

Social Pensions and Poverty in Latin America

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Abstract

This document analyzes the relationship between pensions and poverty among the elderly after the recent expansion of non-contributory pension programs in the Latin American region. The analysis focuses on a set of 18 countries around the year 2012. Based on administrative and survey data, the document revisits the strategies adopted and evaluates the current situation of the elderly. The results indicate that the scheme adopted in each country varies according to different national realities. The expansion of non-contributory pensions is associated with the reduction in poverty among the elderly, but there remain gaps to be closed.

Keywords: Transfers; pension systems; social assistance; non-contributory pensions; social protection; poverty; redistribution; labor market.

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Acronyms

65+	65 or older
ANSES	National Social Security Administration (Administración Nacional de Seguridad Social), Argentina
APS	Solidarity Pension Contribution (Aporte previsional solidario), Chile
BPC	Conditional Cash Transfer Program (Beneficio de Prestación Continuada), Brazil
CEPAL	United Nations Economic Commission for Latin America and the Caribbean (Comisión Económica para América Latina y el Caribe)
CNSS	National Social Security Council (Consejo Nacional de Seguridad Social), Dominican Republic
CONPES	National Economic and Social Council (Consejo Nacional de Política Económica y Social), Colombia
CP	Contributory pension
CPI	Consumer price index
DGAGP	General Directorate for Attention to Priority Groups (Dirección General de Atención a Grupos Prioritarios), Mexico
FISDL	Social Investment Fund for Local Development (Fondo de Inversión Social para el Desarrollo Local), El Salvador
GDP	Gross national product
ILO	International Labor Organization
INDEC	National Institute of Statistics and Censuses (Instituto Nacional de Estadística y Censos), Argentina
INSS	National Social Security Institute (Instituto Nacional do Seguro Social), Brazil
INSS	Social Security Institute of Nicaragua (Instituto Nicaragüense de Seguridad Social)
IVSS	Venezuelan Social Security Institute (Instituto Venezolano de los Seguros Sociales)
LA	Latin America
LA-18	Microdata from microsurveys of 18 Latin American countries
MDIS	Ministry of Development and Social Inclusion (Ministerio de Desarrollo e Inclusión Social), Panama
MDS	Ministry of Social Development (Ministerio de Desarrollo Social), Argentina
MDS	Ministry of Social Development and Fight against Hunger (Ministerio de Desenvolvimento Social e Combate a Fome), Brazil
MIES	Ministry of Economic and Social Inclusion (Ministerio de Inclusión Económica y Social), Ecuador

MTPS	Ministry of Labor and Social Welfare (Ministerio de Trabajo y Previsión Social), Guatemala
NCP	Non-contributory pension
OECD	Organization for Cooperation and Economic Development
PASIS	Social Assistance Pensions (Pensiones asistenciales), Chile
PBS	Basic Solidarity Pension (Pensión Básica Solidaria), Chile
PBU	Basic Universal Pension (Pensión básica universal), El Salvador
PMG	Minimum Guaranteed Pension (Pensión Mínima Garantizada), Chile
pp	Percentage points
PPP	Purchasing power parity
PRAF	Family Allowances Program (Programa de Asignación Familiar), Honduras
SEDESOL	Secretariat of Social Development (Secretaría de Desarrollo Social), Mexico
SISBEN	System of Identification of Social Program Beneficiaries (Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales), Colombia
UNLP	Universidad Nacional de La Plata
WDI	World development indicators

INTRODUCTION

The Latin American (LA) population is aging at an accelerating pace and includes a large percentage of senior citizens living in conditions of poverty (16.3% of those over 65 years of age [65+]) or vulnerability (30.3%). On the other hand, the relative coverage of contributory pension systems has remained stagnant in the last decades despite various efforts at reform (covering only 29.2% of the 45 million senior citizens of 65 years of age in LA). Both factors have led to the growth of non-contributory pensions (NCPs) in the majority of LA countries, especially in the last decade. The principal objective of these programs is to provide assistance to senior citizens who are not protected by contributory social security and to reduce poverty in old age.

