–24 years	Secondary school incomplete	No adult aged 18–64 years achieves their age-appropriate education level
	Aged 25–35 years	Secondary school incomplete	
	Aged 36–57 years	Lower secondary education incomplete	
	Aged58– 64 years	Primary school incomplete	
	Aged 65 years and older	Indicator not applicable	-
Ecuador	Aged 18–64 years	Less than 10 years of schooling	At least one member of the household
	Aged 65 years and older	Indicator does not apply	-

Country	Reference population	Indicator	Household aggregation
El Salvador	Aged 18–64 years	Secondary school incomplete	At least one member of the household
	Aged 65 years and older	Primary school incomplete	
Guatemala	Aged 18–32 years	Less than nine years of schooling	At least one member of the household
	Aged 33–64 years	Less than six years of schooling	
	Aged 65 years and older	Cannot read or write	
Honduras	Aged 15–49 years	Six years of schooling or less	At least one member of the household
	Aged 15 years and older	Cannot read or write	
Panama	Aged 18–30 years	Lower secondary education incomplete	At least one member of the household
	Aged 31–59 years	Primary school incomplete	
	Aged 60 years and over	Cannot read or write	
Paraguay	Born in 1996 or later	Less than 12 years of schooling completed	No adult achieves their age-appropriate educational level
	Born between 1988 and 1995	Less than 9 years of schooling completed	
	Born before 1988	Less than 6 years of schooling completed	
	Aged 50 to 65 years	Cannot read or write	

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

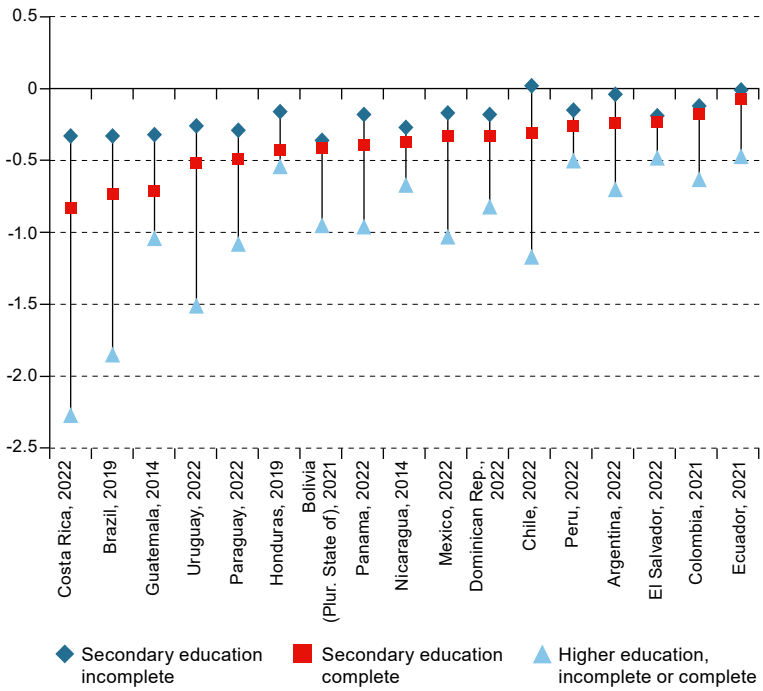
The use of educational attainment thresholds that are more demanding than primary school completion is justified empirically. In the region, individuals who have attained a level of education higher than primary are less likely to fall into income poverty than those who have not (see figure II.2). Measured by the regional median for years around 2022, members of households whose head (whether male or female) had started but not completed secondary

education were 0.18 times less likely to be in monetary poverty than those whose heads of household had completed no more than primary education.[45] In the case of individuals in households whose head had completed secondary education, the probability was 0.37 times lower, and for those belonging to households whose head had attended higher education, whether or not completed, it was 0.95 times lower.

■ Figure II.2

Latin America (17 countries): variation in the probability of falling into monetary poverty, by educational level of the head of household, around 2022

(Marginal effects)



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

Note: The marginal effect is the variation in the probability of a person being in poverty as the educational attainment of the head of household increases, taking as a reference or baseline the population belonging to households whose head has completed no more than primary education. The marginal effect is estimated on the basis of a logit model in which the ECLAC income poverty measurement is the dependent variable (0 = not in poverty; 1 = in poverty). The educational level of the head of household is the predictor and it is controlled for zone of residence, quality of employment, age and sex of the head of household and an index of access to goods and services in the household. The marginal effect of education is estimated by holding the effects of all other predictors constant.

[45] The concept of head of household refers to a person who has primary authority and responsibility for household affairs and is, in the majority of cases, its chief economic support (United Nations, 2010a). This definition has been questioned because of its gender bias (National Institute of Statistics of Chile [INE], 2016; United Nations, 2010a). ECLAC (2011) has recommended identifying a "reference person" or, if the concept of headship is retained, explicitly stating that it refers to "head of household". The possibility of adapting the concept to take account of sociocultural changes in the constitution of households has also been raised, for example, by using the notion of "shared headship" (ECLAC, 2019a).

ECLAC (2014) and Santos et al. (2015) used completion of lower secondary education among 20–59-year-olds as the threshold, since it is required in national legislations, and also because completion of all secondary education could be a very demanding threshold in some countries. Nonetheless, as completion of all secondary education has been incorporated into the legislation of over half of the region's countries (see table II.15), MPI-LA uses this as the threshold for 20–29-year-olds. Successively lower educational attainment thresholds were set from the age of 30 years onwards (see table II.19), to take account of historical differences in the scope of the education system for different cohorts.

■ Table II.19
Latin America (17 countries): adult educational attainment thresholds, by age group

Countries[a]	Duration of primary and secondary education (dt)[b]	Duration of primary education (dp)[c]	20–29 years	30–35 years	35–39 years	40–44 years	45–49 years	50–54 years	55–59 years	60–64 years
A	12	6	12	11	10	9	8	7	6	4
B	12	5	12	11	10	9	8	6	5	4
C	11	6	11	10	9	8	7	7	6	4
D	11	5	11	10	9	8	7	6	5	4
Rule			dt	dt-1	dt-2	dt-3	dt-4	dp+1	dp	4

Source: Economic Commission for Latin America and the Caribbean, on the basis of United Nations Educational, Scientific and Cultural Organization. *International Standard Classification of Education, ISCED 2011*.

[a] The countries considered in the table were divided into four groups, as shown in the first column. The groups were composed as follows: A = Argentina, Chile, the Dominican Republic, Ecuador, Mexico, Panama, Paraguay, the Plurinational State of Bolivia and Uruguay; B = Brazil; C = Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Peru; D = Colombia.

[b] Current duration of primary and secondary education according to the UNESCO International Standard Classification of Education (ISCED).

[c] Current duration of the primary cycle according to ISCED.

The adult educational attainment indicator reflects the past performance of the education system. It applies to the population that was of school age when the scope of compulsory education was considerably smaller than it is today. This explains why the individual incidence of lack of educational attainment is quite high even when the threshold of sufficiency is low, especially in the case of the older-age population in relatively less developed countries. Moreover, the lack of large-scale adult education policies makes the individual indicator difficult to change, especially in the case of the older population.[46] Consequently, MPI-LA considers that persons belonging to households in which no adult has achieved the educational attainment required for their age are deprived.

[46] Nonetheless, the emergence of artificial intelligence could make it even more necessary for people to receive lifelong education.

Lastly, the possibility of defining educational attainment thresholds on the basis of birth dates was considered, in order to reflect the expansion of compulsory education. However, it was decided not to pursue this route, because the history of legislation on compulsory education systems varies widely across Latin American countries, and to do so would result in very different educational attainment thresholds for different age groups in different countries.[47] For example, if a measurement were taken in 2024, the threshold of 12 years of schooling (secondary education complete) would only apply to the 18–21-year-old population in Chile, owing to the relatively late establishment of compulsory secondary education in that country. The same threshold would apply to 18–42-year-olds in Mexico and to 18–28-year-olds in Paraguay (see table II.18).

(d) Illiteracy

Illiteracy implies fewer opportunities to obtain a good job and it limits an individual's capacity to understand and exercise his or her rights, which accentuates processes of exclusion. Literacy can contribute to gender equality, the integration of ethnic and cultural minorities and better health for the population. SDG target 4.6 proposes that, by 2030, all young people and a substantial proportion of the adult population should be literate and have basic numeracy skills.

In the 1950s, a person who had reading and writing skills (basic literacy) was considered literate. Later, functional illiteracy and literacy skills started to be taken into account. More recently, literacy has been understood as the ability to identify, understand, interpret, create, communicate and tell stories using written material. This learning process takes place in an increasingly digitalized, information-rich and rapidly changing world (UNESCO, 2004, 2013).

Despite the importance of literacy skills, household surveys in the region's countries only enquire about basic literacy, which could represent a very low standard of proficiency for the reality of several of these countries. Moreover, the fact that this information is collected through self- or informant-reporting, runs the risk of underreporting owing to social desirability bias. Compounding this is the fact that the use of a low educational attainment indicator in MPI can serve as a proxy for illiteracy.

This deprivation indicator is included in MPI-LA because it represents the failure to achieve an essential functioning —a shortcoming that can be considered more acute than not achieving a certain level of formal schooling. In this case, deprivation is considered to exist when at least one member of the household aged 10 or older cannot read or write, which highlights the severity of the deprivation.

[47] The differences are found not only in legislation, but also in the effective extension of compulsory education coverage. On this last point, Acosta (2021) distinguishes between the Southern Cone countries, where primary education expanded rapidly and secondary education developed very early and other countries. Moreover, the coverage of the systems does not always keep pace with legislation (for example, there may be legislative or coverage gaps).

4. Employment and pensions

A quality job is essential for a person to have an adequate standard of living and improve his or her psychological well-being and family and social integration (Inanc, 2018). Work can be enjoyed and quality employment can foster feelings of dignity, self-fulfilment and belonging (Alkire, 2007).[48] The importance of employment has been recognized in the main human rights declarations and treaties: the Universal Declaration of Human Rights and the International Covenant on Economic, Social and Cultural Rights both affirm the right to equal access to work and state that quality employment must provide decent pay, opportunities for advancement, sufficient leisure time and the right to unionize.

(a) Access to labour markets

Unemployment is one of the most widely used indicators of deprivation in terms of employment in national MPIs. It is available for all Latin American countries and is included in MPI-LA as a measure of deprivation. According to the unemployment indicator, a person must have worked for at least one hour in the last week, in order not to be considered deprived.[49]

Judging labour market-related deprivations by only considering employed and unemployed persons excludes those who are not in the labour force from the population to which the employment dimension applies. This can result in an underestimation of deprivation, since many people who are not part of the labour force may want to work but are unable to do so, owing to factors beyond their control, which could plunge them into a situation of total economic dependency, vulnerability and poverty.

As in the measurements made by Burchi and Malerba (2024) and by Madrigal et al. (2023), MPI-LA includes an indicator related to non-participation in the labour market. This measure is highly relevant for capturing gender inequalities and proxying the constraints faced by women in terms of economic autonomy. The sexual division of labour imposed by the traditional model of gender roles overloads women with caregiving tasks in the home and this constitutes an obstacle to entering the workforce, gaining paid employment and achieving economic independence.

The deprivation indicator associated with the unpaid domestic and care work category seeks to represent, in a comparable way, the deprivation that results from the difficulty or impossibility of participating in the labour market, owing to the obligation to care for other household members. In theory, however, in the case of persons who do not participate in the labour market because of unpaid domestic work, deprivation is

[48] In conventional economic models, work as opposed to leisure reduces well-being, so economic compensation is required for people to be willing to work. However, people can derive satisfaction from employment because they enjoy the activity itself or the associated benefits, such as contacts or a sense of belonging (Collewet and Loog, 2015).

[49] This indicator is not calculated by ECLAC, but is estimated by the countries.

mediated by the desire to work. In other words, it is assumed that the person wants to work but cannot. Surveys in the region do not provide sufficient information to assess preferences, but they do collect data on household composition. These serve as inputs to determine or proxy the existence of household members who, because of their characteristics, require special care, such as children and older persons. The existence of such members in the household could imply a demand for care that would hinder or prevent women's participation in the labour force.[50] The availability of domestic service also alleviates the workload in the home, but the information contained in the surveys has shortcomings in this area.

Given these factors, and to avoid considering as deprived individuals who state that they perform unpaid domestic and care work but are not responsible for caring for other dependants in the household, the condition that at least one member of the household is aged under 18 years or 70 years or older is used.

(b) Job quality

ECLAC has repeatedly pointed out that differences in job quality resulting from the heterogeneity of the productive structure are both an expression and a cause of the reproduction of inequality in Latin America. Persons employed in low-productivity sectors usually engage in subsistence economic activities, often on their own account and without coverage by institutional arrangements. In general, individuals who participate in these activities earn lower incomes, do not have access to social security, lack bargaining power and have fewer opportunities for occupational mobility, among other disadvantages (Bielschowsky and Torres, 2018; Lo Vuolo, 2015; ECLAC, 2012).

Job quality can be measured in various ways, one of which, promoted by the International Labour Organization (ILO), is based on the notion of decent work. It emphasizes the need for equal opportunities and treatment, adequate remuneration and access to social protection (ILO, 2006). The International Labour Organization has used portfolios of indicators to measure countries' progress towards achieving decent work (ILO, 2008; ECLAC and ILO, 2013) and has not proposed any synthetic index of deprivation in this area.

Job quality has also been analysed using the concept of informality.[51] According to the definition adopted by the seventeenth International Conference of Labour Statisticians (ICLS), informality encompasses all economic activities in which workers and production units are not adequately covered by legal frameworks or formal protections. This includes both those who work without a contract or access to social security in formal enterprises and those who work in the "informal sector". The latter is identified by its smaller scale of organization, the absence of formal records or licences and lack of access to labour benefits and social

[50] A deprivation indicator based exclusively on household tasks would involve identifying as deprived persons who face substantially different care demands within the household (for example, persons belonging to households with older persons or children with disabilities and those belonging to households with no older persons or dependents, or single-person households with no one to care for).

[51] The notion of informality aims to characterize the structure of the labour market.

security systems. However, informal employment does not always imply deprivation: some people may choose self-employment over wage-earning work, compensating for the lack of protection with higher income and greater flexibility.

Time-related underemployment is a situation in which employed persons work fewer hours than they want to. A critical issue in measuring this type of underemployment is capturing a person's willingness to work more hours, which is not always done in surveys in the region (Apablaza et al., 2024). It is also necessary to define a threshold for hours worked: one possibility is to use the median number of hours worked by employed persons and another is to use national definitions, but the latter usually are not strictly comparable across countries.[52] All of these factors influenced the decision not to include hourly underemployment in MPI-LA.

In the European context, the concept of precarious employment has been used and applied to poor-quality jobs in the formal sector. Measurements have been based on wage income (which must be less than a percentage of the median hourly wage), the type of contract and the length of the working day (Olsthoorn, 2014). Recently, in Latin America, synthetic job quality indices have been constructed that incorporate indicators of insufficient income, job instability and insecurity and poor working conditions (Sehnbruch et al., 2018 and 2020; Apablaza et al., 2024).

Despite the importance of job quality for well-being, the early multidimensional poverty measurements did not include indicators in this dimension. For example, UBN-based studies typically used information on household income-earners (employed and pensioners), along with education and number of dependents, as a proxy for household resources (Feres and Mancero, 2001). That is why Alkire (2007) identified job quality as a dimension that was missing from poverty measurement. This situation has changed in recent years in Latin America, since employment is now included as a specific dimension in most national MPIs, although the concepts and indicators used vary considerably (see table II.20).

■ Table II.20
Latin America (11 countries): measurement of employment deprivation in national multidimensional poverty indices

Country	Concept	Measurement	Household aggregation
Chile	Open unemployment	Unemployed	At least one
Colombia	Informal employment	Employed but not affiliated to pension funds	At least one
	Long-term unemployment	Unemployed for more than 12 months	At least one

[52] For further information, see International Labour Organization (ILO, 2023).

Country	Concept	Measurement	Household aggregation
Costa Rica	Informal employment	Engaged in self-employment not registered with public authorities and without formal accounting records	At least one
	Labour rights	Wage-earner with income below the minimum wage, or whose other labour rights are not respected	At least one
	Long-term unemployment	More than 12 months unemployed or discouraged worker	At least one
Dominican Republic	Unemployment	Unemployed, long-term unemployed or discouraged	Information not found[a]
	Informal employment	Information not found[a]	Information not found[a]
Ecuador	Open unemployment	Unemployed	At least one
	Inadequate employment	Information not found [a]	At least one
El Salvador	Underemployment and instability	Underemployed in terms of time or income, or member of the economically active population with periods of forced inactivity exceeding one month per year	At least one
	Unemployment	Currently unemployed, or unemployed in the last six months	At least one
Guatemala	Informal employment	Employed in a firm with fewer than six employees, Self-employed (excluding professionals and technicians), unpaid family worker, domestic service	At least one
	Child labour	Child aged 15 years or younger who works, or adolescent aged 16–17 years who works, does not study and does not have nine years of schooling	At least one
Honduras	Underemployment by income	Employed persons working 40 hours per week or more and earning less than the minimum wage	At least one
	Open unemployment	Unemployed	At least one
Mexico	Does not include employment indicator		
Panama	Precarious employment	Employees without a written contract or who do not pay social security	At least one
		Domestic workers without social security Self-employed workers without social security (except farmers, managers, administrators and professionals) Self-employed persons in agriculture without an independent income who produce for their own consumption	
		Employees with a contract, working 40 hours per week or more and earning less than the minimum wage	
	Unemployment or other situations	Unemployed or unpaid family worker Potentially active	At least one

Country	Concept	Measurement	Household aggregation
Paraguay	Open unemployment	Unemployed	Head of household or spouse
	Underemployed	Employed but not working sufficient hours	Head of household or spouse
	Employment without social security	Employed but not contributing to any pension fund	At least one
	Child labour	Person aged 10–17 years who works	At least one

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

[a] No information was found in the reports or official documents of the respective countries.

In view of the advantages and disadvantages of the different approaches to measuring employment deprivation, and considering the shortcomings in the available data sources, it was concluded that the best approach for MPI-LA is not to use a synthetic index (such as informal employment), but instead to use indicators that track the main elements associated with deprivation in terms of job quality from different conceptual perspectives.

Contribution or affiliation to a pension system is an indication of the quality and stability of employment, as it is linked to labour and social legislation coverage (Sehnbruch et al., 2018; Apablaza et al., 2024).[53] Some surveys in the region's countries enquire about contributions to these funds, others about affiliation and others about both. The largest information gaps relate to affiliation: around 2008, 2012 and 2017, there were six countries that did not enquire

[53] Affiliation to a pension system means being formally registered, while contribution implies actually making payments or contributions to the system. Thus, a person may be affiliated but not necessarily an active contributor, which affects the actual level of social protection and job stability.

about affiliation and four that did not ask about contributions.[54] In countries where there is a practical difference between affiliation and contribution, the latter is a better proxy for having a job of a certain quality.[55] Accordingly, it was decided to use a contribution-based measure, but to use affiliation in countries where no information on contribution was provided.

The evaluation of job quality would be incomplete without considering the possibilities offered by labour income (Sehnbruch et al., 2018; Apablaza et al., 2024). Although, from a rights perspective, it would be ideal to use a measure based on the minimum wage, this raises the problem that national minimum wages are not comparable, because they represent different consumption possibilities in different countries.[56] Accordingly, MPI-LA uses individual labour income above the ECLAC monetary poverty line as a standard, to serve as a threshold that reflects the same consumption possibilities or the capability to achieve the same basic functionings in the different countries.[57] Moreover, unpaid family work is deemed to imply a total lack of economic independence based on labour income, compounded by the fact that the workers in question do not usually have access to social security or job protection.

Job quality indicators are individual measures that are often not applicable to all household members, so a decision must be made on how to express individual deprivation in an indicator that represents the household as a whole. As the concept used to measure labour income deprivation concerns consumption possibilities (or the capability to achieve certain functionings), the low labour income of one member of a given household is offset by the high labour income of another member.[58] Therefore, to be identified as deprived in terms of job quality in MPI-LA, a person must belong to a household in which there is no opportunity for compensation; that is, one in which all employed persons either have incomes below the poverty line, or are unpaid family workers, or do not contribute to any pension system.

(c) Pensions

Social security exists to provide people with secure and adequate income in old age and to protect against unemployment, illness, disability, accidents, maternity, loss of the family breadwinner or other risk events. Indicators related to old-age pensions and retirement were included in some traditional UBN measurements to proxy household economic capacity and they have been incorporated into just over half of the national MPIs of countries in the region (see table II.21).[59]

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54 Deprivation rates do not differ substantially when affiliation is used rather than contribution. A comparison of the results in countries or rounds where information on both indicators was provided around 2021 shows that only in Chile and Peru are there significant differences exceeding 15 percentage points (more affiliates than contributors in the employed population). In Argentina and Colombia, it makes no difference which of the two indicators is used; and in Guatemala, El Salvador and the Plurinational State of Bolivia, the differences do not exceed 6 percentage points.

55 In Chile, the individual capitalization account system allows a person to be registered but not contributing to a pension fund at the time of the survey. In that system, a person could be affiliated and unemployed at the same time.

56 The International Labour Organization (ILO, 2020) concluded that, around 2020, the gross minimum wage in Latin American countries ranged from US$ 289 at purchasing power parity (PPP) in Mexico to US$ 953 at PPP in Panama.

57 For further information on the institution's methodology for measuring income poverty, see ECLAC (2018).

58 Use of the minimum wage would have given a different perspective.

59 Other social security benefits, such as unemployment insurance, have not been included in the indices.

The definitions used in the national MPIs have considered contributory and non-contributory pensions, and their amounts have not been taken into account.[60] According to United Nations (2008), non-contributory programmes make it possible to attain minimum social security thresholds, especially in countries where social insurance cannot be provided to everyone. Social pensions should be understood in the context of a progressive strategy, which starts with basic levels of protection and progresses gradually towards better social security.[61]

■ Table II.21

Latin America (11 countries): pension deprivation indicators in national multidimensional poverty indices

Country	Indicator
Chile	Older persons with no pension or retirement benefits, whether contributory or non-contributory
Colombia	No indicator included
Costa Rica	Older persons with no pension or retirement benefits, whether contributory or non-contributory
Dominican Republic	No indicator included
Ecuador	Unemployed or inactive older persons without contributory or non-contributory pensions
El Salvador	Non-beneficiaries of pension funds
Guatemala	No indicator included
Honduras	No indicator included
Mexico	Older persons with no pension or retirement benefits, whether contributory or non-contributory
Panama	No indicator included
Paraguay	Older persons with no pension or retirement benefits, whether contributory or non-contributory

Source: Economic Commission for Latin America and the Caribbean, on the basis of Ministry of Social Development of Chile. (2016). Metodología de medición de pobreza multidimensional con entorno y redes. *Documentos Metodológicos CASEN Series* (32); Angulo, R., Díaz, B. and Pardo Pinzón, R. (2013). A counting multidimensional poverty index in public policy context: the case of Colombia. *OPHI Working Paper* (62). Oxford University Press; National Institute of Statistics and Censuses of Costa Rica. (2015). *Índice de pobreza multidimensional (IPM): metodología*; Castillo, R. and Jácome, F. (2016). Medición de la pobreza multidimensional en el Ecuador. *Revista de Estadística y Metodologías* (2). National Institute of Statistics and Censuses; Technical and Planning Secretariat of the Presidency and Directorate General of Statistics and Censuses (Eds.). (2015). *Medición multidimensional de la pobreza: El Salvador*; Secretariat of General Government Coordination and National Institute of Statistics of Honduras. (2016). *Medición multidimensional de la pobreza (2016)*; National Council for the Evaluation of Social Development Policy of Mexico. (2010). *Informe de pobreza multidimensional en México, 2008*; Ministry of Finance and Economy, Ministry of Social Development and National Institute of Statistics and Census of Panama. (2017). *Índice de pobreza multidimensional de Panamá: año 2017*; Munguía, F. (2017). Medición multidimensional de la pobreza: El Salvador. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago, los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; Botello, S. (2017). Avances del rediseño del índice de pobreza multidimensional de Colombia. In P. Villatoro (Comp.), *Indicadores no monetarios de pobreza: avances y desafíos para su medición. Memoria del seminario regional realizado en Santiago los días 15 y 16 de mayo de 2017*. Seminars and Conferences Series (87) (LC/TS.2017/149). Economic Commission for Latin America and the Caribbean; National Institute of Statistics of Paraguay. (2021). *Informe metodológico: índice de pobreza multidimensional (IPM) Paraguay*; Ministry of Social Development of Guatemala and Oxford Poverty and Human Development Initiative. (2019). *IPM Gt: índice de pobreza*; Superintendency of Banks of the Dominican Republic. Sistema Único de Beneficiarios (SIUBEN). https://siuben.gob.do.

60 Non-contributory pensions do not depend on the contributions made to pension systems by recipients during their working lives and generally aim to cover the most vulnerable population.

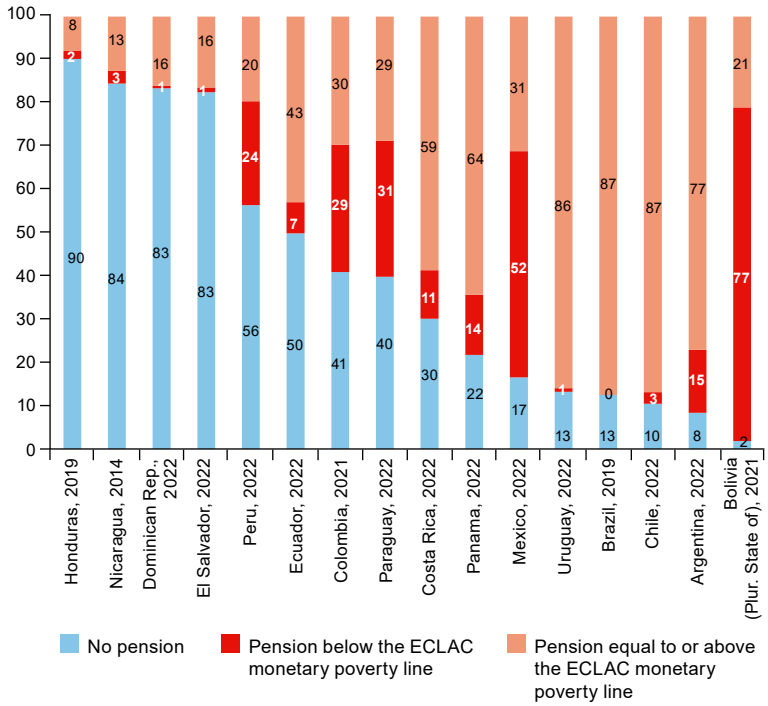
61 For further information on ILO recommendations on national protection floors, see ILO (2012).