The main objective of this study is to analyze the impact of pension systems, and NCPs in particular, on poverty among senior citizens in LA. These new NCP systems are analyzed in terms of the characteristics of their design and implementation as well as some indicators of short-term performance: coverage, adequacy of benefits, and costs. This analysis is complemented by a review of the actual conditions of senior citizens in LA after these changes. To accomplish this, a demographic and socioeconomic characterization was prepared based on the analysis of microdata from household surveys in 18 countries in the region (LA-18) in 2012, except for Chile, for which the data are from 2011.¹ The results indicate that conditions in LA are heterogeneous in terms of pension coverage and the socioeconomic conditions of senior citizens. In addition, results from the region indicate that NCP programs are an important political option for dealing with the problem of poverty or vulnerability in old age.

This research contributes to the literature on the welfare of senior citizens in the region and related social security and social welfare public policies. Since the recent increase in NCP, very few studies have had access to the necessary recent statistical information to make it possible to quantify the magnitude of these programs, which would provide an improved understanding and analysis of the timeliness and pertinence of the policies that have been adapted. This study attempts to fill this vacuum. Finally, it seeks to ensure that the issue of poverty in old age remains part of the academic debate, as well as the public policy-making and future reform agenda.

1. Coverage is nationwide with the exception of Argentina, where it includes only the urban population, which accounts for more than 85% of the total population.

The article is organized as follows: Section 1 describes the origins of pension systems in the region and characterizes and analyzes recent changes resulting from the increase in non-contributory programs. Section 2 reviews the current conditions of senior citizens in LA, reviewing their demographic and socioeconomic characteristics. Section 3 provides the results of breakdowns of poverty in 2000–2012 in selected countries, which allows for the identification of the role played by these types of programs. Finally, Section 4 concludes and discusses the principal public policy challenges.

1. PENSION SYSTEMS IN LATIN AMERICA

1.1. Origen and recent reforms

The objective of pension systems is generally to guarantee an adequate level of consumption during the passive stage of life, offering insurance and poverty-prevention mechanisms. For this reason, they play an important role as a mechanism of providing economic security during old age.

There are a wide range of institutional arrangements in the region for providing protection during this stage of life, which run the gamut from contributory programs² financed by payroll taxes to non-contributory or welfare programs that provide a minimum income financed from general government revenues and are unconnected to work history, or a combination of both arrangements. Such programs can provide a specified benefit or a specified contribution, administered by the public or the private sector and, in general, are obligatory for a given sector of workers (salaried workers, public employees, etc.) and voluntary for others, depending on the country.

Contributory programs linked to formal employment are not very common in LA, with few wide-reaching examples. The programs of countries that had reached the majority of workers in the 1950s and the 1960s (such as Argentina and Uruguay) either declined considerably or stagnated in terms of coverage in the following years, as a result of the difficult conjunctural situation of the period and financial imbalances related to parameters that were unsustainable in the long term. The adverse macroeconomic conditions faced by the region in the 1980s and 1990s and the growth of the informal economy, which resulted from the liberalization of labor markets, led to the introduction of measures intended to correct the situation. The reasons for these reforms were related to the aging of the population and the fiscal sustainability of the programs

2. This type of arrangement can also incorporate redistributive components.

in the medium and long term. Thus, reforms were implemented that were parametric (changes in eligibility for both contributions and beneficiaries), systemic, or structural.³ These generally had little impact on the coverage of systems and, in some cases, reversed previous positive trends.

In the last decade, a new wave of pension system reforms were implemented in the region, aimed at increasing coverage as well as the creation or expansion of NCP programs or the flexibilization of their accessibility.⁴ This wave of reforms has been described as unprecedented in its intensity and speed (Rofman *et al.* 2013). The majority of the programs were created starting in 2000 but mostly after 2005. At the beginning, they were very small and very narrowly targeted. Later, programs were expanded gradually in some cases and very quickly in others and by 2012, a significant proportion of the senior citizen population was covered. Some countries have long histories of non-contributory programs (Argentina, 1948; Costa Rica, 1974; Uruguay, 1919), but these were on a modest scale from the time of their adoption in comparison with the recent changes.