In Latin America, however, mere access to a pension does not provide people with sufficient resources to achieve certain basic functionings in old age. Around 2022, more than 20% of individuals aged 65 years and older received pensions or retirement benefits below the ECLAC income poverty threshold in five Latin American countries (see figure II.3). Therefore, defining older persons as non-deprived simply because they receive a pension is questionable and it might encourage countries to expand pension coverage with very small amounts, in order to reduce the deprivation rate quickly. In contrast, setting a target for older persons to have a pension above the poverty line helps to put the adequacy of pensions, including contributory ones, on the agenda.

■ Figure II.3

Latin America (17 countries): older persons who do not receive any pension and those who receive a pension below or above the poverty line, around 2022

(Percentages)



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

Note: The graph considers contributory and non-contributory retirement and old-age pensions, referenced to the monetary poverty line values estimated by ECLAC for each country. Older persons are defined as those aged 65 years and over.

Defining the reference population for the pension indicator is complicated because retirement ages differ between countries.[62] As persons aged 65 years and over are eligible to receive a pension in all countries in the region (Organisation for Economic Co-operation and

62 There are also differences within countries owing to the coexistence of different pension systems.

Development et al., 2014; Arenas de Mesa, 2019), and since this criterion mostly converges with that used to determine who is entitled to receive a non-contributory pension, this age group was chosen as the reference population.[63]

■ Box II.1
Data limitations and challenges

When measuring multidimensional poverty in Latin America, there are several data constraints, including problems of comparability between countries. The latter stem from the different frequencies with which surveys are conducted and the variety of response categories for some indicators. Data-related difficulties also include the fact that some dimensions and indicators were not included in MPI-LA, either because the surveys did not provide information on them or because the information was incomplete. Several of these difficulties can be resolved by improving questionnaires and data collection processes.

The estimations are not fully comparable across countries because not all of the surveys used as sources for MPI-LA were conducted in the same years. While some countries have regular, well-established surveys that produce annual or even more frequent results, others have more limited resources and carry out surveys less often. Conducting surveys on a regular basis should improve the availability of information and enhance comparability between countries (Santos, 2019).

The measurement of some dimensions included in MPI-LA should and could be improved. The response categories for questions on housing and basic services need to be harmonized to a greater degree. In addition, those relating to water sources and sanitation need to be made more comparable, aligned with the standards of the Sustainable Development Goals (SDGs). In some cases, particularly electricity and water supply, it would be important to have a measure of the continuity of service. In the case of housing conditions, it would be desirable to move towards measuring a dwelling's state of repair, since the use of makeshift materials only identifies deprivation in the region's relatively less developed countries (Villatoro, 2017; Santos, 2019).

In the health domain, there is insufficient information on the effective use of services or on their quality. With regard to health functioning, Latin American surveys provide few indicators on anthropometrics, infant mortality, chronic diseases, mental health and functional limitations for performing basic activities of daily living (Santos, 2019). Given the importance of health for well-being and the relevance of these elements for certain population groups, such as older persons and children, priority should be given to improving data sources for this dimension.

Food insecurity, or the lack of regular access to sufficient nutritious food to grow and develop properly and lead a healthy life, is another element that must be taken into account in multidimensional poverty measurements. Some national statistical offices in the region have started to include question modules on food insecurity in their surveys, inspired by the food insecurity experience scale of the Food and Agriculture Organization of the United Nations (FAO).[a] This is a valuable step forward that will hopefully be replicated in more countries.

In terms of education, multipurpose surveys do not usually collect information on cognitive skills and abilities, which would be a good proxy for educational quality —one of the main policy challenges related to the population of compulsory school age. The education indicators available for this age group (non-attendance at school and educational lag) have a very low incidence and the educational lag measurement is a very imprecise proxy for learning. There is also a lack of information on skills related to the use of new information and communications technologies (ICTs), which are essential for participating in the information and knowledge society. The number of countries that enquire about access to preschool and early childhood education programmes also needs to be increased, which would contribute not only to the educational dimension but also to gender equality.

63 For further information, see Cecchini et al. (2021).

Lack of information in the data sources also affects the production of certain indicators that are crucial for highlighting gender inequalities, such as use of time, work-life balance and domestic violence. Public safety, which encompasses victimization and fear of being a victim of crime, is another very important dimension in the region. Perceptions of discrimination are another area to consider, because they make it possible to proxy the violation of a human right that is basic for human dignity (Villatoro, 2021). Lastly, progress also needs to be made in measuring the quality of the environment and access to school, health, transportation and recreational infrastructure.

In short, there are many opportunities for further improvement of the region's multipurpose surveys, which would not only overcome many of the shortcomings of MPI-LA in terms of monitoring public policies, but would also contribute to more effective measurement of each of the dimensions separately. To improve the surveys, methodological resources can be leveraged from various international entities that are undertaking initiatives to improve statistical quality and proposing question modules that can be used partially or completely in multipurpose surveys. These modules include the Short Set on Functioning developed by the Washington Group on Disability Statistics (2022), the questionnaire for measuring perceived discrimination created by the Praia Group on Governance Statistics, the guidelines on how to measure victimization provided by the UNODC-INEGI Center of Excellence in Statistical Information on Government, Crime, Victimization and Justice,[b] and the tools developed by the working groups of the Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean.[c]

Source: Santos, M. (2019). Indicadores no monetarios para el seguimiento de las metas 1.2 y 1.4 de los Objetivos de Desarrollo Sostenible: estándares, disponibilidad, comparabilidad y calidad. *Statistical Studies Series* (99) (LC/TS.2019/4). Economic Commission for Latin America and the Caribbean; Villatoro, P. (2017). Indicadores no monetarios de carencias en las encuestas de los países de América Latina: disponibilidad, comparabilidad y pertinencia. *Statistical Studies Series* (93) (LC/TS.2017/130). Economic Commission for Latin America and the Caribbean; Villatoro, P. (2021). La medición de la discriminación en base al autorreporte: estado de situación y desafíos. *Statistical Studies Series* (102) (LC/TS.2021/87). Economic Commission for Latin America and the Caribbean; Washington Group on Disability Statistics (2022). The Washington Group Short Set on Functioning (WG-SS). https://www.washingtongroup-disability.com/fileadmin/uploads/wg/Washington_Group_Questionnaire__1_-_WG_Short_Set_on_Functioning__October_2022_.pdf.

[a] See Food and Agriculture Organization of the United Nations. *Food insecurity experience scale*. https://www.fao.org/measuring-hunger/access-to-food/about-the-food-insecurity-experience-scale-(fies)/en.

[b] See Laboratorio de victimización. https://www.cdeunodc.inegi.org.mx/index.php/inicio-viclab-victimizacion-en-la-region/.

[c] See Working Groups. https://rtc-cea.cepal.org/en/working-groups.

C. Construction of the multidimensional poverty index for Latin America

1. The multidimensional measure of Alkire and Foster

The multidimensional poverty index for Latin America is based on the structure of the adjusted headcount index, or adjusted incidence, M_0, which is one of the multidimensional measures proposed by Alkire and Foster (2007, 2011). The M_0 index uses deprivation headcounts not only to identify persons subject to multidimensional poverty, a procedure also used in the traditional UBN measurement, but also to obtain an aggregate measure of deprivation.

In the Alkire and Foster method, people in poverty are identified by assessing each person's deprivation in the different dimensions of the multidimensional index. Each deprivation has a threshold, and a person is considered to be in poverty if he or she accumulates deprivations in a minimum number of dimensions (threshold *k*). In addition, aggregation combines the (weighted) deprivations of people in poverty to calculate a general multidimensional poverty index that reflects both the proportion of people in that situation and the intensity of their deprivations. What follows is a brief description of the structure developed according to Alkire et al. (2015).

Let $x_{ij} \in \mathbb{R}_+$ represent the achievement of each person $i = 1, ..., n$ in each indicator $j = 1, ..., d$, with z_j representing the deprivation threshold corresponding to indicator j. A person is deprived in indicator j if their level of achievement is below the deprivation threshold. Formally, deprivation is defined as $g_{ij}^0 = 1$: when $x_{ij} < z_j$; if, $x_{ij} \geq z_j$ then $g_{ij}^0 = 0$. Next, each person's deprivation is weighted according to the indicator weight, denoted w_j, such that $\sum_j w_j = 1$. The next step is to calculate a deprivation score for each person, which is defined as the weighted sum of the deprivations $c_i = \sum_{j=1}^{d} w_j g_{ij}^0$. Based on this score, persons in multidimensional poverty are identified using a second threshold, denoted *k*, which represents the minimum proportion of deprivations a person must have to be classified as poor. Accordingly, a person is in multidimensional poverty when $c_i \geq k$.

Next, the deprivations of those who are not identified as living in poverty are censored (ignored). Censored deprivations are defined as $g_{ij}^0(k) = g_{ij}^0$ when $c_i \geq k$ and as $g_{ij}^0(k) = 0$ when $c_i < k$. The censored deprivation score is defined as $c_i(k) = \sum_{j=1}^{d} w_j g_{ij}^0(k)$.

After determining which individuals are in a situation of multidimensional poverty, two subindices are combined in the M_0 index: incidence, which is the proportion of the population in that situation, and intensity, which is the (weighted) average of the deprivations experienced by individuals in that situation.[64] The incidence of multidimensional poverty is expressed as $H = q/n$, where q is the number of people identified as poor, and the intensity is given by the formula $A = \sum_{i=1}^{n} c_i(k)/q$. The Latin American MPI, or M_0, is the product of these two subindices:

$$IPM = M_0 = H \times A = \frac{1}{n} \sum_{i=1}^{n} \sum_{j=1}^{d} w_j g_{ij}^0(k)$$

Adjusting the incidence of multidimensional poverty for its intensity allows the M_0 index to comply with the dimensional monotonicity axiom (Alkire and Foster, 2011): that is, if a deprived person becomes deprived in an additional indicator, M_0: will increase.

Given its additive structure, the M_0 index can be decomposed in two ways. Firstly, it can be broken down by population subgroups, because the total M_0: can be obtained as the weighted sum of the multidimensional poverty levels affecting the population subgroups

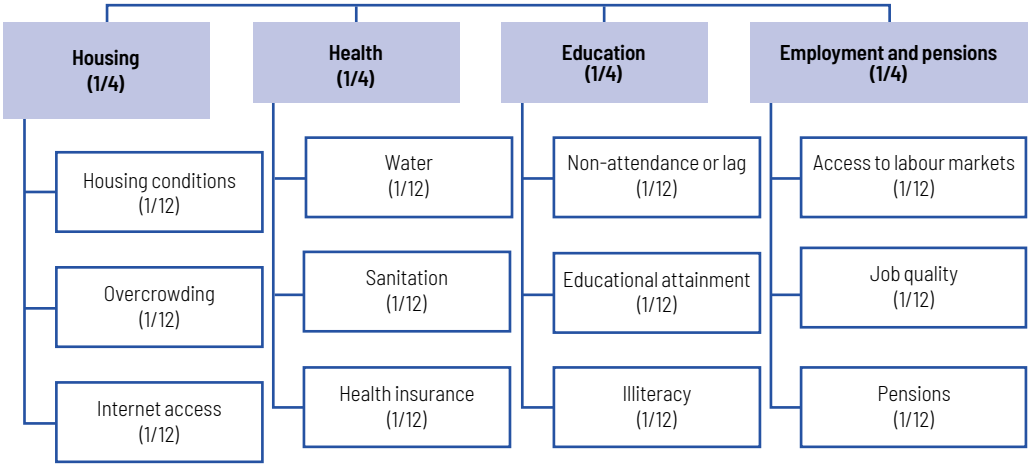
[64] For example, if 10 deprivations are measured with multidimensional threshold k=2, the intensity of poverty for a household with 5 deprivations would be calculated as 5/10 = 50%. In a population of three poor households with poverty intensity measured at 40%, 50% and 60%, respectively, the population's poverty intensity would be calculated as (40+50+60)/3 = 50%.

(which must be mutually exclusive). The percentage contribution of a subgroup to total multidimensional poverty can be calculated by taking the M_0 of the subgroup, weighting it by its share of the total population and dividing it by the total M_0. Secondly, M_0 can be broken down by indicator. In this case, the total M_0 is expressed as the weighted sum of the share of the population identified as multidimensionally poor and deprived in each indicator (the weights refer to the relative weight of each indicator). These proportions are also known as censored headcount rates and make it possible to analyse the contribution of each deprivation to total multidimensional poverty. Each indicator's percentage contribution to multidimensional poverty is estimated as the censored headcount rate multiplied by its relative weight and divided by the total M_0.

2. Structure of the multidimensional poverty index for Latin America

The MPI-LA structure comprises the selected dimensions and indicators, the deprivation criteria corresponding to each indicator, the weight of the indicators and dimensions, and the multidimensional poverty threshold (see diagram II.1 and table II.22).

■ Diagram II.1
Structure of the multidimensional poverty index for Latin America



Source: Economic Commission for Latin America and the Caribbean.

■ Table II.22
Structure and definitions of the indicators of the multidimensional poverty index for Latin America

Dimension	Indicator	Deprivation threshold	Weight
Housing	Housing conditions	At least one of the following situations: - Roof, walls, or floor constructed with non-recoverable or untreated materials. - No access to grid electricity. - Toxic fuel used for cooking (firewood, coal, waste material or paraffin).	1/12
	Overcrowding	Number of rooms[a] less than required according to household age and sex composition. - One room is required for: - The head of the household with a partner or spouse - Each single person aged 18 or over - Each pair of 12–17-year-olds of the same sex - Each unmarried 12–17-year-old not classified in the previous category - Each pair of children under 12 years of age, regardless of sex	1/12
	Internet access	No Internet access at home (fixed or mobile).	1/12
Health	Water	Urban area: public grid outside the property; unprotected wells or wells without motorized pumps; mobile source; rainwater; surface water. Rural area: surface water; rainwater; mobile source; unprotected well; water from well with pit latrine.[b]	1/12
	Sanitation	Urban zone: toilet not connected to sewerage system, or septic tank; bathroom shared with another household; no toilet. Rural zone: no toilet facilities; bathroom shared with another household; pit latrines or other untreated latrines; untreated sewage discharged onto land, river or into the sea.	1/12
	Health insurance	No one in the household has health insurance.[c]	1/12
Education	Non-attendance or educational lag	There is at least one 4–17-year-old household member who is not attending or lagging behind at school.	1/12
	Educational attainment	No adult in the household has attained the educational level corresponding to their age, namely: - 18–19 years old: did not complete secondary school and not attending school. - 20–29 years old: did not complete secondary school. - 30–34 years old: one year short of completing secondary school. - 35–39 years old: was two years short of completing secondary school. - 40–44 years old: was three years short of completing secondary school - 45–49 years old: was four years short of completing secondary school - 50–54 years old: did not complete one year of secondary school. - 55–59 years old: did not complete primary school. - 60–64 years old: did not complete four years of primary education.	1/12
	Illiteracy	At least one household member aged 10 years or older cannot read or write.	1/12

Dimension	Indicator	Deprivation threshold	Weight
Employment and pensions	Access to labour markets	At least one household member aged 18–64 years is either unemployed or out of the labour market owing to domestic tasks.[d]	1/12
	Job quality	All employed persons in the household are in at least one of the following situations: - Is not contributing to a pension system - Is earning an income below the ECLAC monetary poverty line - Is an unpaid family worker.	1/12
	Pensions	At least one household member aged 65 or older is in one of the following situations: - Does not receive any pension, whether contributory or non-contributory - Receives a pension below the ECLAC monetary poverty line	1/12

Source: Economic Commission for Latin America and the Caribbean.

[a] "Rooms" include bedrooms and multipurpose rooms, but not the kitchen.

[b] In urban areas, deprivation is assumed if it is unknown whether the well is protected. In rural areas, deprivation is not assumed if it is unknown whether the well is protected or whether there is a pit latrine.

[c] In 15 out of 17 countries, information was available on access to health insurance for the entire population. In Honduras, information was only available for employed persons, so deprivation or non-deprivation of the employed person in the household was imputed to the other household members. The survey in Brazil does not ask about access to health care, and there are no other questions that could proxy for this.

[d] This situation is considered deprivation in households where at least one member is either under 18 years old or aged 70 years or older. Although there may be a member of the household who does not fall within this age range but is dependent and requires care from someone who is not in the labour market, the household surveys do not enable the systematic and harmonized detection of such situations.

In the Latin American MPI, it was decided to weight the dimensions equally, because they were assumed to be equally important for well-being. From this perspective, each dimension contributes significantly to overall well-being. The aim is to encourage more balanced public policies that promote interventions in all areas of well-being included in MPI-LA, rather than targeting just a few. Accordingly, all indicators within each dimension are weighted equally.

The multidimensional poverty index for Latin America is composed of indicators that apply to all household members, and others that apply to some members only. The indicators in the housing dimension always have the same value for all household members, but this is not necessarily the case for deprivations in education, employment and pensions. The health dimension is an intermediate case, since it has two indicators that do not vary between household members (water and sanitation) and another one that may do so (health insurance).

As the MPI-LA identification unit is the household, individual indicators that apply to some of its members have to be transformed into values that represent the household as a whole. This is usually done by applying one of the following procedures: (i) union, in which it is sufficient for one person in the household to be deprived for all its members to be considered deprived and (ii) intersection, in which all applicable members of the household must be deprived for all household members, whether applicable or not, to be considered deprived.

When choosing the transformation procedure, intersection was generally preferred in the case of deprivations that had a high incidence and were less severe or more likely to be compensated for within the household. In contrast, union was preferred for deprivations

that had a lower incidence and were more severe. Thus, union was chosen for indicators of non-attendance at school or educational lag, illiteracy, labour market access and pensions for older persons. Intersection was used in the case of deprivations in health insurance, educational attainment and job quality. This procedure helps prevent the equal weighting of MPI-LA dimensions and indicators from resulting in indicators of very high incidence but lower severity contributing excessively to total poverty. The most obvious example is that of low educational attainment among adults, which is also relatively insensitive to policy.

As MPI-LA aims to quantify the incidence of poverty in the regional population, the results are presented at the individual rather than the household level. Since the household is the index identification unit, the incidence described in the results section refers to the population belonging to households in situations of multidimensional poverty.

The multidimensional poverty threshold (k) used in MPI-LA is 33%, which means that a person or household must be deprived in at least four indicators to be considered multidimensionally poor. This is equivalent to being deprived in more than one dimension.

Chapter III

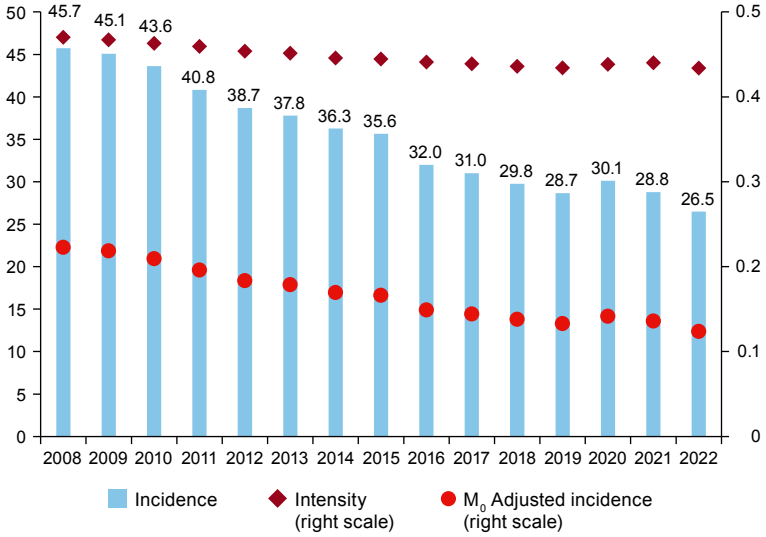
Results of application of the multidimensional poverty index for Latin America

A. Incidence, intensity and adjusted incidence of multidimensional poverty

Between 2008 and 2022, the incidence of multidimensional poverty in the region dropped sharply, from 45.7% to 26.5%, equivalent to a 1.4 percentage point reduction per year (see figure III.1). The intensity of poverty also diminished: in 2008, the average deprivation of persons living in poverty was 0.47 (5.6 deprivations in MPI-LA), compared to 0.43 (5.2 deprivations) in 2022. As a result, the intensity-adjusted incidence fell from 0.22 in 2008 to 0.12 in 2022. The downward trend in poverty during the period analysed was only interrupted in 2020, when it rose in the wake of the coronavirus disease (COVID-19) pandemic. This was followed by a reduction in incidence in 2021 and a drop in both incidence and intensity in 2022. In that year, the incidence of multidimensional poverty (both adjusted and unadjusted) was the lowest in the entire data series.

■ Figure III.1
Latin America (17 countries):[a] multidimensional poverty indicators, 2008–2022

(Percentages and index values)



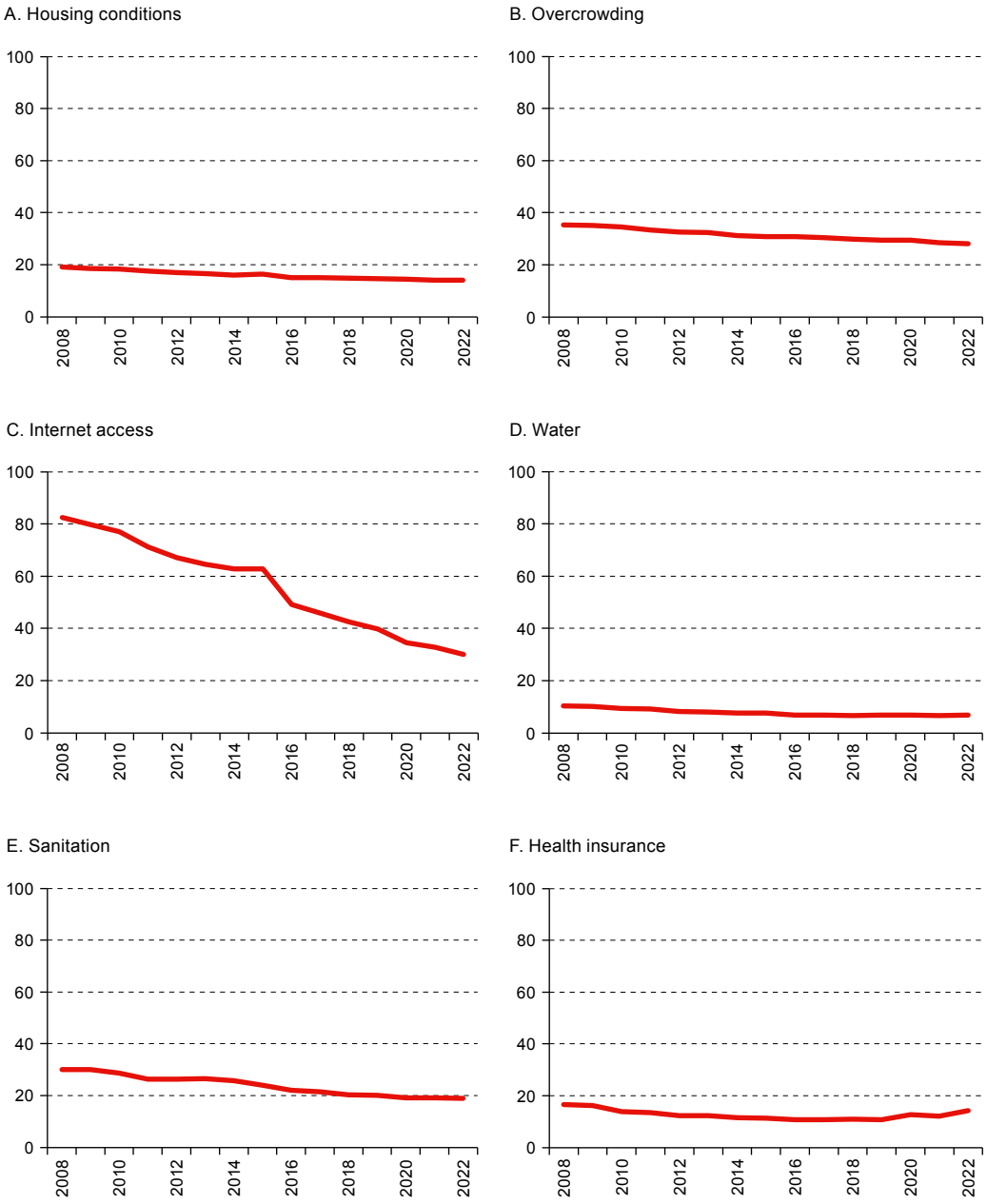
Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

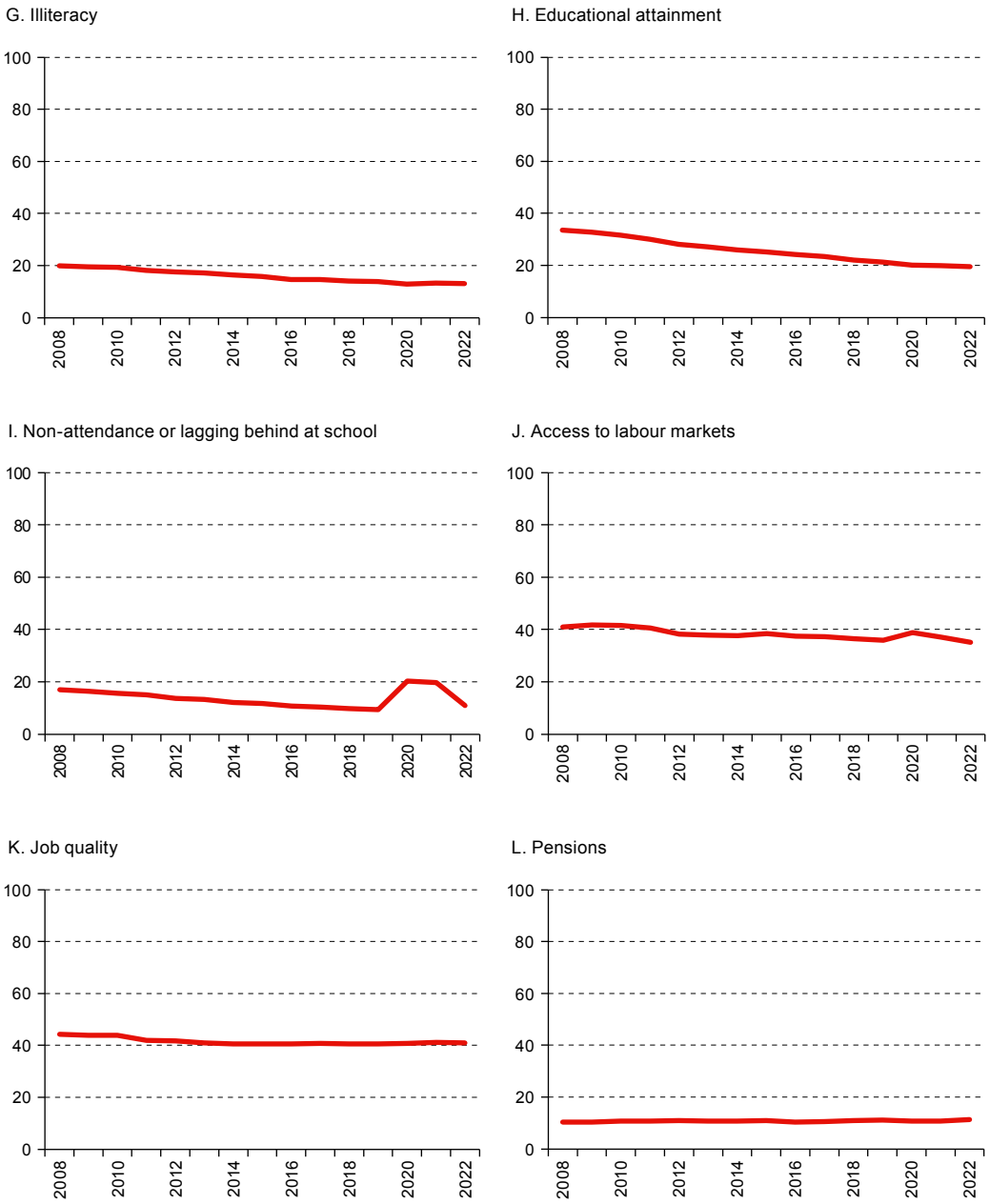
The sharp reduction in multidimensional poverty that occurred between 2008 and 2022 is explained by the fact that 11 of the 12 deprivations considered in MPI-LA recorded reductions, some of which were quite significant (see figure III.2). In the regional aggregate, the steepest decline was in lack of access to the Internet, which decreased by 3.7 percentage points per year, followed by low educational attainment among adults, inadequate sanitation and overcrowding, which decreased at annual rates of 1.0, 0.8 and 0.5 percentage points, respectively. In the employment dimension, the sharpest decline occurred in the lack of access to the labour market, which fell by 0.4 percentage points per year, while precarious employment declined at an average annual rate of 0.2 percentage points. This dimension also includes pension inadequacy, the only deprivation for which incidence increased between 2008 and 2022.

■ Figure III.2

Latin America (17 countries):[a] incidence of deprivations in the multidimensional poverty index, 2008–2022

(Percentages)





Source: Economic Commission for Latin America and the Caribbean.

Note: The figures represent the regional weighted average of the population in households experiencing deprivation. They are estimated relative to the entire population, not just those identified as living in multidimensional poverty.

[a] Argentina, 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 housing conditions indicator was among those that improved the least in the region between 2008 and 2022. This is a composite indicator that combines the materiality of the dwelling, access to electricity and the use of clean energy for cooking. Empirically, the incidence of deprivation in terms of clean energy is clearly higher than that related to dwelling materials and electricity. This highlights the need to adopt policies that promote the energy transition and reduce this type of deprivation, which is critical for mitigating climate change, to which people suffering multidimensional poverty are precisely the most vulnerable.

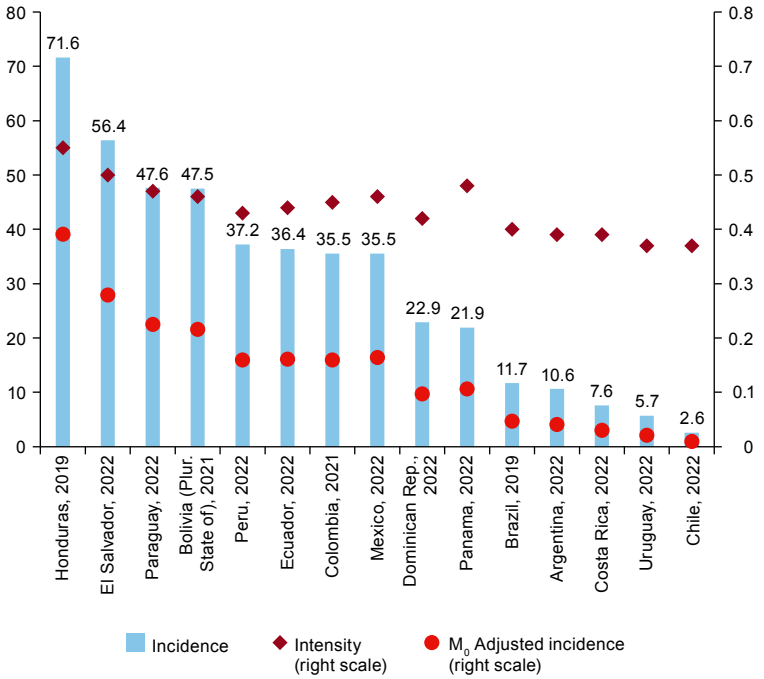
The rise in multidimensional poverty between 2019 and 2020 was linked closely to the disruption of educational and work activities caused by the COVID-19 pandemic. In the regional aggregate,[1] the main effect was seen in non-attendance or lagging behind at school, which increased by 10.9 percentage points in 2020.[2] Lack of access to the labour market grew by almost 3 percentage points, and precarious employment rose by 0.3 points. The lack of health insurance increased by 2 percentage points in 2020, possibly related to the loss of wage-earning jobs that provide access to contributory health insurance schemes. When considering just the 10 countries for which information is available for 2019 and 2020, the effects are even greater: on average, the prevalence of non-attendance or lagging behind at school increased by 20.6 percentage points, lack of access to the labour market rose by 4.9 percentage points, and precarious employment grew by 0.8 points. The lack of health insurance increased by 1.2 percentage points, less than the weighted regional aggregate.

Countries vary widely in terms of the incidence of multidimensional poverty (see figure III.3). Around 2022, this exceeded 45% in Honduras, El Salvador, Paraguay and the Plurinational State of Bolivia, but it was no more than 10% in Chile, Costa Rica and Uruguay. Countries with the highest incidence of poverty tend also to be affected the most by its intensity. Around 2022, in El Salvador and Honduras, people living in poverty had deprivations in two or more dimensions on average; in Chile and Uruguay, in fewer than two. An exception is Panama, where the intensity of poverty is greater than its incidence would suggest.

1 Estimation using data from the nearest previous year in the case of information gaps.
2 ECLAC (2024, 2023) shows that the rise in monetary poverty during the pandemic was explained largely by the loss of income from wages and salaries.

■ Figure III.3
Latin America (15 countries): multidimensional poverty indicators, by country, around 2022

(Percentages and index values)



Source: Economic Commission for Latin America and the Caribbean.

Multidimensional poverty is declining in all Latin American countries for which several measurements are available for 2008–2022, a trend that is corroborated by both the adjusted and unadjusted incidence measures (see figure III.4).

As shown in figure III.4, the rate at which multidimensional poverty decreased varied across countries. By linking the rate at which multidimensional poverty declined in each country with the unadjusted incidence verified in the latest measurement available in each case, the following four groups can be distinguished:

(i) Not very intense pace of reduction, with poverty still affecting the majority: group comprising El Salvador and Honduras, where the incidence of poverty fell by less than 1.5 percentage points per year and, around 2022, it was above 50%.

(ii) Intense pace reduction with poverty still high: a group comprising Ecuador, Mexico, Paraguay, Peru and the Plurinational State of Bolivia, where the incidence of poverty fell by 1.5 percentage points or more per year on average and, around 2022 it was between 35% and 50%.

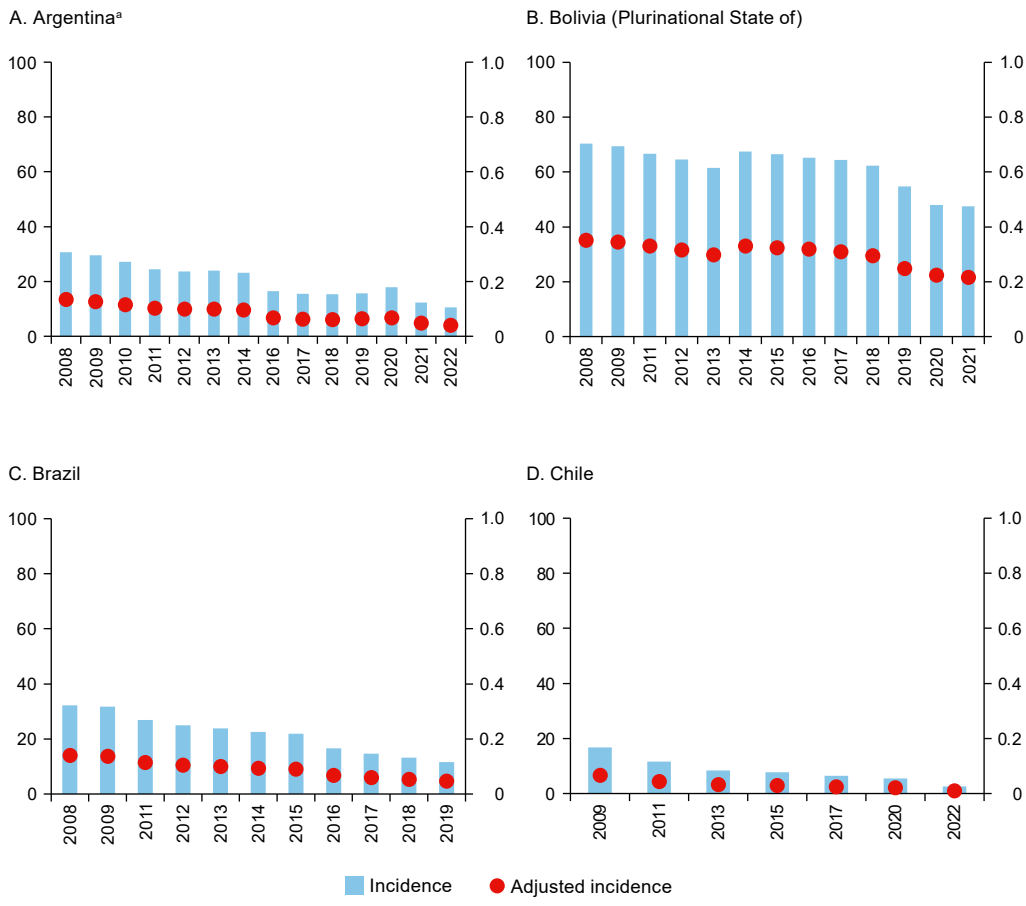
(iii) Intense pace of reduction with moderate poverty: group comprising Panama and the Dominican Republic, where the incidence of poverty fell by more than 1.5 percentage points per year and, in 2022, it was between 21% and 23%.

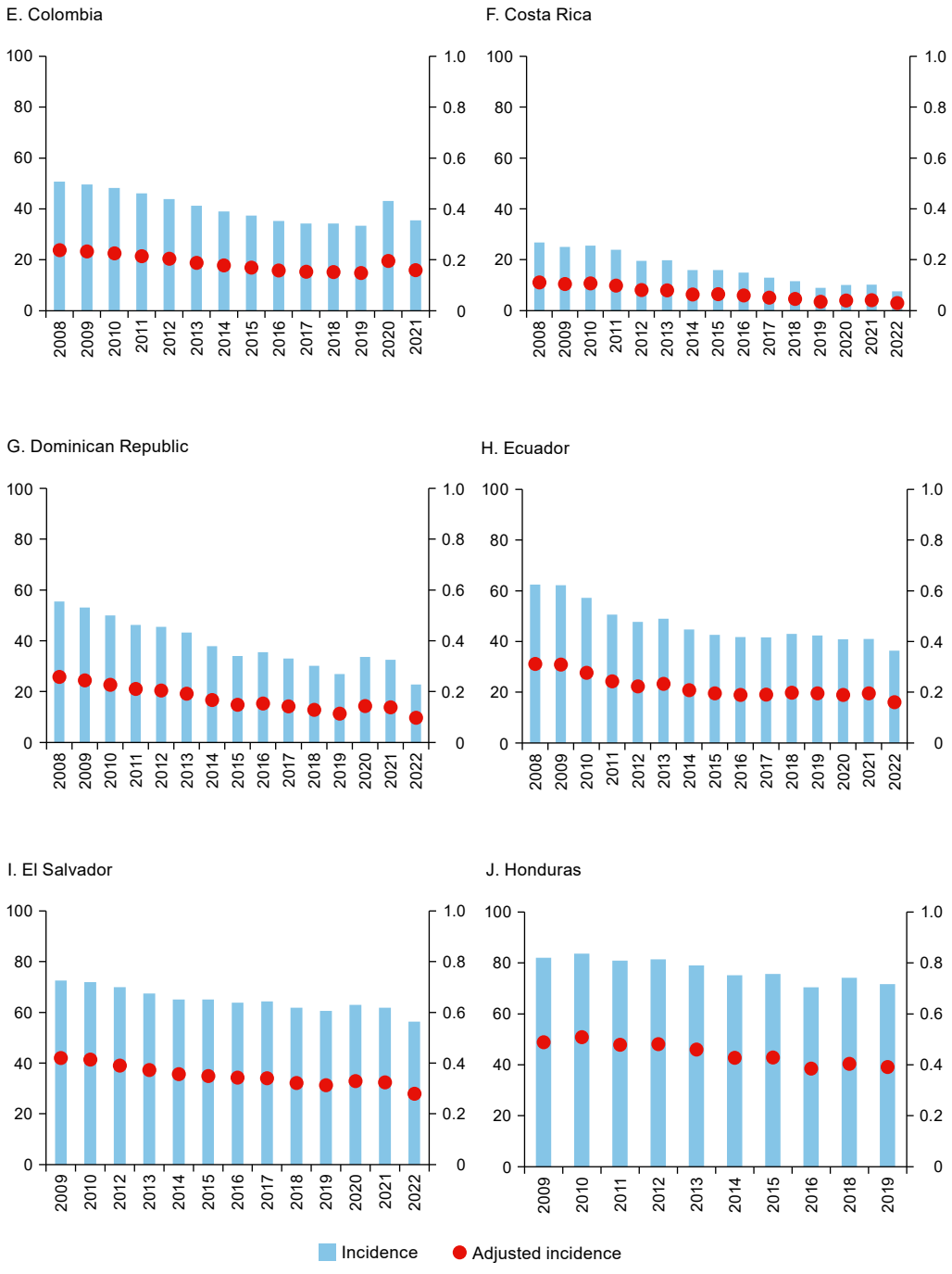
(iv) Not very intense pace of reduction and low poverty: a group comprising Argentina, Chile, Costa Rica and Uruguay, where the incidence of poverty fell by less than 1.5 percentage points per year and, around 2022, it was below 12%. However, it should be noted that the initial incidence of poverty in these countries was lower than in the other groups, which means there was less statistical scope for reduction.

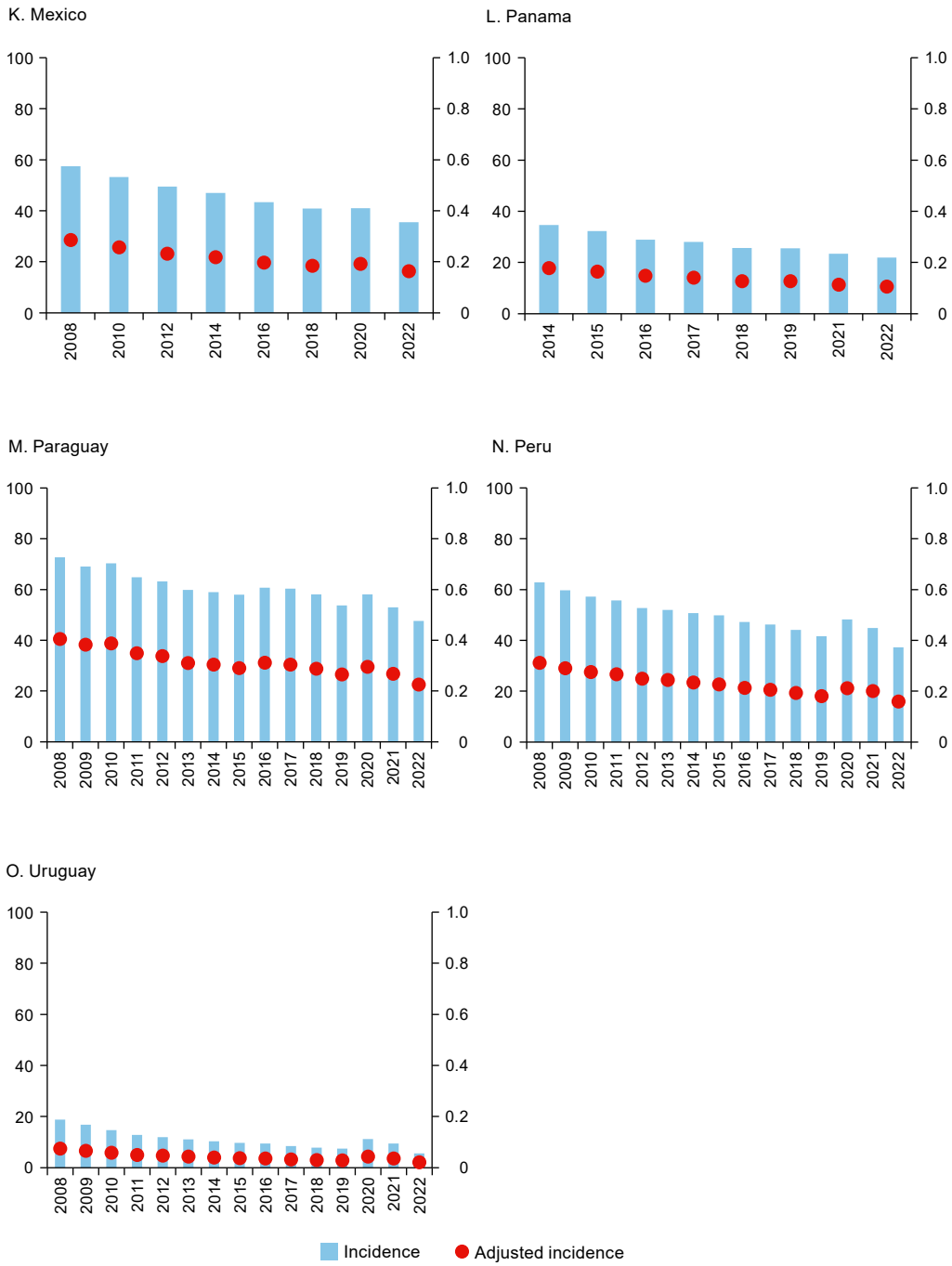
■ Figure III.4

Latin America (15 countries): incidence and adjusted incidence of multidimensional poverty, by country, 2008–2022

(Percentages and index values)




E. Colombia
F. Costa Rica
G. Dominican Republic
H. Ecuador
I. El Salvador
J. Honduras
Incidence
Adjusted incidence



Source: Economic Commission for Latin America and the Caribbean.
[a] Urban zones only.

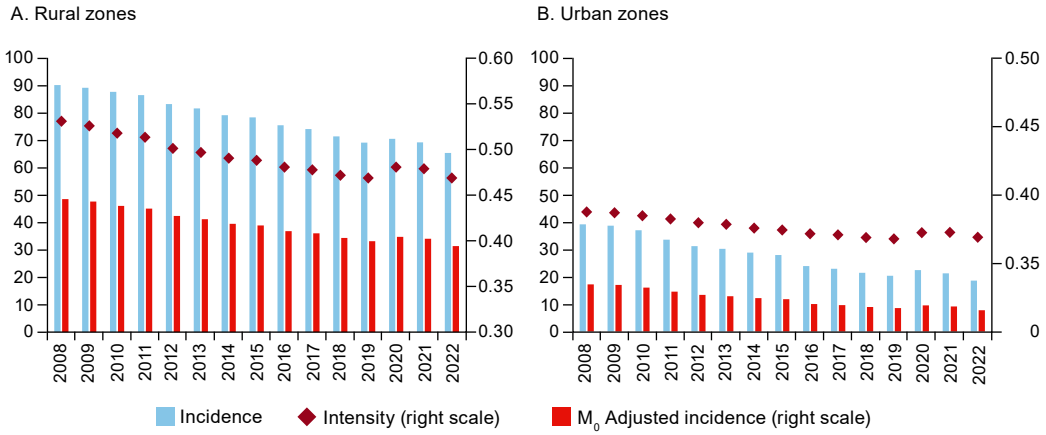
Two countries, Brazil and Colombia, were not classified in any group. In the case of Colombia, although the incidence of poverty was 35.5%, which would place it in group (ii), the rate of reduction was 1.2 percentage points per year, which is not sufficient for the country to be included in that group. In the case of Brazil, multidimensional poverty decreased rapidly (at a rate of 1.9 percentage points), but its incidence was 11.7% in the latest available measurement (2019), which was too low for the country to be included in any of the groups in which there was an intense pace of reduction.

B. Disaggregations of multidimensional poverty

In 2008–2022, the incidence of multidimensional poverty was much higher in rural areas than in urban ones (see figure III.5). Although incidence declined significantly in both areas, the process was relatively more pronounced in the former, with reductions of averaging 1.6 percentage points per year in rural areas compared to 1.3 percentage points per year in urban zones. The intensity of multidimensional poverty was also greater in rural areas than in urban ones during that period and, as in the case of incidence, it declined more sharply in the former. Thus, in absolute terms, the intensity-adjusted incidence declined by more in rural areas than in urban zones between 2008 and 2022.

■ Figure III.5
Latin America (14 countries):[a] multidimensional poverty indicators, by zone of residence, 2008–2022

(Percentages and index values)



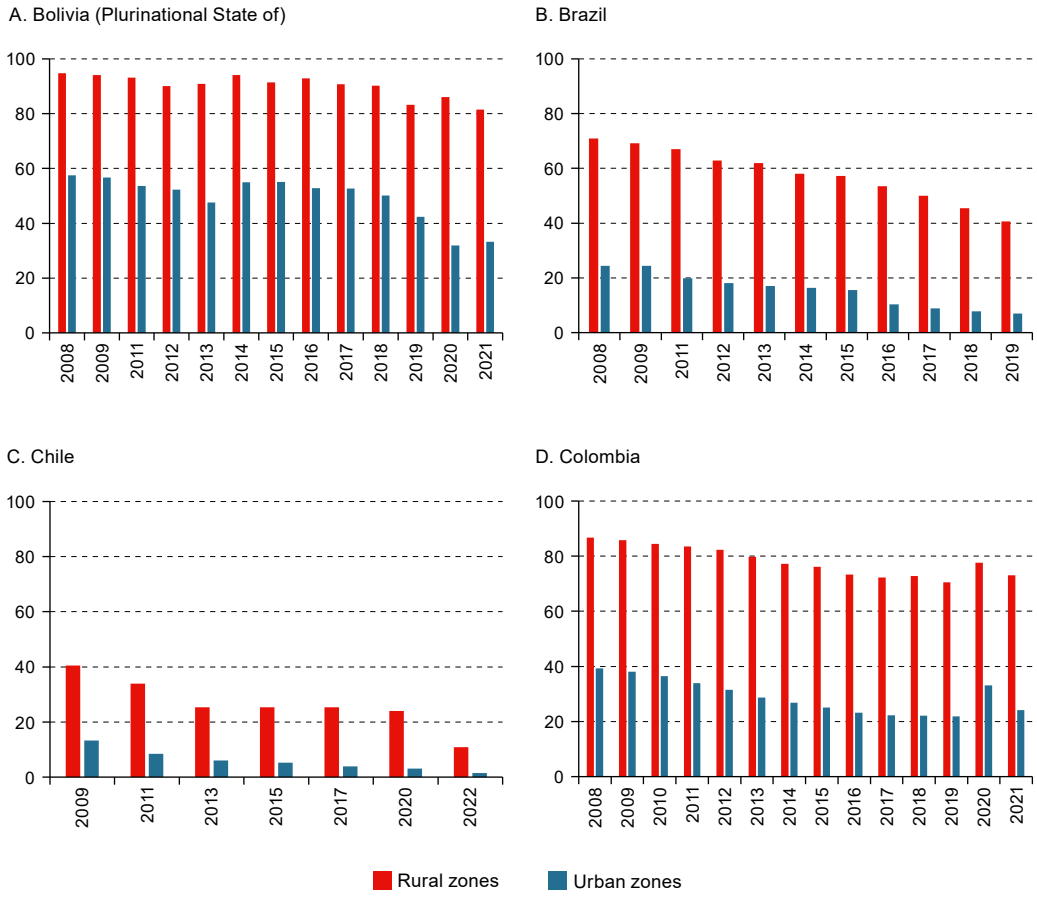
Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Brazil, Chile, Colombia, Costa Rica, the Dominican Republic Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The incidence of multidimensional poverty in rural areas decreased by most in the Dominican Republic, Brazil, Chile and Panama, falling by 2.9, 2.8, 2.3 and 2.3 percentage points per year, respectively. In urban areas, the steepest reductions occurred in the Dominican Republic, Paraguay and the Plurinational State of Bolivia, where incidence retreated at an average rate of 1.9 percentage points per year. The countries where the incidence of rural multidimensional poverty diminished the least between 2008 and 2022 were El Salvador, Honduras and the Plurinational State of Bolivia. In the case of urban poverty, the countries in which incidence declined the least in absolute terms were Chile, Costa Rica, Panama and Uruguay, but the baseline incidence of urban poverty in those countries (around 2008) was relatively low by regional standards (see figure III.6).