This trend is linked to: a) the low coverage of contributory systems and the need to reduce the gap between the coverage of traditional systems (Holzmann *et al.* 2009) in a context of high labor informality;⁵ b) the fact that the population of LA is aging at an even faster rate than that of developed countries and eventually there will be fewer individuals of working age whose income can maintain senior citizens (Cotlear 2011; UNFPA and HelpAge 2012; CEPAL 2012); c) the greater availability of fiscal resources, resulting from a considerable improvement in the terms of trade for primary products produced in the region; d) social pressures calling for the attention of specific vulnerable groups; and e) a major debate promoted by international organizations⁶ and in academic spaces⁷ centered on the provision of greater protection to vulnerable groups, which helped put this topic on the public agenda.

1.2. Review and evaluation of non-contributory programs in the region

This section briefly reviews recent experiences in the expansion of pension coverage through non-contributory programs in LA. These programs are evaluated in three dimensions:

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3. Such reforms were carried out in: Chile (1981), Peru (1993), Argentina and Colombia (1994), Uruguay (1996), Bolivia and Mexico (1997), El Salvador (1998), Costa Rica (2001), the Dominican Republic (2003-2005), and Panama (2005-2007).
 4. Other regions adopted similar strategies, see: Palacios and Slunchynsky (2006); Holzmann *et al.* (2009); or the HelpAge database on pensions.
 5. While there have been improvements in recent years, the region still has high levels of labor informality (42% of the active-age population between 15 and 64 years of age in 2012).
 6. Holzmann and Hinz (2005); CEPAL (2006); ILO (2011); and recently, Bosch *et al.* (2013).
 7. Barr (2001); Holzmann and Hinz (2005); Barr and Diamond (2009); Hanlon *et al.* (2010).

coverage, impact or generosity of the benefits provided, and fiscal sustainability.⁸ In addition, some specific aspects related to the design and Institutionalality of the programs are discussed.

Coverage, design, and Institutionalality

In general, the effectiveness of a pension system is measured through an analysis of the coverage provided both during the active and passive working life of the individual. Without detracting from the importance of this measure, this study focuses on the analysis of the senior citizen population.⁹ In LA, the following stylized facts can be observed: a) coverage¹⁰ is still extremely low in some countries and does not reach 30% of senior citizens (Honduras, Guatemala, and the Dominican Republic are examples) and is very high in only a few (Chile, Brazil, Uruguay, Argentina, and Bolivia); b) coverage is greater for men than for women because of their longer history of contributive labor, except in countries with high coverage; c) the majority of beneficiaries reside in urban areas (except in Brazil, Chile, Ecuador, and Mexico); d) there is a clear bias towards coverage of the highest quintiles in the distribution of income; and e) coverage is greater the higher the levels of education (Rofman and Oliveri 2012). Despite the expansion of NCPs in recent years, low levels of aggregated coverage prevail (63.9% of senior citizens, with contributory coverage of only 29.2%), which continues to pose a challenge for the region in the future in terms of social security (see Graph 1).

In 2012, among the 18 LA countries with non-contributory programs,¹¹ it is possible to distinguish the benefits of non-contributory programs through household surveys in only nine (Bolivia, Chile, El Salvador, Mexico, Costa Rica, Ecuador, Bolivia, Panama, and Paraguay). Of these, only Bolivia has universal NCPs (with 96.7% coverage), which are relatively generous and exceed those of the contributory system in Ecuador (43.7% vs. 23%) and Mexico (35.9% vs. 26.1%). In contrast, the coverage of social pensions is surpassed by the contributory system and is between 24.6% and 10% in Chile, Costa Rica, Panama, and

8. For a review of these experiences, see Rofman *et al.* (2013).

9. See Rofman and Oliveri (2012) for a review of the historical evolution of coverage of the economically active population in the region.