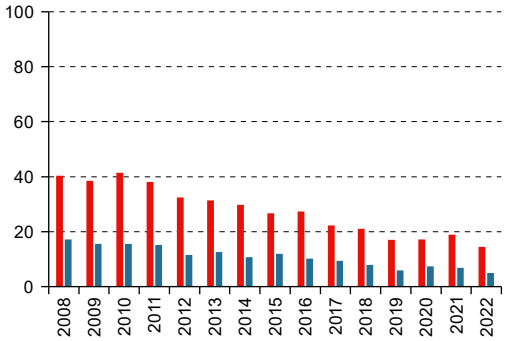
■ Figure III.6

Latin America (14 countries): incidence of multidimensional poverty, by zone of residence and country, around 2008–2022

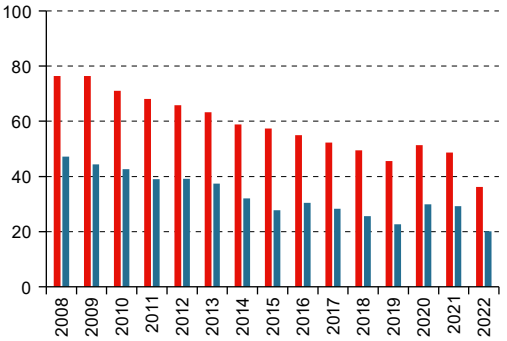
(Percentages)



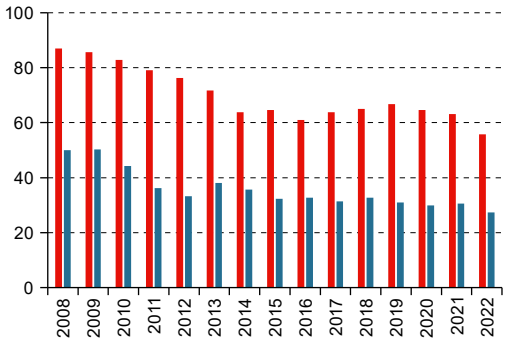
E. Costa Rica



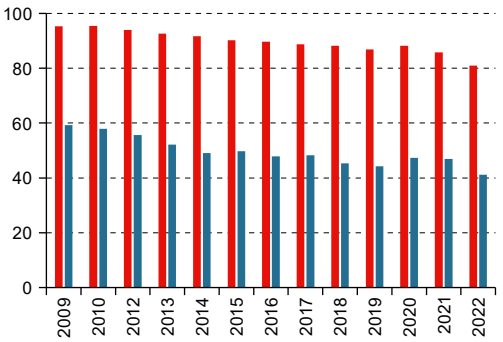
F. Dominican Republic



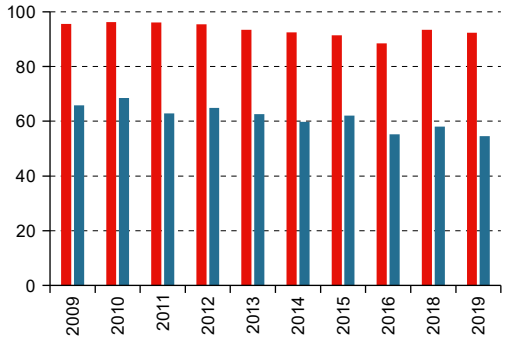
G. Ecuador



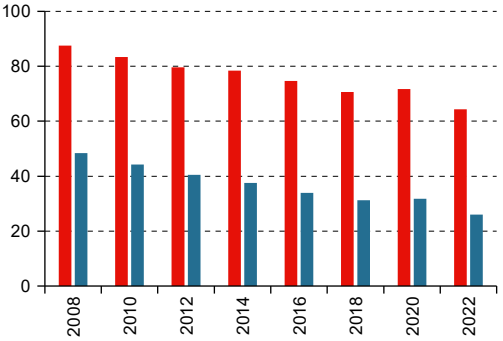
H. El Salvador



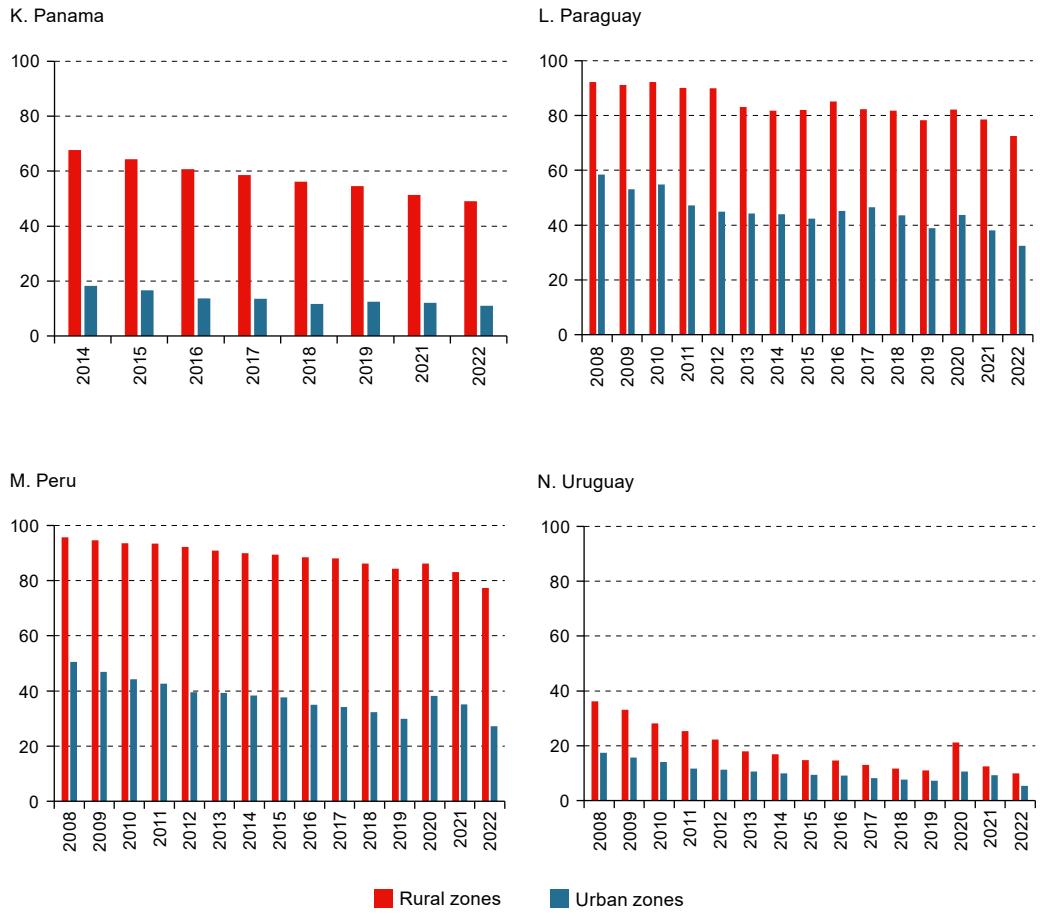
I. Honduras



J. Mexico



Rural zones Urban zones



Source: Economic Commission for Latin America and the Caribbean.

Although multidimensional poverty declined in rural areas, its incidence in those areas remained disproportionately high around 2022. In nine out of 14 countries, rural multidimensional poverty was 50% or even higher in that year, with the highest rates recorded in El Salvador, Honduras, Peru and the Plurinational State of Bolivia. In contrast, urban multidimensional poverty was below 25% in seven countries and no more than 10% in Brazil, Chile, Costa Rica and Uruguay. Consequently, there were considerable disparities in the incidence of poverty by area: in nine out of 14 countries, the incidence of rural poverty exceeded the urban rate by 30 percentage points, with the greatest differences recorded in Peru, Colombia, the Plurinational State of Bolivia and Paraguay, in that order.

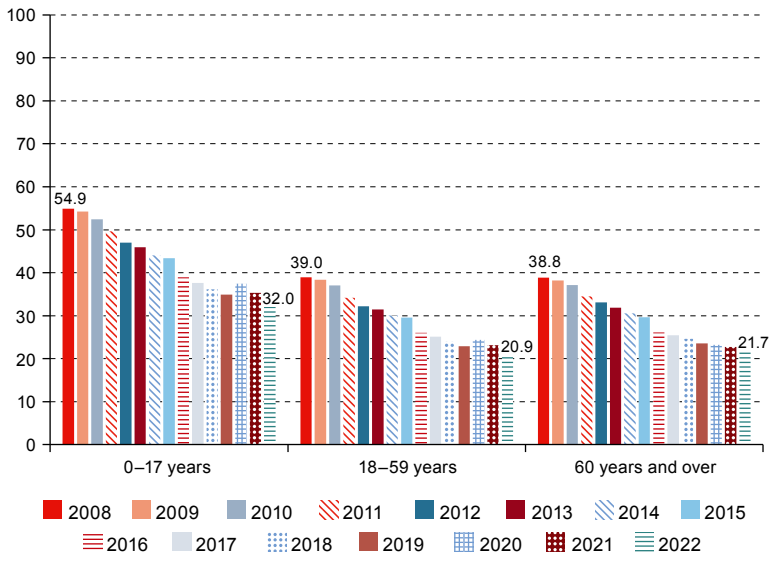
Internationally, there is evidence, demonstrated by various methods, that poverty affects children and adolescents more than the rest of the population.[3] The MPI-LA results concur with these estimations: between 2008 and 2022, multidimensional poverty in the region was consistently higher among children and adolescents than among adults (see figure III.7). Around 2022, multidimensional poverty affected 32% of persons under 18 years of age, 20.9% of 18–59-year-olds and 21.7% of persons aged 60 years and over. The intensity of poverty was also somewhat higher among children and adolescents than in other age groups. The average deprivation score for persons under 18 years of age was 44%, for 18–59-year-olds it was 42%, and for persons aged 60 years and older it was 41.3%. The fact that both the incidence and the intensity of multidimensional poverty were higher among children and adolescents meant that the intensity-adjusted incidence was higher for this age group than for others.

■ Figure III.7

Latin America (15 countries):[a] multidimensional poverty indicators, by age group, 2008–2022

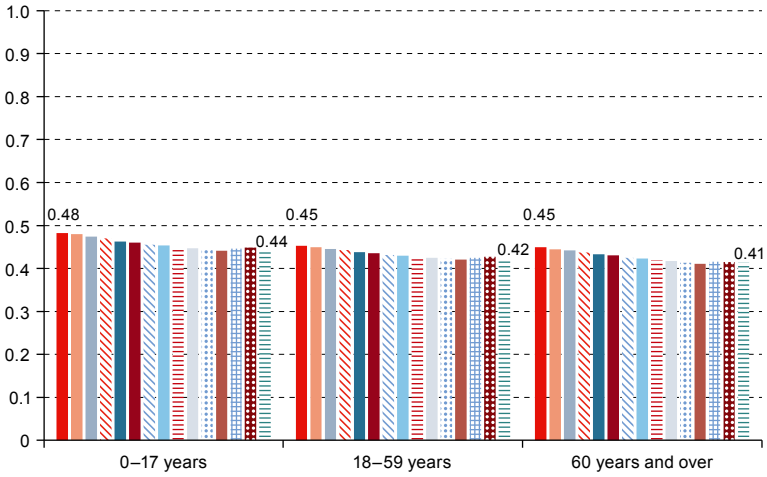
(Percentages and index values)

A. Incidence
(Percentages)

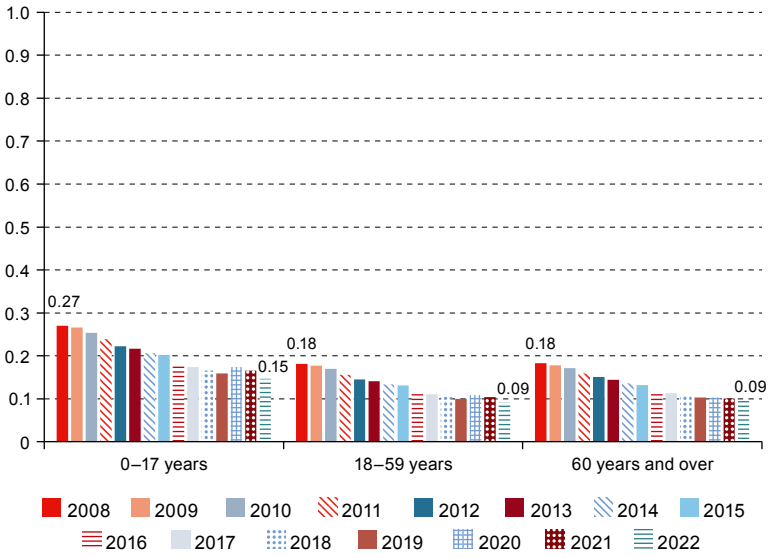


[3] For a recent monetary measurement based on World Bank poverty lines, see Salmeron-Gomez et al. (2023). For a measurement using the global MPI, see OPHI and UNDP (2023).

B. Intensity
(Index values)



C. Adjusted incidence
(Index values)



Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The reduction in multidimensional poverty between 2008 and 2022 was more pronounced among children and adolescents than in other age groups. During that period, the incidence of multidimensional poverty fell by 1.6 percentage points per year among children and

adolescents, by 1.3 percentage points per year among 18–59-year-olds and by 1.2 points per year among persons aged 60 years and older. Similarly, the incidence of intensity-adjusted multidimensional poverty decreased at an average annual rate of 0.9 percentage points for children and adolescents, compared to 0.6 percentage points among 18–59-year-olds and among persons aged 60 years and older.

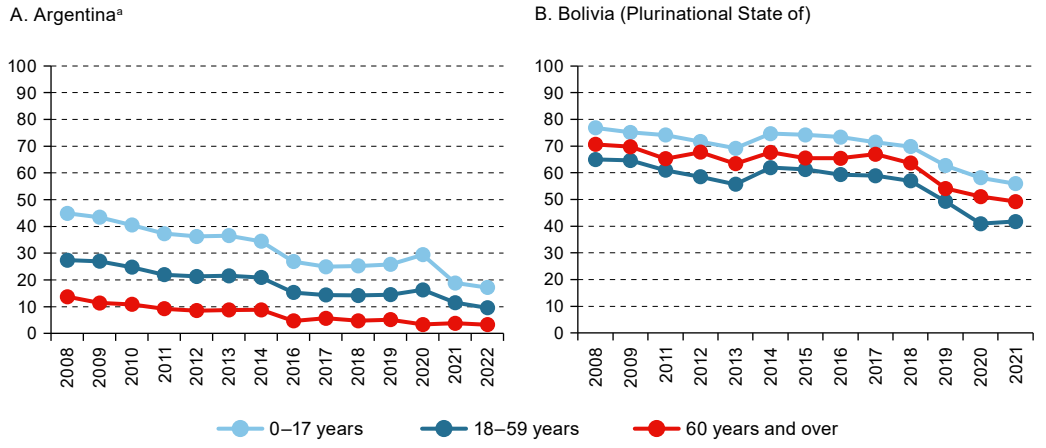
The MPI-LA results also show that children and adolescents were the group hit hardest by the pandemic. Between 2019 and 2020, the incidence of multidimensional poverty increased by 2.6 percentage points in this age group, mainly owing to the rise in the indicator of non-attendance or lagging behind at school. Among 18–59-year-olds, the incidence of multidimensional poverty increased by 1.5 percentage points. In contrast, among persons aged 60 years and over, it fell by 0.3 points, possibly reflecting the shortage of indicators to measure deprivation in this group, particularly in the health domain.[4] Subsequently, between 2020 and 2022, the incidence of multidimensional poverty fell by much more among children and adolescents than among 18–59-year-olds or persons aged 60 years and over (by 2.7 percentage points per year, compared to 1.8 and 0.8 percentage points per year, respectively).

The higher incidence of multidimensional poverty among children and adolescents than in other age groups is a consistent pattern in nearly all Latin American countries (see figure III.8).[5] Around 2022, the highest rates of multidimensional poverty among children and adolescents were recorded in El Salvador, Honduras, Paraguay and the Plurinational State of Bolivia, where incidence exceeded 50%. In contrast, Chile, Costa Rica and Uruguay recorded multidimensional poverty among children and adolescents of around 10% or less.

■ Figure III.8

Latin America (15 countries): incidence of multidimensional poverty, by age group and country, 2008–2022

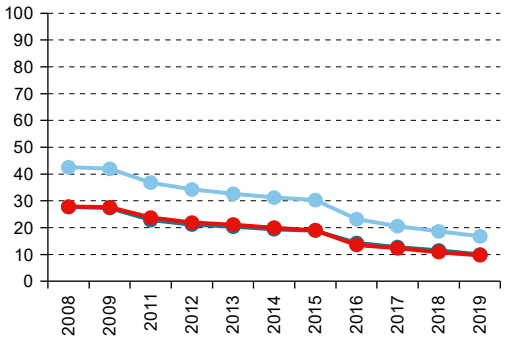
(Percentages)



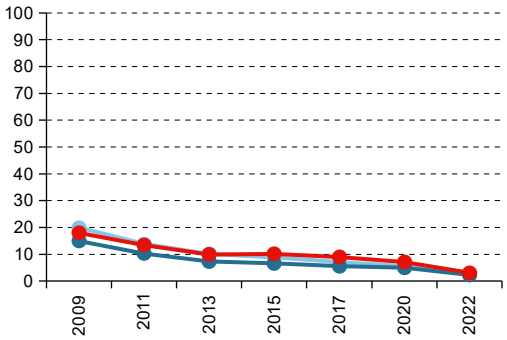
4 As noted above, MPI-LA is conditioned by the availability of comparable information in the different countries' data sources.

5 The only exceptions are Chile in 2015, 2017, 2020 and 2022; the Dominican Republic in 2008–2016, except for 2011; and Paraguay in 2019. Comparing persons under 18 years old and those aged 18 to 59 years, the incidence of poverty is higher among the former in all countries and survey rounds.

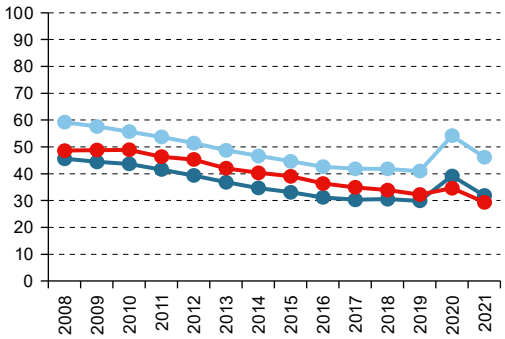
C. Brazil



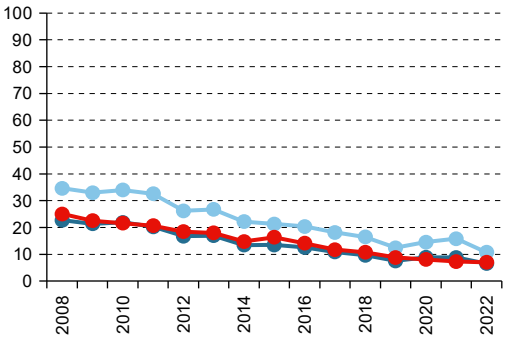
D. Chile



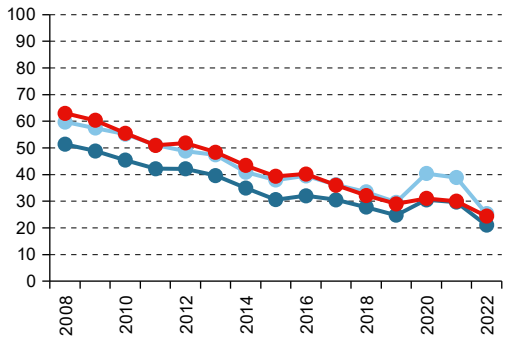
E. Colombia



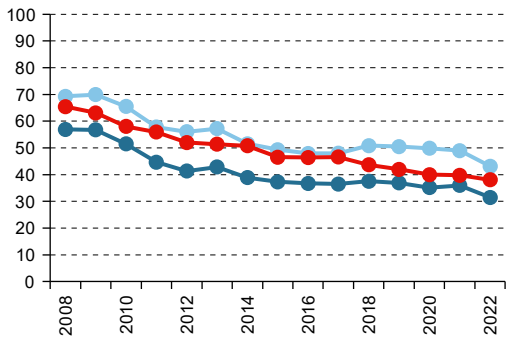
F. Costa Rica

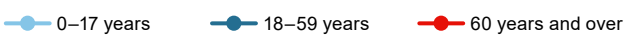


G. Dominican Republic

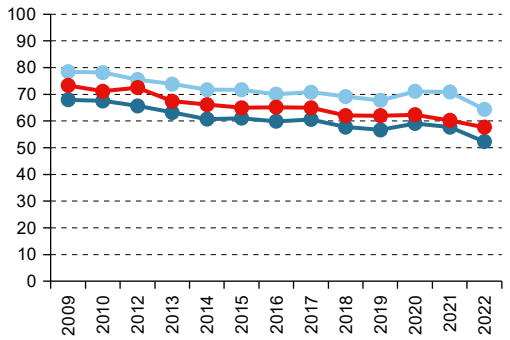


H. Ecuador

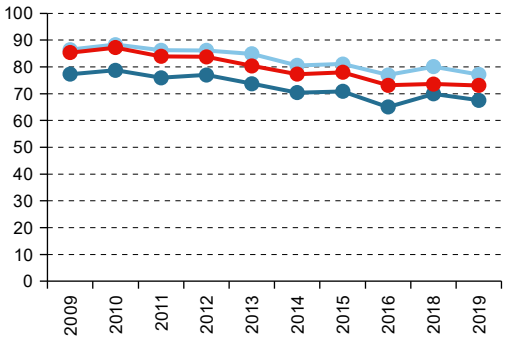




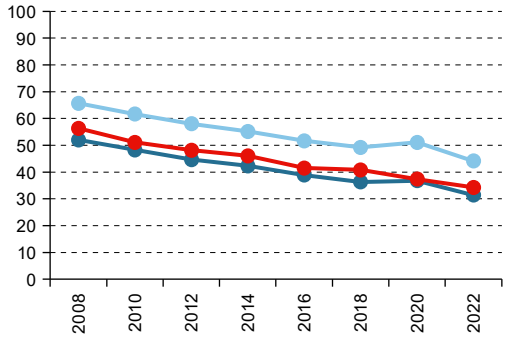
I. El Salvador



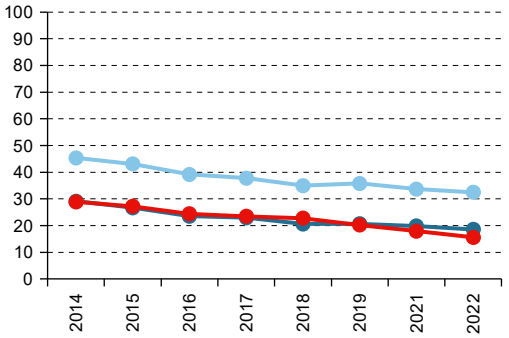
J. Honduras



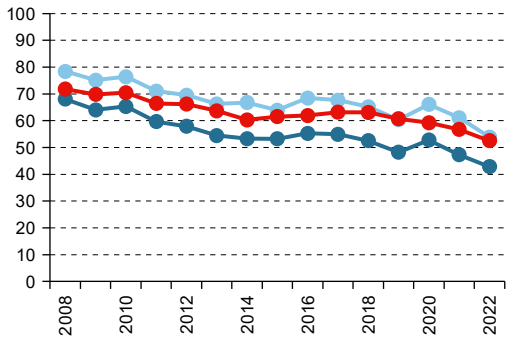
K. Mexico



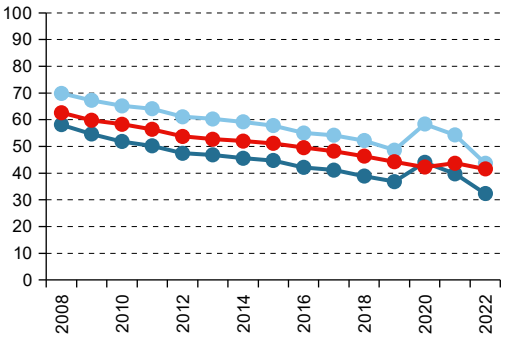
L. Panama

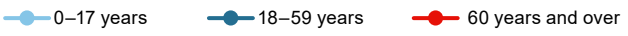


M. Paraguay

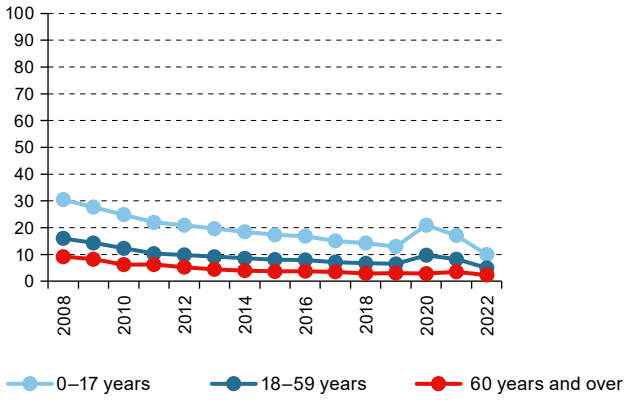


N. Peru





O. Uruguay



Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Urban zones only.

Around 2022, the incidence of multidimensional poverty was higher among persons aged 60 years and over than among 18–59-year-olds in 10 out of 15 countries in the region, and the difference was more than 5 percentage points in Ecuador, El Salvador, Honduras, Paraguay, Peru and the Plurinational State of Bolivia. These results contrast with estimates obtained from the income poverty measure, where the incidence of monetary poverty is greater among persons aged 60 and over than among 18–59-year-olds in just one of the same 15 countries and years.[6]

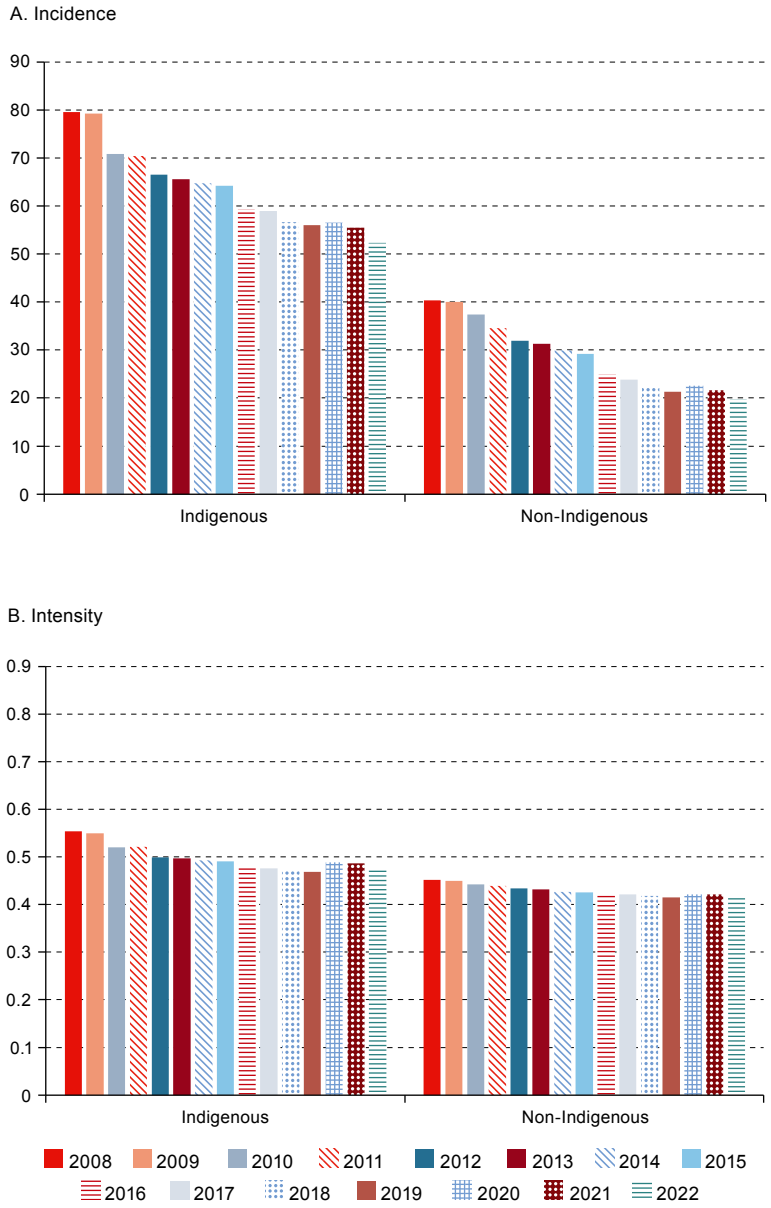
On the basis of its monetary measure, ECLAC (2022a, 2023) has shown that poverty has a much higher incidence among Indigenous people than among the rest of the population. This is confirmed using MPI-LA. Around 2022, multidimensional poverty affected one in every two people who claimed membership of an Indigenous population, compared to one in five non-Indigenous people (see figure III.9). The intensity of multidimensional poverty was also greater among Indigenous people than among the non-Indigenous population: the average deprivation score for the former group was 0.48 (5.7 deprivations) and for the latter, 0.42 (around 5 deprivations). In 2022, the adjusted incidence of poverty was almost three times higher among the Indigenous population than among the non-Indigenous (0.25 compared to 0.08, respectively).

[6] Estimations based on Economic Commission for Latin America and the Caribbean. *Household Survey Database* (BADEHOG). The data sources are the same as those used to measure multidimensional poverty.

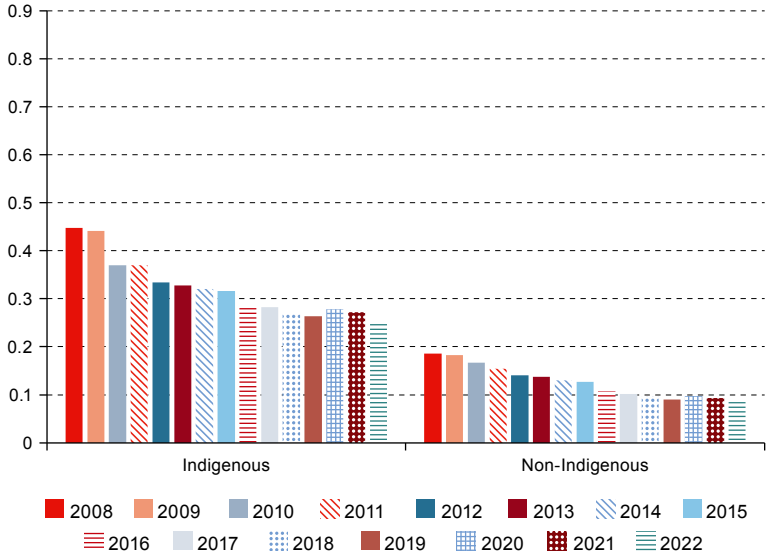
■ Figure III.9

Latin America (9 countries):[a] multidimensional poverty indicators, by ethnicity, weighted averages, 2008–2022

(Percentages and index values)



C. Adjusted incidence



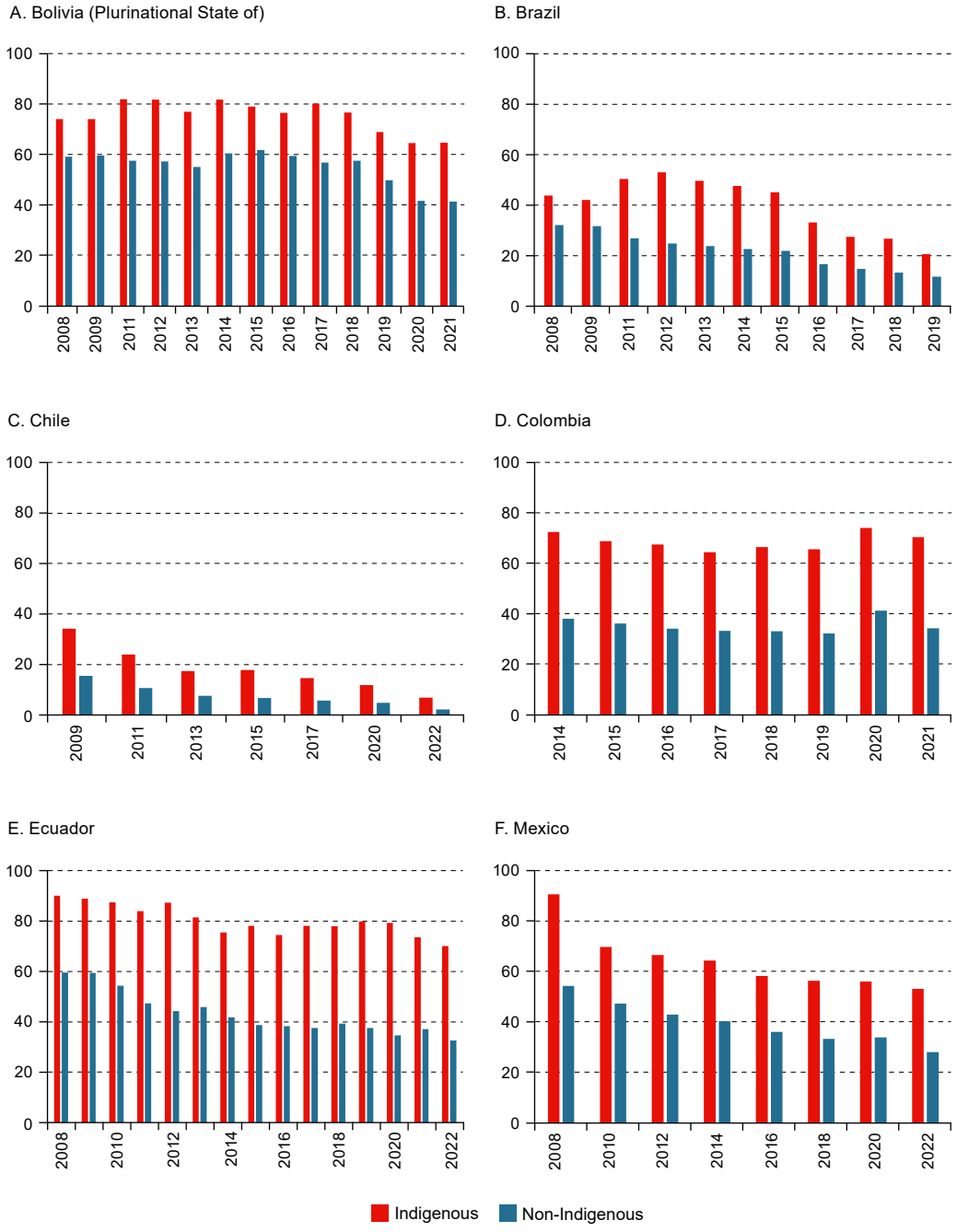
Source: Economic Commission for Latin America and the Caribbean.
[a] Brazil, Chile, Colombia, Ecuador, Mexico, Panama, Peru, the Plurinational State of Bolivia and Uruguay.

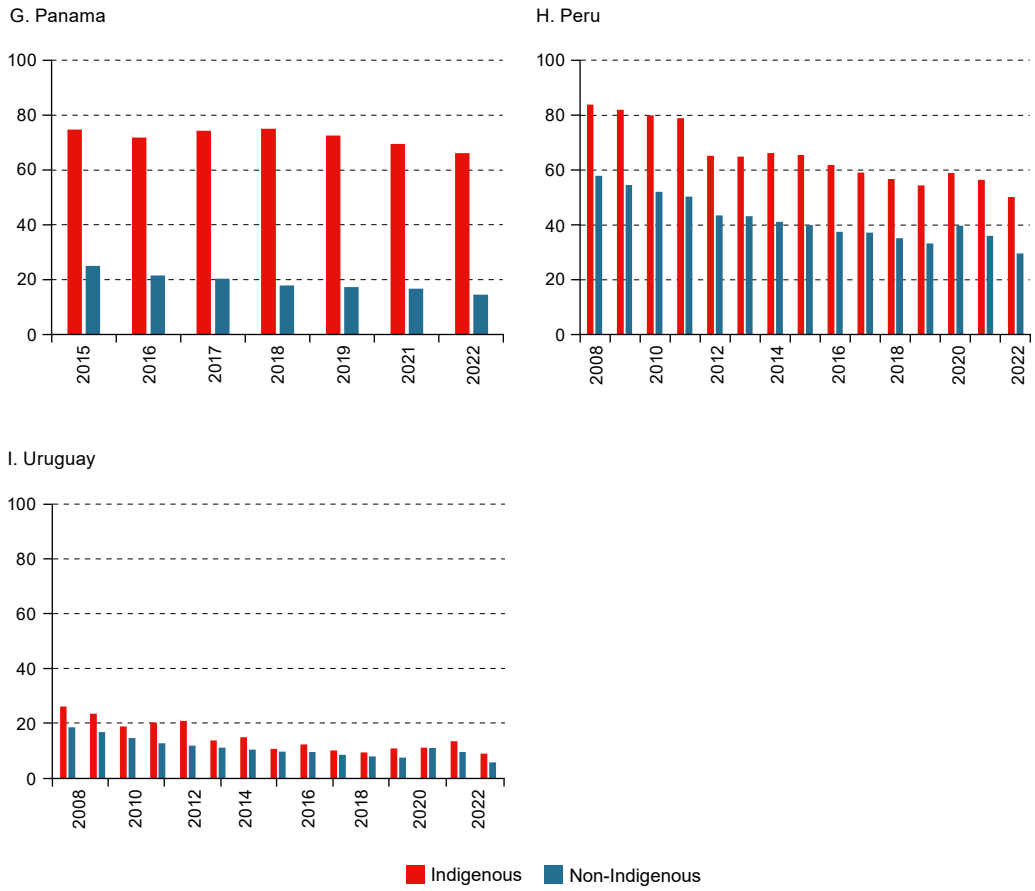
However, between 2008 and 2022, multidimensional poverty declined faster, in absolute terms, among Indigenous than among non-Indigenous people. The incidence of multidimensional poverty decreased by an annual average of 1.9 percentage points among the former and by 1.5 points among the latter. The adjusted incidence, meanwhile, declined by 1.4 percentage points per year among Indigenous people —almost double the rate recorded among non-Indigenous people (0.72 percentage points per year).

Around 2022, the highest incidences of multidimensional poverty among Indigenous populations were recorded in Colombia, Ecuador, Panama and the Plurinational State of Bolivia, in that order (see figure III.10). In that year, the largest disparities in poverty incidence between Indigenous and non-Indigenous people were in Panama and Bolivia (52 percentage points), followed far behind by Ecuador and Colombia, with gaps of 38 and 36 percentage points, respectively. Between 2008 and 2022, the incidence of multidimensional poverty among Indigenous peoples decreased most rapidly in Mexico, Peru, Brazil and Chile —by 2.7, 2.4, 2.1 and 2.1 percentage points per year, respectively. The pace of reduction was slowest in the Plurinational State of Bolivia (0.7 percentage points per year) and Colombia (0.3 points per year).

■ Figure III.10
Latin America (9 countries): incidence of multidimensional poverty, by ethnicity and country, 2008–2022

(Percentages)





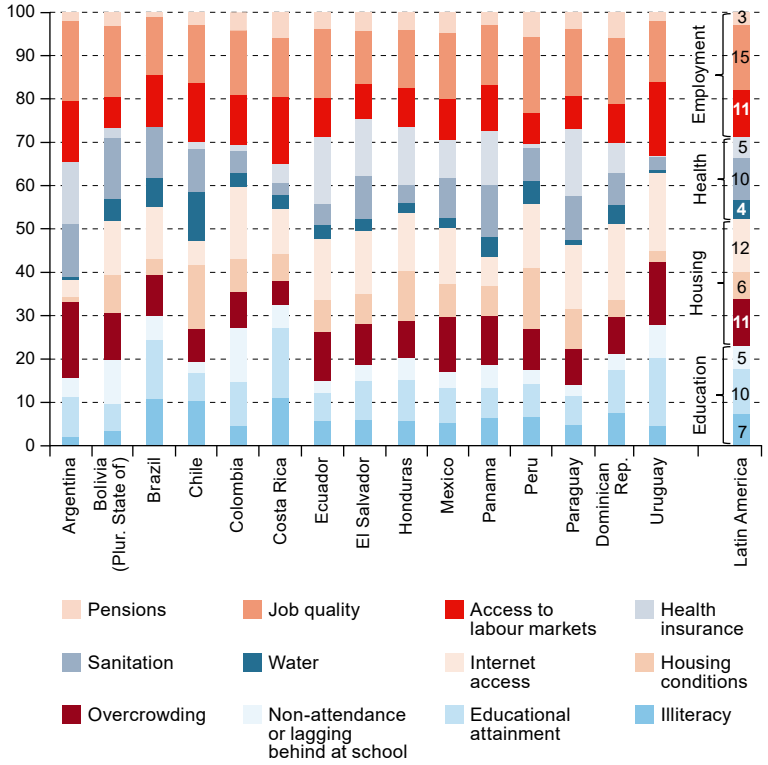
Source: Economic Commission for Latin America and the Caribbean.

C. Composition of multidimensional poverty

Around 2022, the dimensions that contributed most to multidimensional poverty in Latin America were housing conditions/services and employment/pensions. These accounted for 29.1% and 28.8% of the adjusted incidence of poverty, respectively, while education (23.2%) and health (18.9%) made the smallest contributions. Considering each of the deprivation indicators separately, those that contributed most to multidimensional poverty were bad job quality, lack of Internet access, lack of access to the labour market and overcrowding. These accounted for 14.9%, 12.2%, 10.9% and 10.7%, respectively. Those that contributed the least were non-attendance or lagging behind at school, lack of health insurance, inadequate access to water and insufficient pensions (see figure III.11).

■ Figure III.11
Latin America (15 countries): relative contribution of the dimensions and deprivations to multidimensional poverty, by country and regional total, around 2022

(Percentages)



Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.

The very small contributions made by indicators of non-attendance or lagging behind at school and inadequate access to water reflect the progress made by the region's countries in expanding the coverage of compulsory education and the water supply network. Demographics play a role in the small contribution of the inadequate pensions indicator, since it applies only to households with older members, and because households living in poverty tend to consist of younger persons. It is also notable that the contribution of the various deprivations does not seem to be related to the level of poverty in each country. The major exception is lack of access to the labour market, which contributes more to poverty in countries where the incidence of intensity-adjusted poverty is lower (Spearman's correlation coefficient = -0.79). In poorer countries, lack of health insurance and inadequate housing conditions tend to have a greater impact.

Consequently, about a quarter of the region's total multidimensional poverty is explained by low-quality employment and barriers to labour market access. This highlights the need for policies that simultaneously address the heterogeneity of the productive structure and the burden of unpaid domestic work borne by women in the region (see chapter IV). Moreover, the contributions of deprivation in terms of Internet access and overcrowding highlight the importance, for the most vulnerable sectors, of public connectivity initiatives and social housing policies that consider the space available within the dwelling as a fundamental element.

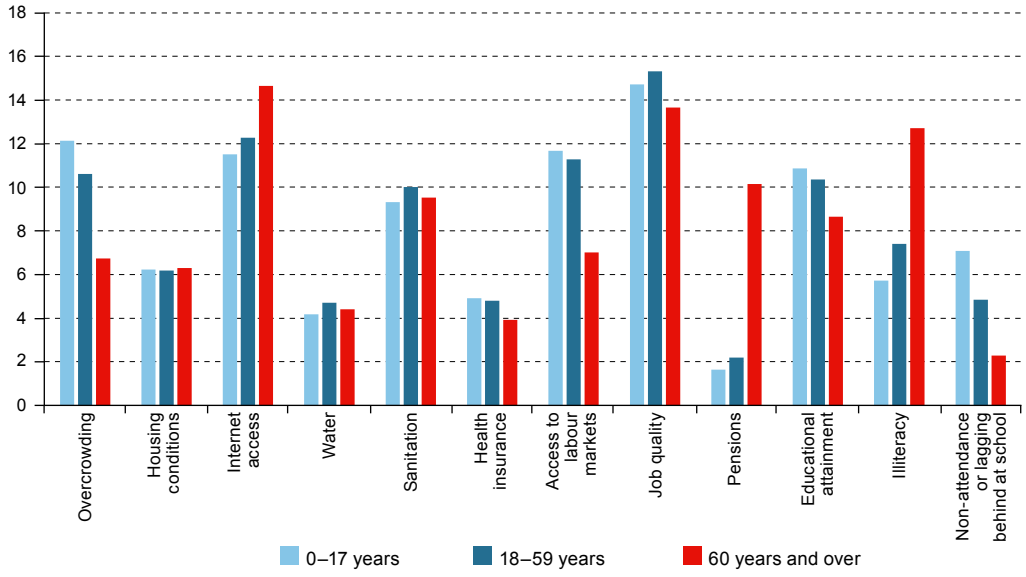
Some deprivations, such as those related to job quality, housing conditions and water and sanitation, affect all age groups equally. Others contribute more to poverty in certain age groups (see figure III.12A). Inadequate pensions, illiteracy and lack of Internet access, for example, contribute more to poverty among older persons. In contrast, children and adolescents are affected more by non-attendance and lagging behind at school, as well as overcrowding. Therefore, the fact that the MPI-LA identification unit is the household does not obscure certain life cycle differences. Differences related to zone of residence are smaller than those related to the life cycle (see figure III.12B).

■ Figure III.12

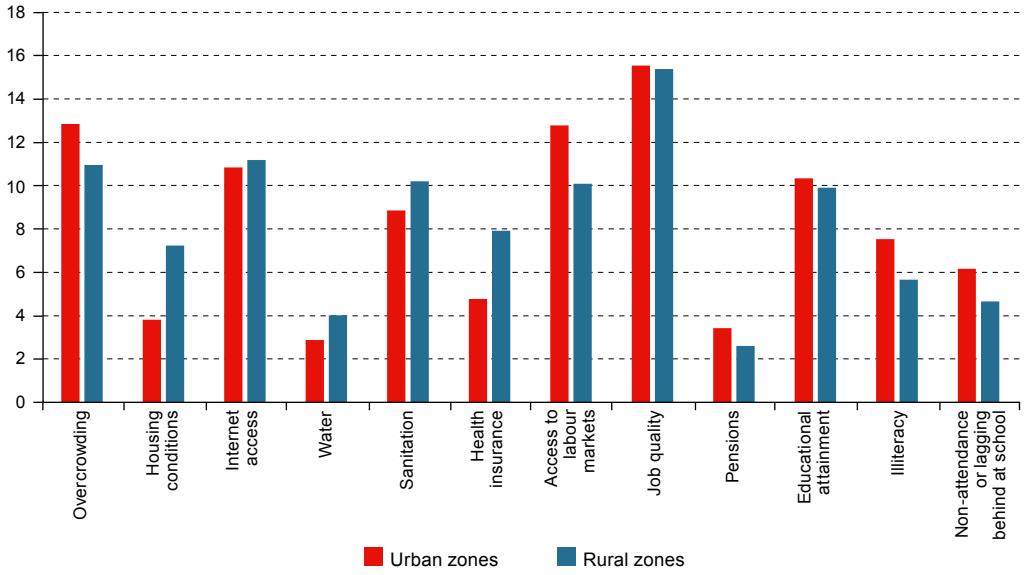
Latin America (15 countries):[a] relative contribution of individual deprivations to multidimensional poverty, by age group and zone of residence, around 2022

(Percentages)

A. By age group



B. By zone of residence[b]



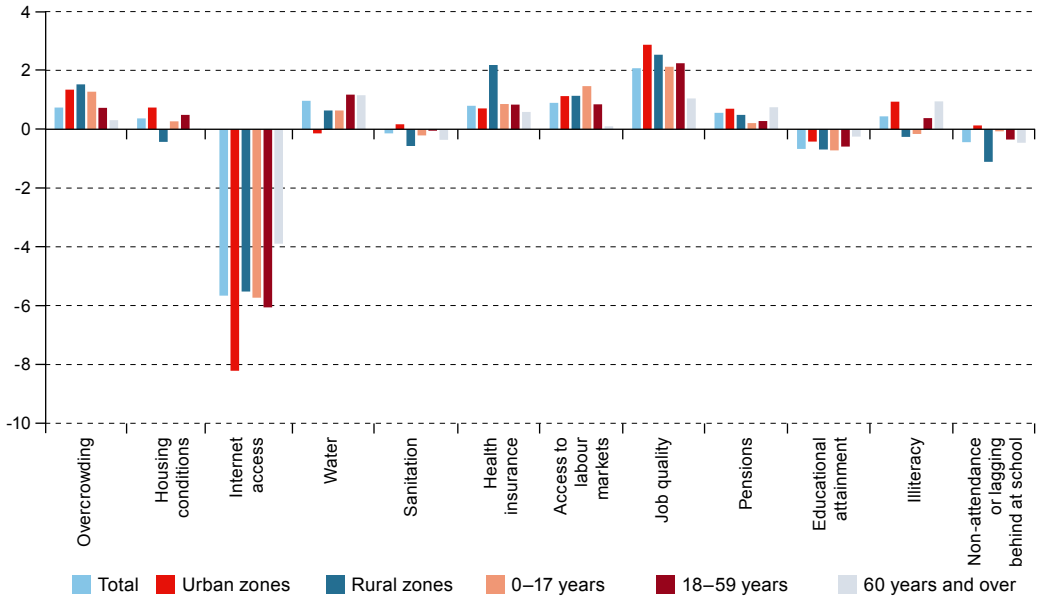
Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.
[b] Argentina is not included in the breakdown by zone of residence.

The contribution made by the different deprivations to total multidimensional poverty in the region did not change substantially between 2008 and 2022, except for lack of Internet access. In this case, the contribution to total poverty declined by 5.7 percentage points in that period (see figure III.13) and by 8.2 percentage points in urban areas. By age group, the contribution of lack of Internet access to poverty declined less among older people (by 3.9 percentage points). In contrast, the contribution of poor-quality employment to total poverty increased by 2.1 points, with the increase being greater in urban areas than in rural ones. The contribution of lack of health insurance also increased and by significantly more in rural zones (2.2 percentage points) than in urban areas (0.7 points). Consequently, between 2008 and 2022, the contribution of the employment and pensions dimension to total poverty grew by 3.6 percentage points, while that of the housing dimension declined by 4.5 points.

In the nearly 15 years spanning 2008 and 2022, the contribution of the indicators that are most sensitive to changes in household demographics, namely individual indicators and overcrowding, has been very stable. It can therefore be concluded that variations in multidimensional poverty during this period are not due mainly to changes in the demographic composition of households, but to other factors.

■ Figure III.13
Latin America (15 countries):[a] variation in the contribution of the deprivations to multidimensional poverty, 2008–2022

(Percentage points)



Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

D. Multidimensional poverty and income poverty

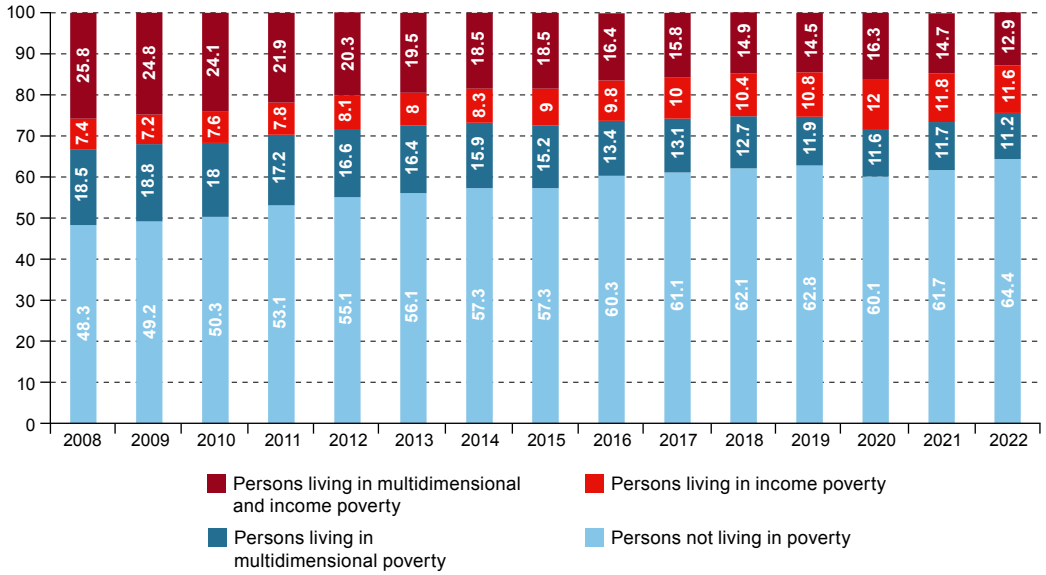
Applying both the multidimensional poverty and the income poverty measurement methods shows that, between 2008 and 2022, the proportion of the regional population identified by both methods as living in poverty diminished steadily, while the proportion not identified as living in poverty increased similarly (see figure III.14). The proportion of the population identified to be in both multidimensional and income poverty fell from 25.8% in 2008 to 12.9% in 2022, equivalent to a reduction of 0.9 percentage points per year. The population that was not in poverty according to either method increased from 48.3% in 2008 to 64.4% in 2022, or by 1.2 percentage points per year. The population living in multidimensional poverty alone contracted by 0.5 percentage points per year, while the population living in income poverty alone expanded by an annual average of 0.3 percentage points. Given these variations, the incidence of income-only poverty was slightly higher than that of multidimensional poverty in 2020, 2021 and 2022. This contrasted with the situation at

the start of the period, when the incidence of the latter was substantially higher. In 2008, 2009 and 2010, the proportion of the population living in multidimensional poverty alone was more than 10 percentage points larger than that living in income poverty alone.