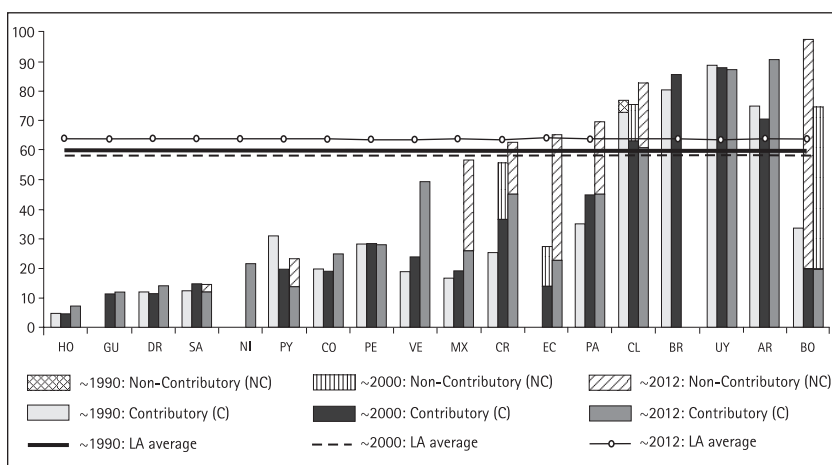
10. From here on, a person is considered as covered by the pension system if they declared positive income for retirement or a pension for widowhood (contributory or non-contributory) in the survey.

12. In Nicaragua, there is a NCP that was created in 1982, called the "Pensión de Gracia" but its coverage is very limited given that since the 1990s it stopped adding new beneficiaries; in 2012, it included only 103 individuals. In 2013, there was a decree that assured a reduced proportional old age pension for individuals of 60 years of age who did not meet the mandated qualification period, but had paid in for at least 250 weeks (the law requires 750 weeks). In the Dominican Republic, implementation is pending; in addition, some type of minimum pension is guaranteed by the contributory system for those senior citizens who fulfill some but not all the necessary requisites to receive a pension from this system.

Paraguay. At the other extreme, such programs play a marginal role in El Salvador and Honduras (less than 3%).¹²

Graph 1

Pension coverage of senior citizens according to type of benefit, Latin America, circa 1990, circa 2000, and circa 2012 (percentage of 65+ population that receives pension income)



Notes:

(i) The years and sources used in each case are: Argentina (urban): EPHC, 1991, 2000, 2012; Bolivia: EH 1989, 2001, 2012; Brazil: PNAD 1990, 2001, 2012; Chile: Casen 1990, 2000, 2011; Colombia: GEIH 1992, 2000, 2012; Costa Rica: ENAHO 1990, 2000, 2012; Ecuador: ENEMDU 1990, 2000, 2012; El Salvador: EHPM 1997, 2000, 2012; Guatemala: ENEI 2000, 2012; Honduras: EPHPM 1990, 2001, 2012; Mexico: ENIGH 1992, 2000, 2012; Nicaragua: ECH 2012; Panama: EH 1991, 2000, 2012; Paraguay: EPH 1990, 2000, 2012; Peru: ENAHO 1995, 2000, 2012; Dominican Republic: ENFT 1996, 2000, 2012; Uruguay: ECH 1990, 2000, 2012; Venezuela: EHM 1995, 2000, 2012. The same years and sources are used in the other graphs in this article.

(ii) The lightest colored bar makes it possible to clearly differentiate the NCPs from CPs in those countries where it is possible to separate these two regimes through household surveys.

(iii) In countries where it is not possible to make this distinction, the coverage appears as contributory although it may include non-contributory benefits.

(iv) In Bolivia, the fall in contributory coverage to 2000 is because in 1995 the survey only included urban areas but later surveys included rural zones.

Source: Rofman and Oliveri (2012) based on LA-18, updated.

The majority of non-contributory programs have national coverage, although some at first focused on the least populated and vulnerable areas and later expanded to the rest of the country (for example, in Mexico). In some countries, there are also programs on

12. For many reasons, these estimates, which were obtained through household surveys, differ from those obtained from administrative data (reported in Table 1).

the sub-regional level, for example, in Mexico,¹³ or in provinces, as in Buenos Aires in Argentina. From this point on, the descriptive data are available in Table A1 in the Appendix.