■ Figure III.14

Latin America (15 countries):[a] multidimensional poverty and income poverty, 2008–2022

(Percentages)



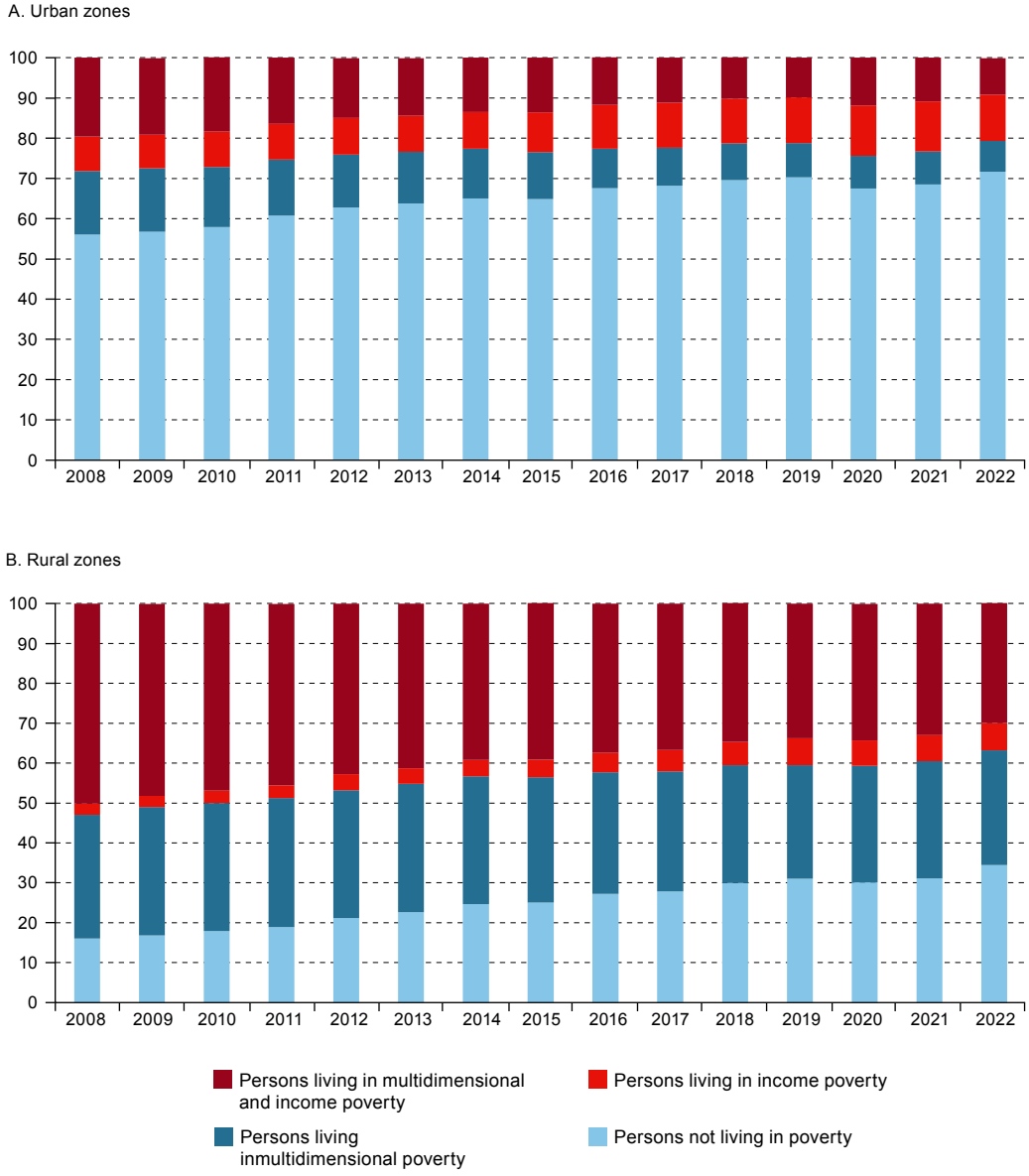
Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

The cross-classification of the multidimensional and monetary measurements reveals striking differences in the distribution of the various categories of poor and non-poor people by zone of residence (see figure III.15). Around 2022, the proportion of the population living in poverty according to both methods was 30.1% in rural areas, compared to 9.1% in urban zones. Similarly, the proportion who were not considered poor by either method was 71.7% in urban areas and 34.4% in rural ones. Moreover, the proportion of the population living in multidimensional poverty alone was much higher in rural than in urban zones (28.8% compared to 7.6%, respectively), whereas the proportion living in income poverty alone was greater in urban areas (11.5%) than in rural ones (6.8%). This means that if the ECLAC monetary poverty measurement were used exclusively to allocate resources, the chances of committing an exclusion error would be greater in rural areas. In contrast, if only MPI-LA could be used, the likelihood of committing an exclusion error would be greater in urban zones.[7]

[7] This does not mean that a multidimensional measure will always capture more poverty than a monetary measure in rural areas, or that the monetary indicator will always report more urban poverty than the multidimensional method.

■ Figure III.15
Latin America (14 countries):[a] multidimensional poverty and income poverty, by zone of residence, 2008–2022

(Percentages)



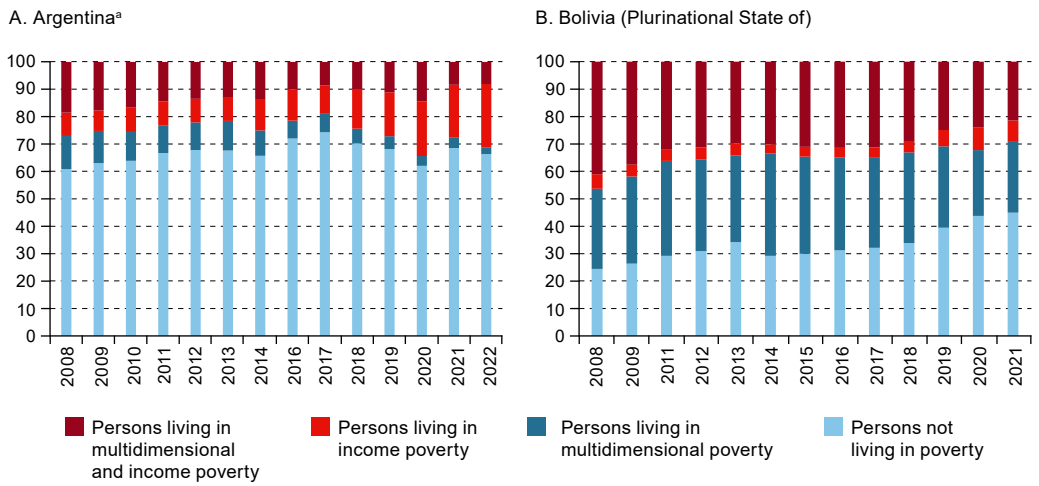
Source: Economic Commission for Latin America and the Caribbean.
Note: The figures represent the weighted average for the region.
[a] Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

There are also differences between zones of residence in the trend of the different categories, resulting from the cross-classification of the multidimensional and monetary measurements. The proportion of the population living in multidimensional poverty alone decreased by much more in urban zones than in rural ones (by 0.6 compared to 0.2 percentage points per year, respectively). As a result, since 2016, the incidence of income poverty alone has exceeded that of multidimensional poverty alone in urban zones. In rural areas, in contrast, multidimensional poverty alone continues to be much more prevalent than income poverty alone, although the gaps have narrowed.

Comparing the results of the multidimensional and monetary measurements also reveals significant heterogeneity among countries (see figure III.16). Around 2022, the highest incidences of poverty according to both methods were observed in Honduras, El Salvador, the Plurinational State of Bolivia, Colombia and Paraguay. In that group of countries, the proportion of the population living in multidimensional and income poverty was 20% or more. In Costa Rica, Uruguay and Chile, however, no more than 5% of the population was in that situation. Considering multidimensional poverty alone, the highest rates were recorded in El Salvador, Paraguay, Peru and the Plurinational State of Bolivia, whereas Argentina had the highest incidence of income poverty alone, followed at a distance by Brazil, Colombia and Costa Rica.

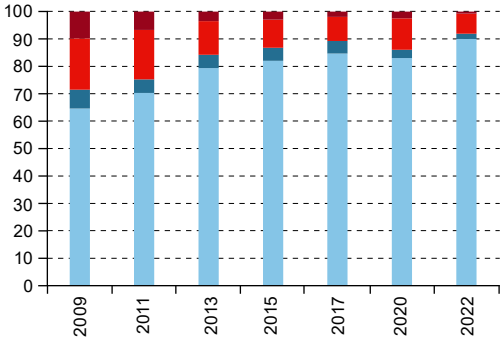
■ Figure III.16
Latin America (15 countries): multidimensional poverty and income poverty, by country, 2008-2022

(Percentages)

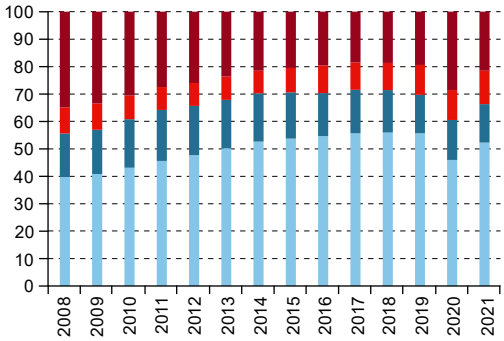


C. Brazil

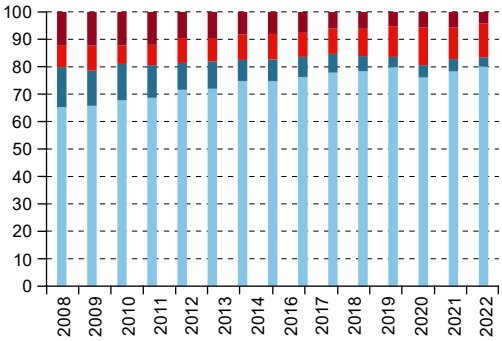
D. Chile



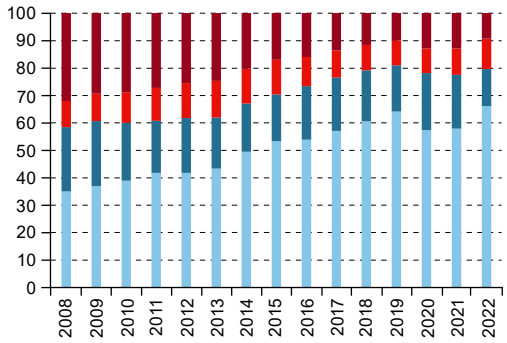
E. Colombia



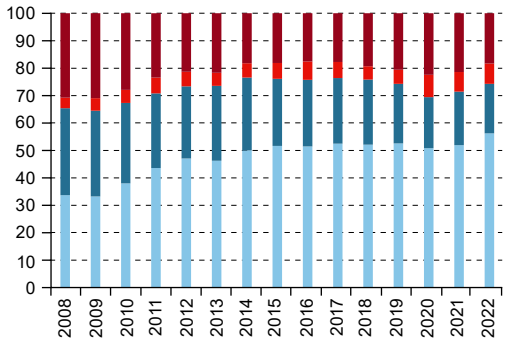
F. Costa Rica



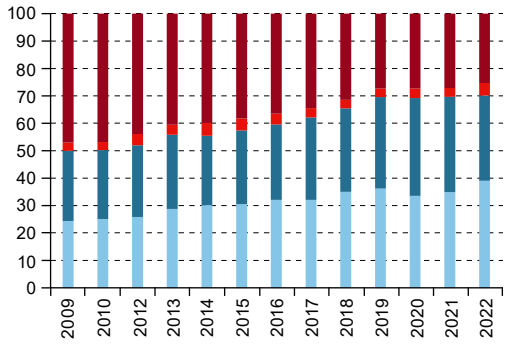
G. Dominican Republic



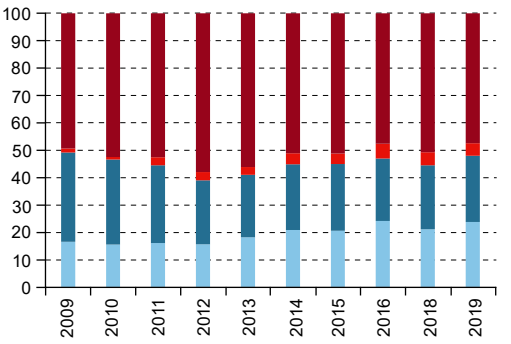
H. Ecuador



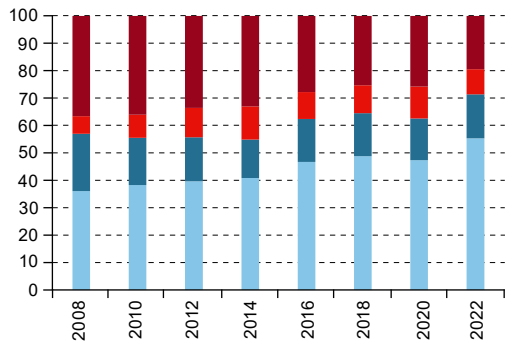
I. El Salvador



J. Honduras

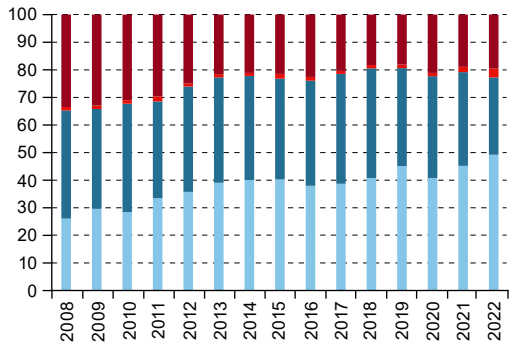


K. Mexico

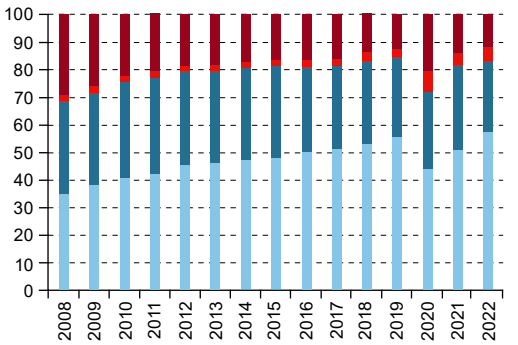


L. Panama

M. Paraguay



N. Peru



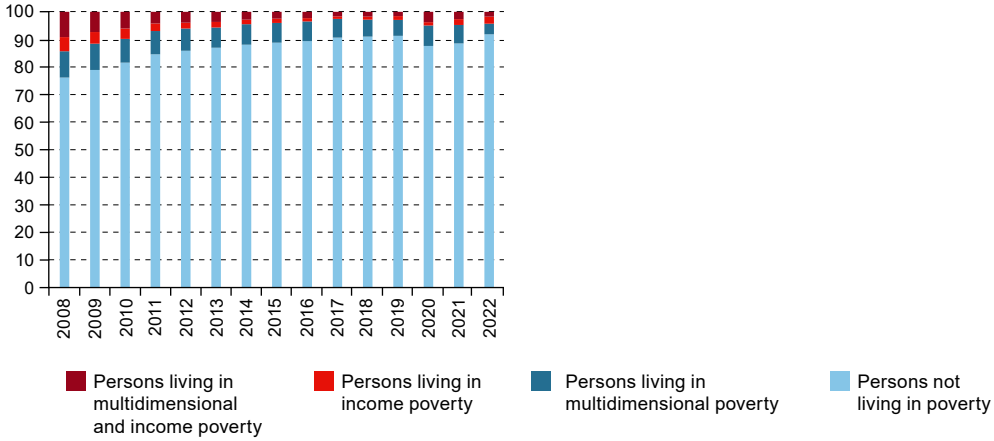
Persons living in multidimensional and income poverty

Persons living in income poverty

Persons living in multidimensional poverty

Persons not living in poverty

O. Uruguay



Source: Economic Commission for Latin America and the Caribbean.
[a] Urban zones only.

The countries in which the population living in poverty according to both methods fell by most between 2008 and 2022 were El Salvador, the Dominican Republic, the Plurinational State of Bolivia and Mexico, with average annual reductions of 1.7, 1.6, 1.5 and 1.3 percentage points, respectively. The incidence of multidimensional poverty alone declined in 14 out of 15 countries, with reductions of between 0.9 and 1 percentage point per year in Ecuador, Brazil, Costa Rica, Panama and Honduras. The exception was El Salvador, where multidimensional poverty alone increased by an annual average of 0.4 percentage points. Income-only poverty increased in 13 out of 15 countries —and by 1 percentage point per year in Argentina— retreating only in Chile and Uruguay.

One last point to consider in the intersection of multidimensional and income poverty is that MPI-LA includes a number of monetary indicators. One of the conditions for a person to be identified as having poor-quality employment is to have an income from work below the ECLAC poverty line, and one of the conditions for a person to be considered to have an inadequate pension is for its amount to be below that line. While this is not equivalent to incorporating the household monetary poverty indicator into MPI-LA, it does mean that caution is needed when making comparisons.

Chapter IV
Gender gaps: an analysis at the individual level

When the identification unit of a multidimensional measurement is the household, as in the case of MPI-LA, individual deprivations have to be transformed into household deprivations. To determine whether a household is deprived therefore requires a second threshold to be defined, which, as noted above, can be done through various procedures. One of these is union, whereby all members of the household are considered deprived in a given indicator if at least one member has a deprivation in that indicator (for example, a household is considered deprived in terms of employment if at least one of its members is unemployed). Another procedure is intersection, in which every household member to whom the indicator applies must be deprived for the household itself to be considered deprived. An intermediate threshold can also be used, whereby, for example, a certain proportion of household members must be deprived for the entire household to be classified as deprived.

The application of procedures to transform individual deprivations into household deprivations obscures differences in well-being among household members, since either all members are deprived or none are. This would not be a problem if there were no differences in well-being between household members, or if the differences were not systematic, but this does not seem to be the case. The use of transformation procedures has been criticized because it obscures the deprivation affecting female household members, which would result in the incidence of gender disparities being understated at the aggregate level (Klasen and Lahoti, 2021; Munoz et al., 2018; UN Women, 2018).[1] Data from the region indicate that gender inequalities exist within the household as a result of the traditional model of the sexual division of labour, which overloads women with domestic work, hinders their labour and social inclusion and limits their economic autonomy (ECLAC, 2023).

Given that a measurement for which the household is the identification unit poses difficulties when analysing gender gaps, a complementary measurement of MPI-LA

[1] Clearly, there are also differences in well-being within households, related to the life cycle and other factors, such as disabilities, illnesses, or kinship relationships. These differences are not considered in this document because the individual information available in the data sources is not sufficient to address them adequately.

is proposed, which seeks to examine gender inequalities in the context of multidimensional deprivation. This measurement has the following three characteristics: (i) it is based on an individual measurement in which the deprivations faced by each person are not transformed into deprivations for the entire household; (ii) it applies to the reference population of between 20 and 59 years of age, since information on individual deprivations is more complete for this age group; and (iii) it is based on the same information and structure as used in MPI-LA, with an adjustment in the employment dimension to include an indicator of "lack of own income", which accounts for the deprivation in income and social protection faced by the unemployed population.[2] Table IV.1 presents the structure of the individual deprivation measure designed to capture gender gaps. The threshold (k), used to determine gender inequalities in individual multidimensional deprivation, is the same as used in MPI-LA, namely $k = 33\%$.

■ Table IV.1

Latin America: measurement of individual multidimensional deprivation, indicators used to capture gender gaps in the population aged 20–59 years

Dimension	Indicator	Deprivation threshold	Weight
Housing	Housing conditions	Same as MPI-LA	1/12
	Overcrowding	Same as MPI-LA	1/12
	Internet access	Same as MPI-LA	1/12
Health	Water	Same as MPI-LA	1/12
	Sanitation	Same as MPI-LA	1/12
	Health insurance	The person does not have health insurance.	1/12
Education	Low educational attainment	The person does not attain his/her age-appropriate educational level	1/8
	Illiteracy	The person cannot read or write.	1/8
Employment and own income	Access to labour markets	The person is in one of the following situations: - Unemployed - Outside the labour market owing to domestic tasks[a]	1/8
	Quality of employment or lack of own income	The person is in one of the following situations: - Employed but not contributing to pension systems - Employed as an unpaid family worker - Employed with an income below the ECLAC monetary poverty line - Unemployed or outside the labour force and with own income below the ECLAC monetary poverty line[b]	1/8

Source: Economic Commission for Latin America and the Caribbean.

[a] This situation is considered deprivation in households where at least one member is either under 18 years old or 70 years of age or older. Although there might be a household member who is not in this age range but is dependent and requires care from the person who is outside the labour market, household surveys do not allow for the systematic and harmonized detection of such situations.

[b] Own income is individual income from wages, salaries and profits; retirement and pensions; transfers between households and from abroad; government transfers; income from fixed-term investments; property income and other income sources.

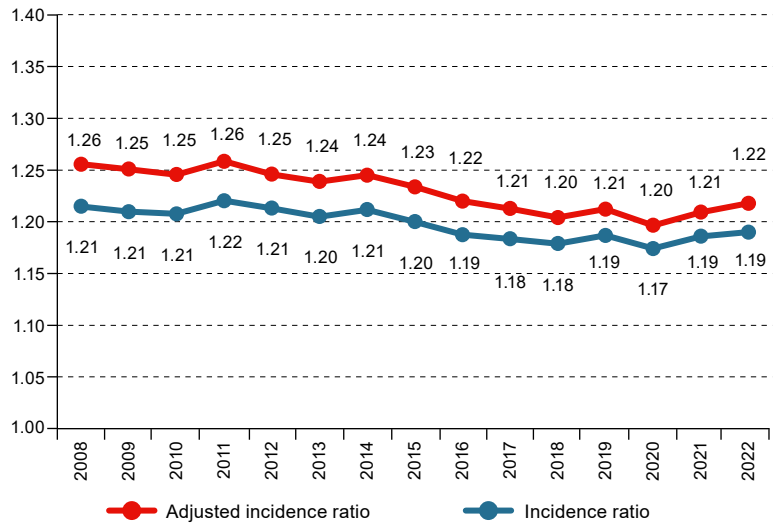
[2] See Milosavljevic (2008) for information on the concept of own income.

Using individual measurement, it can be seen that there are significant and sustained gender disparities among Latin Americans aged between 20 and 59 years throughout the data series. Around 2022, the incidence of individual multidimensional deprivation at the regional level was 1.19 times higher among women than among men (see figure IV.1). This ratio represents a very slight reduction in gender inequality since 2008, when individual multidimensional deprivation was 1.21 times higher among women. These levels of disparity are quite close to those obtained with the femininity index for poverty constructed on the basis of the ECLAC (2024) monetary measurement.

■ Figure IV.1

Latin America (15 countries):[a] gender disparities in individual multidimensional deprivation indicators, population aged 20–59 years, regional weighted averages, 2008–2022

(Ratio)[b]



Source: Economic Commission for Latin America and the Caribbean.

[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

[b] Calculated as the quotient between the incidence of individual multidimensional deprivation among women relative to the equivalent among men. A ratio above (below) 1 indicates that deprivation is relatively higher (lower) among women.

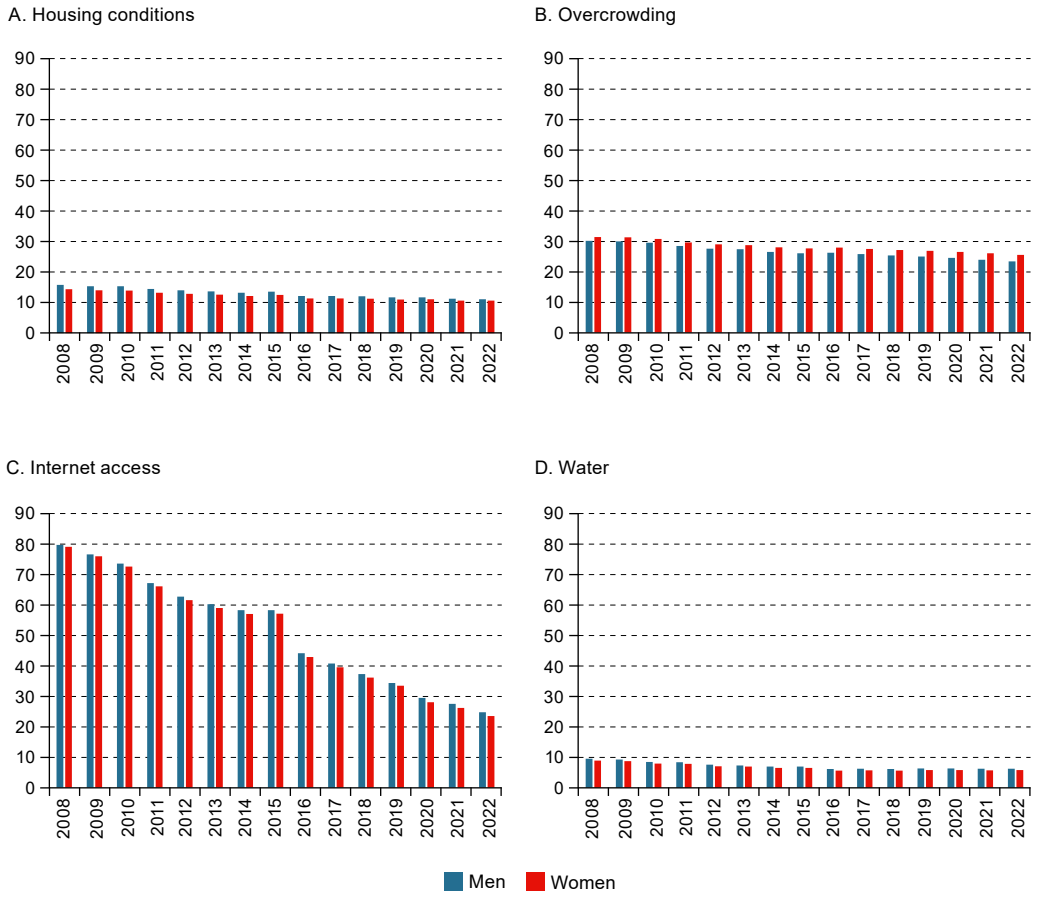
In the regional aggregate, gender differences in individual multidimensional deprivation are explained by gaps in labour market access, job quality and opportunities for economic autonomy. In 2008–2022, by far the greatest disparity was found in terms of no access to the labour market owing to unpaid domestic care work. In this indicator, there was almost no deprivation among the male population, while among women the incidence of deprivation

ranged from 15% to 20% (see figure IV.2). The second largest disparity was in terms of labour income below the monetary poverty line, which was between 12.2 and 15.4 percentage points higher among women than among men throughout the period analysed. Women who were unemployed or outside the labour force were also affected more than men by insufficient or lack of own income. In this case, the difference is due mainly to the fact that there are many more women than men who do not have access to the labour market and who have insufficient income of their own.

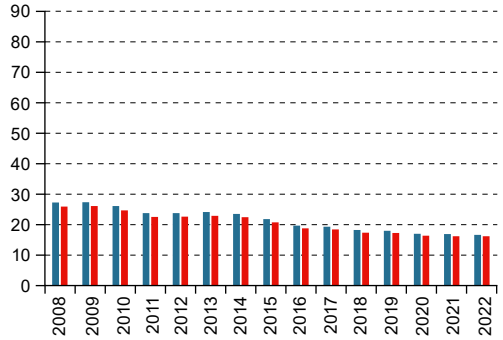
■ Figure IV.2

Latin America (15 countries):[a] simple deprivations in the population aged 20–59 years, by sex, regional weighted averages 2008–2022

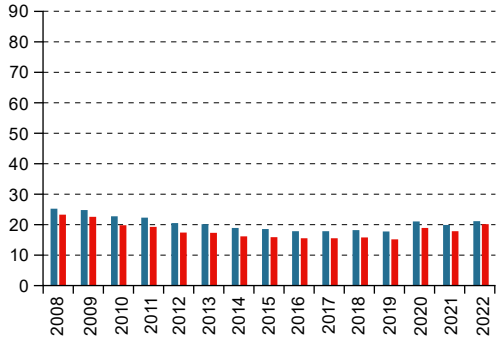
(Percentages)



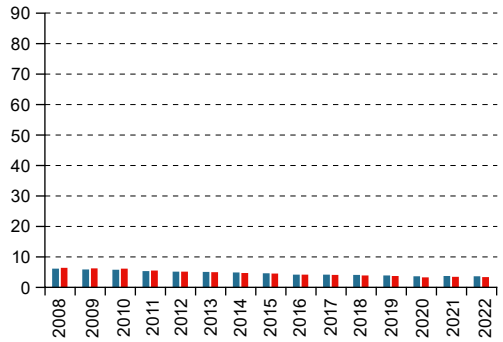
E. Sanitation



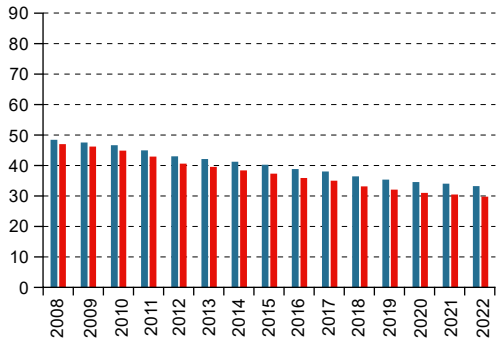
F. Health insurance



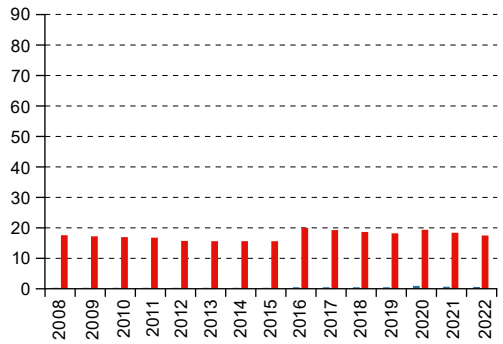
G. Illiteracy



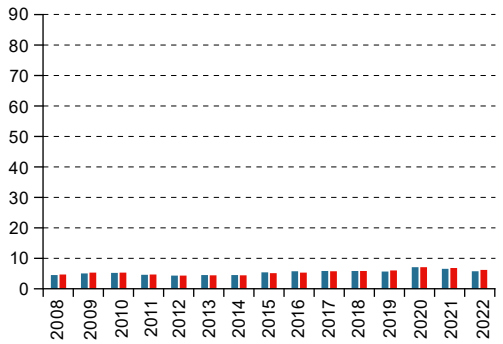
H. Low school attainment



I. Persons outside the labour market owing to domestic tasks

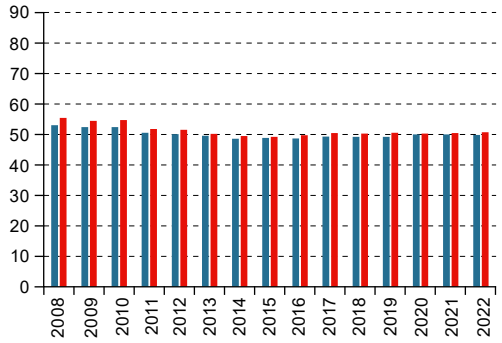


J. Unemployed persons

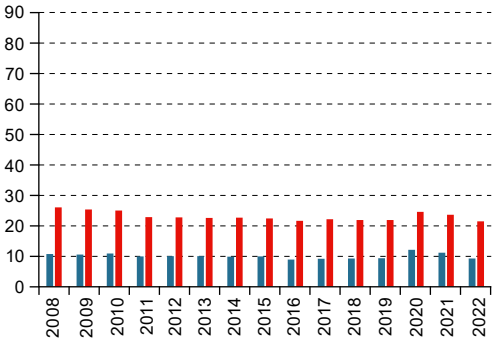


Men Women

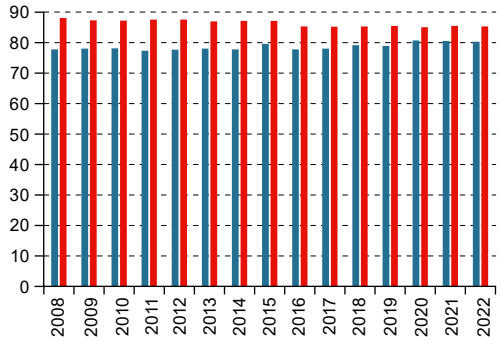
K. Employed persons who do not contribute to a pension system



L. Employed persons with labour income below the ECLAC monetary poverty line



M. Persons who are unemployed or outside the labour market with own incomes below the ECLAC monetary poverty line



Source: Economic Commission for Latin America and the Caribbean.

[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Honduras, Mexico, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

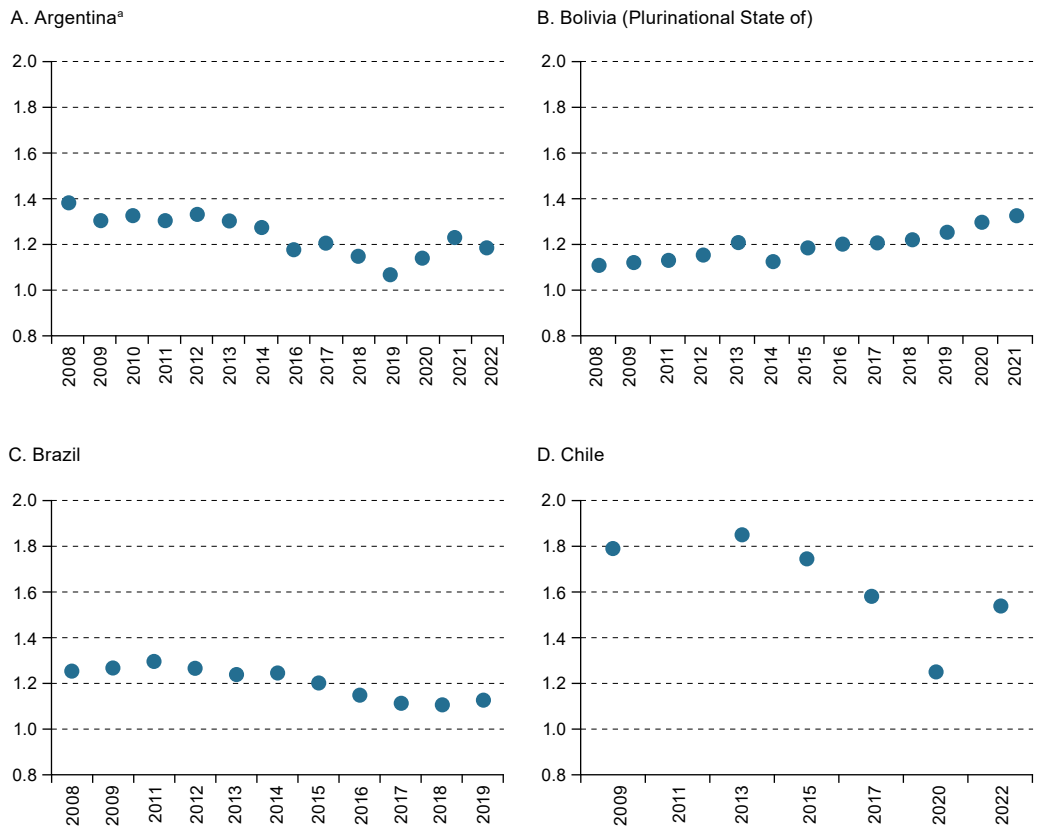
Nonetheless, there are some labour market indicators for which the gender gaps are small. The incidence of non-contribution to pension systems, for example, is only slightly higher among women than among men, with differences fluctuating between 0.2 and 2.4 percentage points between 2008 and 2022. In the case of unemployment, gender differences did not exceed 1 percentage point during that period. In the other dimensions, there are no unfavourable disparities for women in the health and education indicators, and in the housing dimension, overcrowding rates are slightly higher among women, but this is not the case for lack of Internet access and inadequate housing conditions.

Lastly, with regard to individual multidimensional deprivation by country, the greatest gender disparities around 2022 were found in Chile, Ecuador and Uruguay, where the ratios of adjusted incidence of multidimensional deprivation were 1.54, 1.34 and 1.35, respectively, while in Honduras the ratio was 1.05 and in the Dominican Republic it was 0.92 —in other words a relatively unfavourable situation for men. In terms of how gender gaps have evolved, the most significant increases occurred in the Plurinational State of Bolivia, Ecuador and Peru, and the most pronounced decreases were in Chile and Costa Rica (see figure IV.3).

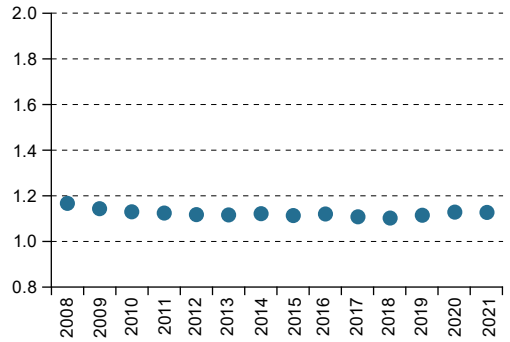
■ Figure IV.3

Latin America (15 countries): gender disparity in the adjusted incidence of individual multidimensional deprivation by country, population aged 20–59 years, 2008–2022

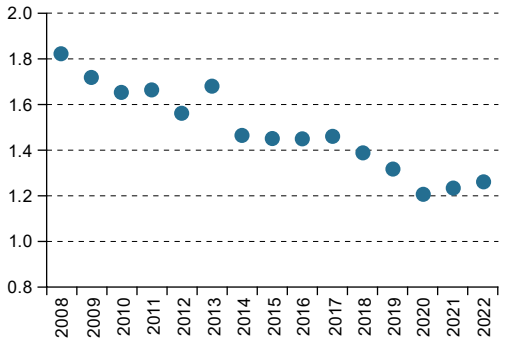
(Ratio)[a]



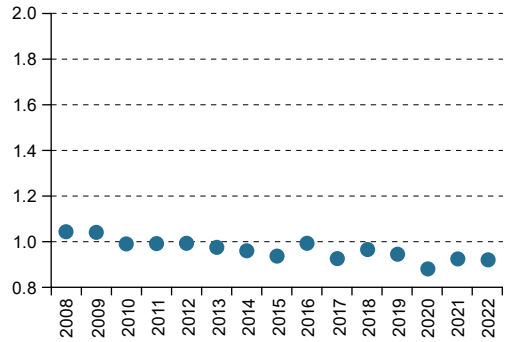
E. Colombia



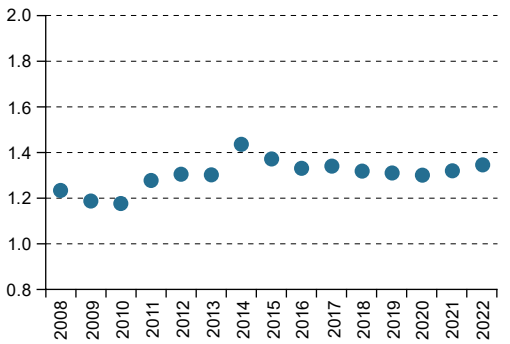
F. Costa Rica



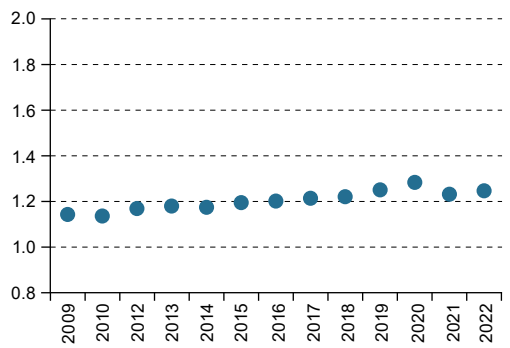
G. Dominican Republic



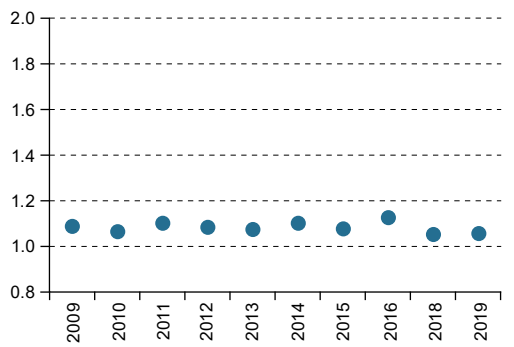
H. Ecuador



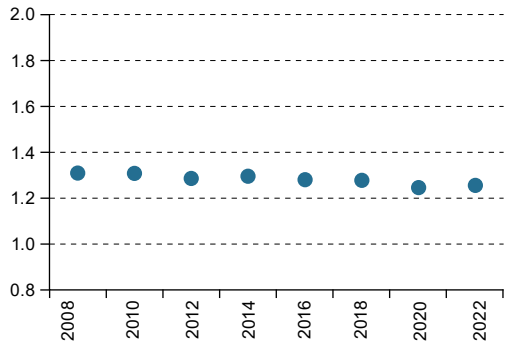
I. El Salvador



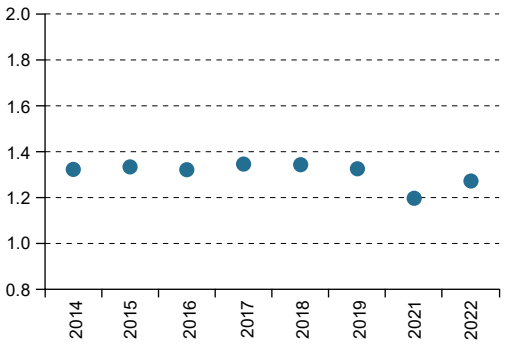
J. Honduras



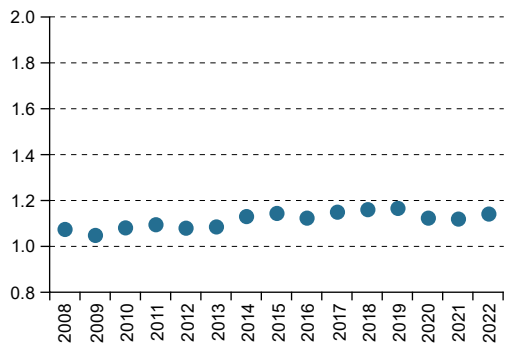
K. Mexico



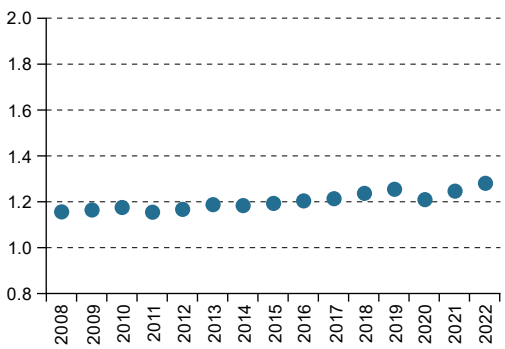
L. Panama



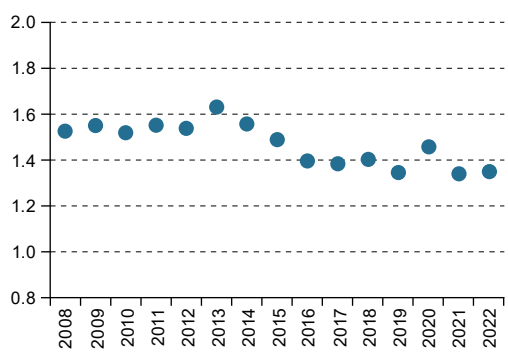
M. Paraguay



N. Peru



O. Uruguay



Source: Economic Commission for Latin America and the Caribbean.

[a] Calculated as the quotient between the adjusted incidence of individual multidimensional deprivation among women relative to the equivalent among men. A ratio above (below) 1 indicates that deprivation is relatively higher (lower) among women.

■ Box IV.1
Individual identification unit in multidimensional poverty measurements

In both the capabilities and the rights approaches, well-being is envisaged as an eminently individual phenomenon. Furthermore, information about individuals is essential for revealing inequalities within the household (Atkinson, 2019). Given these elements, the identification unit should be the individual. However, in the vast majority of poverty measurements for the entire population, whether monetary or non-monetary, the identification unit has been the household, owing to the shortcomings of individual information in the data sources. A first difficulty is that it is not always possible to apply the same dimensions and indicators to the entire population (Alkire et al., 2015). Another problem is the lack of data on deprivations relevant to certain groups. Moreover, there are not always comparable deprivation indicators that make it possible to measure equivalent deprivations among persons belonging to different age groups or in different life situations (Alkire, 2018).

There are very few measures of individual multidimensional poverty that cover the entire population. Among the official multidimensional poverty indices (MPIs) in Latin America, only that of Mexico uses individual identification units. The World Bank (2018), for example, used an MPI limited to five countries that was partially individualized (not all deprivations were measured at the individual level). Klasen and Lahoti (2021) applied an individual MPI to India in which, if information was missing, deprivations were imputed from the situation of other household members (this was the case, for example, for children under six years old in the education dimension). Franco (2014) constructed an individual MPI for Chile, Colombia, Ecuador and Peru using three age groups (children, adults and older adults). Espinoza-Delgado and Klasen (2018) created an individual MPI that included education, health and standard of living, to analyse poverty differences between women and men in Nicaragua. Lekobane (2022) conducted an individual measurement of multidimensional poverty for the entire population of Botswana.

The individual multidimensional poverty measurements applied to entire populations yielded a number of results of interest. Klasen and Lahoti (2021) found that, in India, individual poverty was 14 percentage points higher among women than among men, well above the 2-percentage-point difference obtained from a household-based MPI. Espinoza-Delgado and Klasen (2018), in contrast, did not find significant differences in the incidence of poverty by sex in Nicaragua, although this result changed when an employment and social protection dimension was added. According to the results of Lekobane (2022), poverty rates were slightly higher among women. In terms of age, Franco (2014) and Lekobane (2022) found that the highest incidence of multidimensional poverty was among older persons and the lowest among children. Espinoza-Delgado and Klasen (2018) and Klasen and Lahoti (2021) also found that the poverty rate among children and adolescents aged 6–18 years was much lower than that of adults and older persons.

Given the need to examine the situation of some of the most vulnerable segments of the population in greater depth, individual measurements have been applied to specific subgroups. For instance, various individual measurements of child poverty have been implemented (ECLAC and UNICEF, 2010; Roelen et al., 2010; Roche, 2013; Rodríguez, 2016; UNICEF and OPHI, 2023), given the specific characteristics of this age group, such as their dependency and greater vulnerability (Espíndola et al., 2017). Individual MPIs have also been designed and applied to female populations, to deepen understanding of the deprivations affecting women (Bastos et al., 2009; Alkire et al., 2013; Batana, 2013). The United Nations Development Programme (UNDP) developed an individual MPI for adult women in 10 Latin American countries, which had 10 indicators classified in five dimensions: (i) health and childcare; (ii) economic autonomy; (iii) education and household structure; (iv) information and communications technologies (ICTs); and (v) housing and the availability of essential services (Madrigal et al., 2023).

Recent progress in measuring individual poverty has focused on capturing gender inequalities in the adult population. Alkire et al. (2012), for example, analysed the European population aged 16 years and over, and Vijaya et al. (2014) analysed the Indian population of at least 18 years of age. In Fiji, there is an individual deprivation index that serves as a gender-sensitive multidimensional poverty measurement tool applied to the population 18 years of age and older. This index assesses deprivation in 15 indicators, namely food, water, housing, health, education, energy and fuel, sanitation, social relations, clothing, violence, family planning, environment, voice and representation, time use and work (Fisk and Crawford, 2017). In addition, Burchi and Malerba (2024) conducted an individual measurement of critical poverty among the 15–64-year-old population in 83 low- and middle-income countries. The dimensions and indicators used in this measurement were education (illiteracy, less than four years of schooling and lack of formal education); work (unemployment, non-participation in the labour force and unpaid family work) and health (access to water and sanitation).

The results of the individual measurements applied to adults who are not older persons have revealed significant gender inequalities. Burchi and Malerba (2024), for example, found that poverty among women was between 57% and 76% more prevalent than among men, on average, and that 54% of persons in multidimensional poverty were women, rising to 63% in the case of extreme poverty. Gender disparities in poverty were particularly striking in rural areas of South Asia and in the Middle East and North Africa, with these disparities being driven by inequalities in employment. The Fiji study, meanwhile, found that the use of polluting fuels for cooking and heating caused health problems twice more frequently in women than among men. This is highly relevant, since deficiencies in heating and cooking fuel are typically measured at the household level. The Fiji study also provided important information on intersectionality, as the interaction between disability and gender was associated with greater deprivation in most dimensions and indicators of the individual deprivation index. Lastly, the measurement of the social dimensions of poverty is noteworthy, particularly in relation to the ability to make personal decisions (such as leaving home, seeking medical care and interacting freely with others), connectivity and social support (in other words, the capacity to depend on others and be a support to them) and the ability to influence and effect change in the community or society (Fisk and Crawford, 2017).

Source: Economic Commission for Latin America and the Caribbean, on the basis of Espinoza-Delgado, J. and Klasen, S. (2018). Gender and multidimensional poverty in Nicaragua: an individual based approach. *World Development, 110*. Elsevier; Klasen, S. and Lahoti, R. (2021). How serious is the neglect of intra-household inequality in multi-dimensional poverty and inequality analyses? Evidence from India. *The Review of Income and Wealth, 67*(3). Wiley; Franco, A. (2014). An individual-centered approach to multidimensional poverty: the cases of Chile, Colombia, Ecuador and Peru. *UNU-MERIT Working Paper*, 2014-068. United Nations University-Maastricht Economic and Social Research Institute on Innovation and Technology; Lekobane, K. (2022). Leaving no one behind: an individual-level approach to measuring multidimensional poverty in Botswana. *Social Indicators Research, 162*. Springer; World Bank. (2018). *Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle*; United Nations Children's Fund and Oxford Poverty and Human Development Initiative. *Sri Lanka's Multidimensional Poverty Index 2019 Results: National and Child Analyses*; Madrigal, M., Salvador. E. and Suarez, J. (2023). *Índice de pobreza multidimensional con foco en mujeres para América Latina y Caribe: estado de situación para 10 países de la region*. United Nations Development Programme (UNDP); Economic Commission for Latin America and the Caribbean and United Nations Children's Fund. *Pobreza infantil en América Latina y el Caribe* (LC/R.2168); Roelen, K., Gassmann, F. and Neubourg, C. de (2010). Child poverty in Vietnam: providing insights using a country-specific and multidimensional model. *Social Indicators Research, 98*(1). Springer; Roche, J. (2013). Monitoring progress in child poverty reduction: methodological insights and illustration to case study of Bangladesh. *Social Indicators Research, 112*(2). Springer; Rodríguez, L. (2016). Intrahousehold inequalities in child rights and well-being: a barrier to progress? *World Development, 83*. Elsevier; Espíndola, E. et al. (2017). Medición multidimensional de la pobreza infantil: una revisión de sus principales componentes teóricos, metodológicos y estadísticos. *Project Documents* (LC/TS.2017/31). Economic Commission for Latin America and the Caribbean; Bastos, A. et al. (2009). Women and poverty: a gender-sensitive approach. *The Journal of Socio-Economics, 38*(5). Elsevier; Alkire, S. et al. (2015). *Multidimensional Poverty Measurement and Analysis*. Oxford University Press; The women's empowerment in agriculture index. *World Development, 52*. Elsevier; Batana, Y. (2013). Multidimensional measurement of poverty among women in sub-Saharan Africa. *Social Indicators Research*, 112. Springer; Alkire, S. et al. (2012). Multidimensional poverty measurement for EU-SILC countries. *OPHI Research in Progress* (36a). University of Oxford; Alkire, S. (2018). The research agenda on multidimensional poverty measurement: important and as-yet unanswered questions. *OPHI Working Paper* (119). University of Oxford; Vijaya, R. et al. (2104). Moving from the household to the individual: multidimensional poverty analysis. *World Development, 59*. Elsevier; Burchi, F. et al. (2021). An individual-based index of multidimensional poverty for low- and middle income countries. *Journal of Human Development and Capabilities, 22*(4). Taylor & Francis; Atkinson, A. (2019). *Measuring Poverty around the World*. Princeton University Press; Fisk, K. and Crawford, J. (2017). Exploring multidimensional poverty in Fiji: findings from a study using the individual deprivation measure. Fiji Bureau of Statistics and International Women's Development Agency; Burchi, F. and Malerba, D. (2024). Gender differences in multidimensional poverty in low- and middle-income countries: an assessment based on individual poverty indices. German Institute of Development and Sustainability (IDOS).

Chapter V
Final considerations

This document presents an index for measuring multidimensional poverty in Latin America (MPI-LA) and explains its rationale, structure, methodology and empirical results. This instrument, the dimensions and indicators of which were selected on the basis of the capabilities and rights approaches, makes it possible to measure poverty in a comparable manner in 17 of the region's countries, using standards of sufficiency that are better suited to the reality of Latin American countries than international measures that are limited to the most acute deprivations. Moreover, combining the results of MPI-LA with the ECLAC monetary poverty measurement provides valuable information for characterizing deprivation, which can be used as an input for designing more comprehensive poverty reduction policies.

From an empirical standpoint, the results of MPI-LA show that the percentage of the regional population living in multidimensional poverty declined sharply and steadily between 2008 and 2022, at a rate of 1.4 percentage points per year. Poverty reduction was interrupted in 2020 owing to the disruption of educational and work activities caused by the coronavirus disease (COVID-19) pandemic, but the declining trend resumed in 2021 and 2022. The marked reduction in poverty between 2008 and 2022 reflected the decreasing incidence of nearly all the deprivations included in MPI-LA during that period. In some cases, the reductions were substantial, for example in lack of Internet access, which fell by 3.7 percentage points per year. Low educational attainment among adults, inadequate sanitation and overcrowding fell by 1.0, 0.8 and 0.5 percentage points per year, respectively.

The application of MPI-LA also revealed considerable differences in multidimensional poverty levels between countries. Around 2022, the incidence of such poverty exceeded 45% in El Salvador, Honduras, Paraguay and the Plurinational State of Bolivia, whereas in Chile, Costa Rica and Uruguay it was less than 10%. The countries with the highest incidences of poverty were also the most affected by its intensity: around 2022, people living in poverty

in El Salvador and Honduras experienced deprivations in two or more dimensions on average, while those in Chile and Uruguay experienced deprivations in less than two. Thus, the most affected countries, which are also those with the fewest resources to invest in public policies, need to design policies targeting a relatively larger number of people living in poverty, who also suffer from greater deprivation.

Around 2022, deprivations related to job quality and barriers to labour market access accounted for nearly a quarter of total multidimensional poverty in the region. This underscores the need for policies to address the heterogeneity of the productive structure and the burden of unpaid domestic work borne by women. The contribution of deprivations in terms of lack of Internet access and overcrowding highlights the importance of public initiatives to enhance connectivity among the most vulnerable sectors, as well as the relevance of implementing social housing policies that consider available space as a fundamental element. It should also be noted that some deprivations contribute to poverty across the board in all age groups, while others contribute more to poverty in specific stages of the life cycle. The former include poor quality employment, housing conditions, water and sanitation. Inadequate pensions, illiteracy and lack of Internet access contribute more to poverty among older persons, while non-attendance or lagging behind at school and overcrowding affect children and young people relatively more.

Between 2008 and 2022, the percentage of the population living in poverty, as measured by both the multidimensional poverty and income poverty methods, declined steadily, and the proportion not living in poverty, measured by either method, increased. During this period, the proportion of people who were simultaneously living in multidimensional and income poverty decreased by an annual average of 0.9 percentage points, while the proportion who were not living in poverty according to either method increased by 1.2 points per year. The population living in multidimensional poverty alone declined by 0.5 percentage points per year, while those living in income poverty alone grew at an annual average of 0.3 points. As a result of these variations, the incidence of monetary poverty was higher than that of multidimensional poverty in 2020, 2021 and 2022. This situation is very different from that prevailing at the start of the series, when the incidence of the latter was significantly greater than that of the former. The discrepancies between the results of MPI-LA and those of the monetary poverty indicator show that the multidimensional measure helps to identify people living in poverty who are not classified as such when the income-based indicator is used, even though the incidence of monetary poverty may be greater.

From a strictly methodological point of view, MPI-LA produces a ranking of Latin American countries that is similar to those obtained using other development indicators, thus suggesting consistency with other metrics already established in the region. Moreover, the MPI-LA results show consistently higher poverty rates in populations that tend to have lower levels of well-being as measured by other instruments (for example, among children, rural residents and Indigenous populations). More detailed analyses of robustness make clear that the MPI-LA results are very stable with respect to changes in the multidimensional poverty threshold, the way in which individual deprivations are transformed into household deprivations, the weighting of the dimensions and indicators and the structure of the dimensions (further information on the robustness of MPI-LA can be found in the methodological annex to this document).

When using multidimensional measures of well-being, one of the main challenges is to reflect gender inequalities. Given the difficulties that arise when analysing gender gaps using a measure for which the identification unit is the household, these asymmetries were analysed in relation to the adult population aged 20–59 years without transforming individual deprivations into household ones, and adding an indicator that captured the insufficiency of own income to the deprivations included in MPI-LA. Applying this measurement revealed significant and sustained gender inequalities in this segment of the population, which can be explained by gaps in labour market access, job quality and economic autonomy. The main factors explaining gender disparities are non-participation in the labour market owing to caregiving responsibilities and unpaid domestic work, followed by deprivation resulting from labour income below the monetary poverty line.

It should be noted that many data shortcomings were encountered during the design and implementation of MPI-LA. To perform a multidimensional measurement, information on all dimensions, indicators and periods analysed must come from a single source, which restricts the amount and quality of information that can be used. Currently, the most comprehensive sources for measuring multidimensional poverty in the region are the multipurpose household surveys conducted by national statistical offices and other public agencies but, despite progress, there are still areas where data availability and quality need to be improved.

Health is one of the priority domains that need improvement. The Latin American surveys contain very few indicators on anthropometrics, infant mortality, chronic diseases, mental health and limitations on performing the basic activities of daily living. In the case of education, the surveys provide almost no information on cognitive skills and abilities, which makes it difficult to obtain a good proxy for educational quality —one of the key policy challenges in the field of compulsory education. There is also a lack of information on skills related to the use of information and communications technologies (ICTs), which are essential for the information and knowledge society. In addition, more countries need to investigate access to preschool and initial education programmes, which would contribute to gender equality. In this latter area, information is needed on time use, work-life balance and domestic violence. Food insecurity is another crucial element to consider, since hunger is one of the worst expressions of poverty. In the case of housing conditions, it would be desirable to measure the state of repair of dwellings, since the incidence of very precarious materiality is very low in the region's relatively most developed countries. Environmental quality, access to infrastructure and services and citizen security are other fundamental aspects of well-being that are not yet incorporated sufficiently into the multipurpose surveys of the region's countries.

At the same time, greater use needs to be made of data sources that allow for a more comprehensive measurement of multidimensional poverty relative to other units of analysis, such as countries, subnational territories (for example, major administrative divisions), or urban-rural areas. Limiting the unit of identification and observation to individuals or households could result in data sources other than multipurpose household surveys being neglected. Although the use of other sources, such as social and administrative records, poses the challenge of ensuring analytical consistency and interoperability, it also

provides an opportunity to broaden perspectives on the different dimensions of poverty. This challenge becomes even more relevant in a context of technological progress and the burgeoning spread of data systems in the region, which could transform current methods and enrich the analysis.

Lastly, it should be reiterated that MPI-LA and national MPIs differ in their objectives and procedures. The former aims to achieve regional comparability by using data from a single source, while national MPIs are intended to provide information that is as relevant as possible to each country's context. Although an effort was made when designing MPI-LA to align it with national measures, the dimensions, indicators and deprivation thresholds are not the same. There are also differences in the weighting of indicators and in the ways in which individual shortcomings are transformed into household-level deprivations. All these characteristics mean that the results obtained with MPI-LA and national MPIs are not mutually comparable.

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Annex A1

A. Robustness of the multidimensional poverty index for Latin America

As the MPI-LA is a tool that makes it possible to monitor public policies at the regional level, it is essential to be certain about the robustness of its results. Given that decisions for which there are no strict rules were made at different stages of the construction of MPI-LA —such as the selection of indicators and their grouping into dimensions, the weighting of indicators and dimensions and the definition of the multidimensional poverty threshold (k)— it is necessary to analyse the stability of the country ranking when the structure and parameters of the index are changed.

The first step in assessing the robustness of MPI-LA involved assigning different values, ranging from 10% to 70%, to the multidimensional poverty threshold, ranking the countries according to the adjusted multidimensional poverty level (M_0) obtained from these values across the entire data series (from 2008 to 2022) and measuring the correlation between the rankings obtained. Spearman's correlation coefficient and Kendall's τ-coefficient were very high, indicating that the ranking of countries for each year remains consistent despite the change in the threshold (see table A1.1). This is illustrated in figure A1.1 for the 2008, 2014 and 2022 survey rounds: in each of these rounds, the overall position of each country remains the same even though the multidimensional poverty threshold varies.

■ Table A1.1

Latin America (17 countries):[a] correlation between country rankings according to different values of the multidimensional poverty threshold of MPI-LA, 2008–2022[b]

	Regional median	Regional mean
Spearman's correlation coefficient	0.991	0.978
Kendall coefficient τ	0.929	0.915

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

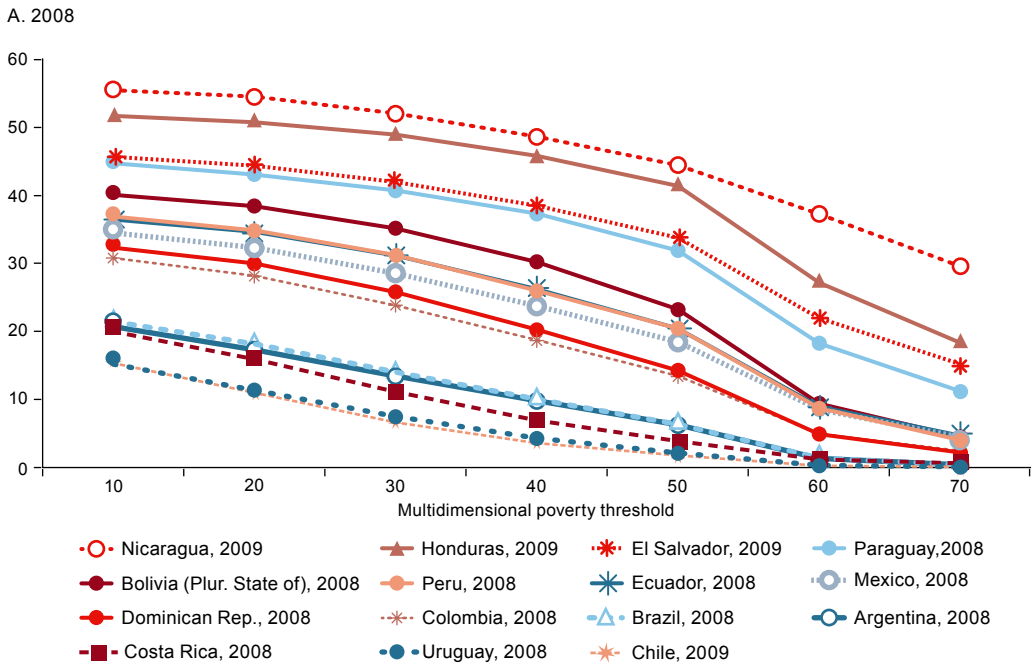
[a] Argentina, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, the Plurinational State of Bolivia and Uruguay.

[b] The analysis covers all countries and years available. Values ranging from 10% to 70% were assigned to the multidimensional poverty threshold.

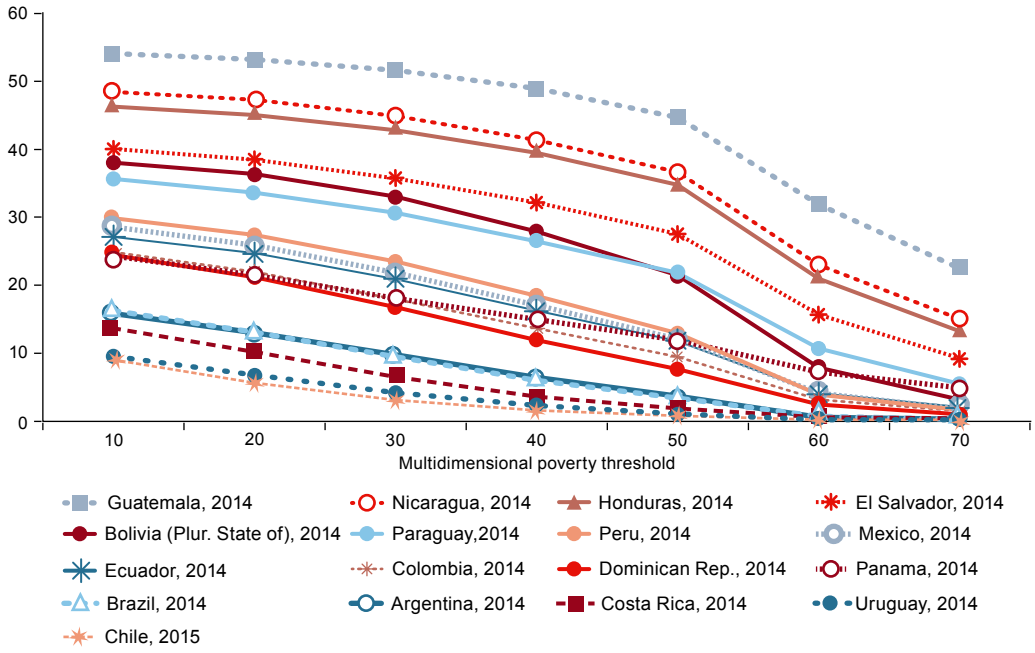
■ Figure A1.1

Latin America (17 countries):[a] adjusted incidence of multidimensional poverty according to different values of the MPI-LA multidimensional poverty threshold, around 2008, 2014 and 2022[a]

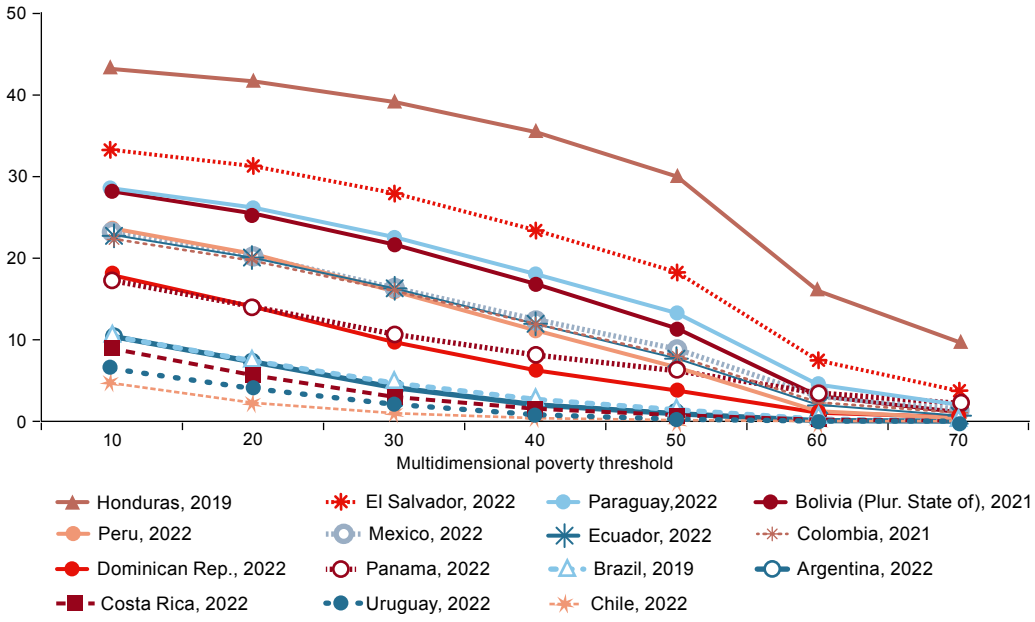
(Percentages)



B. 2014



C. 2022



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

[a] The values of Spearman's correlation coefficient and Kendall's τ-coefficient obtained for each year were as follows: in 2008, 0.99 and 0.96; in 2014, 0.98 and 0.93; and in 2022, 0.93 and 0.86, respectively. The coefficient values are expressed as averages.

The second step in the analysis of robustness entailed comparing all possible pairs of countries for different years, using alternative MPI-LA specifications —that is, different variations of the multidimensional poverty threshold, the weighting of the dimensions and indicators, and, lastly, the structure of MPI-LA. In simple terms, to reliably assert that country A is poorer than country B, this must hold true when different specifications of the MPI-LA are used. A country ranking based on a multidimensional poverty index is robust when different specifications of the index are used to compare pairs of countries, and a large proportion of those comparisons produce the same results. Although there is no golden rule indicating what that proportion should be, following Santos and Villatoro (2018), percentages above 80% were considered robust.

Initially, the robustness of MPI-LA was evaluated by varying the multidimensional poverty threshold, *k*, in the range of 10% to 70%. Next, the stability of the country ranking was analysed, using the union criterion to transform all individual indicators into deprivations applicable to the entire household, and in this case too, the value of *k* was varied in the range of 10% to 70%. Thirdly, the weightings of the MPI-LA dimensions and indicators were modified, and three multidimensional poverty thresholds (25%, 33% and 40%) were considered. The weight of each dimension was increased successively by 10 percentage points, starting at 30% and rising to 60%, with the surplus distributed among the remaining dimensions and indicators.[1] Lastly the structure of MPI-LA was changed so that it had two dimensions, one consisting of housing indicators and the other of individual indicators. The weighting of the dimensions and indicators was varied gradually, and *k* values of 25%, 33% and 40% were used. Thus, taking the final structure of the MPI-LA as a reference, in some specifications only one parameter was changed at a time, while in others several were altered simultaneously, which in total meant analysing 71 possible specifications.

The Latin American MPI is extremely robust to changes in the multidimensional poverty threshold, the way individual deprivations are transformed into household deprivations, the weighting of the dimensions and indicators, and the dimensional structure. For example, when considering values of *k* between 10% and 70%, the extremes of which are quite close to the criteria for identifying union and intersection, 89.4% of the comparisons between pairs of countries in relation to the different years produced robust results throughout 2008–2022 (see table A1.2). In this initial exercise, seven specifications were considered, in which only one MPI-LA parameter was altered, namely the multidimensional poverty threshold. When the same exercise was performed using the union criterion to transform all individual indicators into household deprivations (if at least one member of the household was deprived, all were considered deprived), the proportion of robust comparisons reached 92.0%.

[1] For example, if the housing dimension were assigned a weight of 30%, the three indicators in that dimension would each be assigned a weight of 10%. The remaining 70% would be distributed equally among the other dimensions (health, education and employment), so that the weight of each of those dimensions would be 23.3% (70/3); and the weight of each of the indicators in those dimensions would be 7.7% ((70/3)/3). In contrast if the housing dimension were assigned a weight of 40%, each of the indicators in that dimension would be assigned a weight of 13.3%; each of the remaining dimensions would be assigned a weight of 20% (60/3); and each of the indicators for those dimensions would be assigned a weight of 6.7% ((60/3)/3).

■ Table A1.2

Latin America (17 countries):[a] robust comparisons between pairs of countries measured by the adjusted incidence, with different MPI-LA specifications, 2008–2022

(Percentages)

	Final MPI-LA model (from k = 10% to k= 70%[b]	MPI-LA with union as transformation method (from k = 10% to k = 70%[c]	MPI-LA with modification of the weighting of the dimensions and indicators (k = 25%)[d]	MPI-LA with modification of the weighting of the dimensions and indicators (k = 33%)[d]	MPI-LA with modification of the weighting of the dimensions and indicators (k = 40%)[d]	MPI-LA with modification of the structure (2 dimensions) (k = 25%, k = 33% and k = 40%)[e]
Proportion of comparisons producing the same results (robust)	89.4	92.0	85.2	86.4	84.6	95.3

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

[a] Argentina, 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] Seven specifications of the final MPI-LA model were used, in which the value of the multidimensional poverty threshold (k) was increased successively by 10 percentage points, from 10% to 70%.

[c] The union criterion was used to transform all individual indicators, which means that the household deprivation threshold for low educational attainment, health insurance and job quality was modified. Seven specifications were analysed in which the value of k was increased successively by 10 percentage points, from 10% to 70%.

[d] A weight of 30%, 40%, 50% and 60% was assigned to one dimension, and the remaining weight in each case was distributed equally among the other dimensions and indicators. This procedure was carried out for each of the dimensions, so 16 specifications were tested for each value of k (25%, 33.3% and 40%). In total, 48 specifications were tested.

[e] Two dimensions were defined, one with housing indicators (housing conditions, overcrowding, access to the Internet, water and sanitation) and another with indicators captured at the individual level (non-attendance or lagging behind at school, low educational attainment, illiteracy, health insurance, labour market access, job quality and pensions). The weight of the dimensions and indicators was gradually varied, and k values of 25%, 33% and 40% were used. A total of nine specifications were analysed.

Moreover, MPI-LA is quite robust when the weights of the dimensions and indicators are altered, considering multidimensional poverty thresholds between 25% and 40%. In these cases, although the proportion of robust comparisons was smaller than in the first exercise, values of around 85% were achieved, which can be considered adequate, especially considering the number of specifications analysed (16 for each level of k) and the variation in the weighting of the dimensions (specifications were tested where the weighting of each of the dimensions varied between 30% and 60%).

Lastly, MPI-LA is very robust to simultaneous changes in the structure of dimensions and the values of the multidimensional threshold. By varying the structure of MPI-LA, regrouping its indicators into two dimensions —one consisting of housing measures (applicable to all household members) and the other consisting of individual indicators— while also considering the most empirically plausible values of k (25%, 33% and 40%), 95.3% of the comparisons produced similar results.

B. Redundancy of the indicators of the multidimensional poverty index for Latin America

Redundancy is the unnecessary repetition of information. In the context of multidimensional poverty measurement, two indicators are redundant if, despite referring to different deprivations, they capture the same deprivation and duplicate the information, thereby artificially increasing the level of multidimensional poverty.

There are various association tests that can be used to analyse redundancy. In the recent literature on multidimensional poverty, Alkire et al. (2015) suggest using the redundancy indicator R^0, which shows the number of observations that have the same deprivation status in two given variables, expressed as a proportion of the minimum of the marginal deprivation rates (Alkire and Ballon, 2012 and 2015). The formula for the redundancy indicator is as follows:

$$R^o = \mathbb{p}_{11}^{jj'} / \min\left(\mathbb{p}_{+1}^{j'}, \mathbb{p}_{1+}^{j}\right), \quad 0 \leq R^o \leq 1$$

where $\mathbb{p}_{11}^{jj'}$ is the proportion of people who are deprived in indicator j and also in indicator j'; $\mathbb{p}_{+1}^{j'}$ is the total proportion of people deprived in the indicator j' (whether or not they are also deprived in indicator j), and $\mathbb{p}_{1+}^{j}$ is the total proportion of people deprived in the indicator (whether or not they are deprived in the indicator j').

As a first step, the mean and median redundancy between each MPI-LA indicator and the rest of the indicators was estimated using information for the 17 countries around 2022 (see table A1.3). In general, moderate or low levels of redundancy were observed. The highest mean values of R^0 were found in relation to job quality (mean of 0.63 and median of 0.67) and Internet access (mean of 0.59 and median of 0.61). The lowest values were observed for pensions (mean of 0.29 and median of 0.21).

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■ Table A1.3
Latin America (17 countries): redundancy of the MPI-LA indicators, 2022[a]

Indicators	Mean	Median
Housing conditions	0.49	0.49
Overcrowding	0.48	0.48
Internet access	0.59	0.61

Indicators	Mean	Median
Water	0.43	0.42
Sanitation	0.48	0.49
Health insurance	0.48	0.48
Labour market access	0.45	0.43
Job quality	0.63	0.67
Pensions	0.29	0.21
Non-attendance or lagging behind at school	0.42	0.41
Low educational attainment	0.48	0.44
Illiteracy	0.43	0.41

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

[a] Data for 2022, except Brazil (2019), Colombia (2021), Guatemala (2014), Honduras (2019), Nicaragua (2014) and the Plurinational State of Bolivia (2021).

■ Table A1.4

Latin America (17 countries): redundancy between pairs of MPI-LA indicators, 2022[a]

	Indicators	Average	Minimum	Maximum
Corresponding to the housing dimension	Housing conditions and overcrowding	0.47	0.11	0.84
	Housing conditions and Internet access	0.69	0.06	1.00
	Overcrowding and Internet access	0.53	0.04	0.99
Corresponding to the health dimension	Water and sanitation	0.56	0.13	0.89
	Water and health insurance	0.43	0.02	0.89
	Sanitation and health insurance	0.44	0.04	0.82
Corresponding to the education dimension	Non-attendance or lagging behind at school and low educational attainment	0.45	0.09	0.81
	Non-attendance or lagging behind at school and illiteracy	0.32	0.07	0.70
	Low educational attainment and illiteracy	0.45	0.24	0.77
Corresponding to the employment and social security dimension	Labour market access and job quality	0.53	0.31	0.77
	Job quality and pensions	0.47	0.18	0.73
	Labour market access and pensions	0.28	0.15	0.49
Corresponding to different dimensions	Job quality and health insurance	0.87	0.50	0.97
	Job quality and low educational attainment	0.69	0.34	0.93
	Overcrowding and labour market integration	0.56	0.40	0.81

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

[a] Data for 2022, except Brazil (2019), Colombia (2021), Guatemala (2014), Honduras (2019), Nicaragua (2014) and the Plurinational State of Bolivia (2021).

In the case of indicators of different dimensions, those referring to health insurance and job quality exhibit the highest redundancy (average of 0.87) among all pairs of MPI-LA indicators. This can perhaps be explained by the link between health insurance and contribution (affiliation) to pension systems, which forms part of the measurement of job quality. Nonetheless, the existence of a strong correlation between two indicators is not sufficient to discard one of them, especially if both are highly relevant for public policy (Alkire et al., 2015). Furthermore, health insurance is an indicator that has intrinsic importance because it offers minimum protection against health contingencies and, from a conceptual standpoint, it is independent of pension contributions, which offer protection in old age.

In recent decades, the international community has recognized the need to measure poverty more comprehensively, by incorporating various dimensions of well-being. More than half of Latin American countries have developed official multidimensional poverty indices, which are essential for evaluating and designing national poverty reduction policies. However, these measurements are not mutually comparable. Multidimensional poverty indicators designed to allow for international comparability also exist, but their standards are not always adequately adjusted to the Latin American context.

Following the tradition of the Economic Commission for Latin America and the Caribbean (ECLAC), which in the 1980s promoted the method of unmet basic needs for measuring poverty, this publication presents a multidimensional poverty index for Latin America. Based on capabilities and rights approaches, the index complements income-based poverty measurement and offers a more comprehensive view for the design of effective public policies.

The Economic Commission for Latin America and the Caribbean hopes that the methodology presented here will facilitate a comparative perspective on poverty in the region, within the constraints imposed by differences in information sources, and serve as a reference for updating and improving multidimensional poverty measurements in the countries.

The *ECLAC Methodologies* collection focuses on disseminating conceptual bases, technical specifications for preparation and applications of the quantitative and qualitative tools produced and used within ECLAC. Its main purpose is to contribute by adding and improving policy formulation tools based on empirical data, that bring about sustainable development with equality.

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