In the majority of cases, the explicit objective of establishing non-contributory programs was the reduction of poverty in old age and an increase in pension coverage. These non-contributory programs of transfers to senior citizens in general are part of a broader social assistance program that covers other types of risks, such as disability. In addition, these programs are often integrated with other associated services or assistance in kind within a system of social protection (such as health coverage – Argentina; or basic and complementary social services – Colombia, El Salvador or Mexico, among others).

Each system has its own mechanism for determining the eligibility of beneficiaries: the basic criteria employed are demographic, given that the minimum age for benefit eligibility is not the same across all countries. In some, non-contributory coverage begins at a more advanced age (in Argentina,¹⁴ Honduras, and Panama, the age of eligibility is 70 years) and in some other countries, there is even differentiation by gender (the "Pension Moratorium" in Argentina, the rural pension in Brazil, or the programs in Colombia and Venezuela). Some use geographic targeting methods with the objective of achieving greater effectiveness (rural pensions in Brazil, Colombia, El Salvador, Mexico or Paraguay), concentrating on the most vulnerable zones. In other countries beneficiaries self-select, as is the case in, for example, the Conditional Cash Transfer Program (Beneficio de Prestación Continuada, BPC) in Brazil, which is in effect in urban areas; or entry into the "Moratorium" in Argentina which was on a mass scale due to government publicity through the so-called "pensions for housewives," despite the beneficiaries having to apply in order to be included in the program. Bolivia is the only country that opted for universal pensions; the rest use some type of method focusing on poverty. For this purpose, direct¹⁵ or indirect¹⁶ verification of means of support and eligibility is carried out, and it is ensured that beneficiaries do not have any other pension coverage, whether contributive or of another type (although in

13. In the case of Mexico, sub-national programs are very important since, taken as a whole, they reach more than half of the beneficiaries of the national non-contributory system (estimated on the basis of data from CONEVAL 2011). On the other hand, there is great disparity in eligibility factors and little fiscal support.

14. In Argentina, non-contributory benefits for old age are provided at 70 years of age. This is not the case in the benefits provided by the non-contributory pension program ("moratorium"). The latter was initiated in 2005, allowing access to contributory pensions by senior citizens who did not have a sufficiently long labor history to be eligible for pensions.

15. Information is collected on household income or assets, and is then verified using independent administrative sources, for example, in Argentina.

16. A score is generated based on easily observable household characteristics and eligibility is ascertained from a comparison with a cut-off point established on the basis of statistical analyses that usually use regression estimates. This is the case, for example, in Chile, Colombia, Paraguay, and Uruguay.

some cases the right to a contributive pension [CP] does not lead to automatic exclusion). The evaluation is not always on the level of individuals but rather, in the majority of cases, the conditions of the household in which the senior citizen lives are evaluated. In addition, in some cases, citizenship or a minimum number of years of residency in the country is required. There are programs where beneficiary co-responsibility is required, such as receiving healthcare or participating in talks or courses (Panama and Mexico – the senior citizen component of the Oportunidades program, for example).

The Institutionality of the reforms developed in various ways, and in some cases through a combination of a) the expansion of existing non-contributory programs; b) the creation of new non-contributory programs (Colombia, 2004; Ecuador, 2006; Uruguay, 2008; Panama, 2009; El Salvador, 2009; Paraguay, 2009; Peru, 2010 and 2011; Mexico, 2007; among others); or c) flexibilization of the eligibility criteria for access to existing contributory programs (Argentina's "Moratorium" in 2005 permitted access to pension benefits by individuals with incomplete labor histories and in Brazil facilities were granted to some groups of workers between 2006 and 2008; Peru and Uruguay, 2008; and Chile, 2009¹⁷).

The majority of the established schemes are permanent and respond to the structural characteristics of the labor market. The case of the "Moratorium" in Argentina is unique since it responds to the conjunctural situation and is temporary. In Argentina, access to the NCP by senior citizens was re-opened starting in 2003 under the existing program (although a low level of coverage had existed since 1948). Then, starting in 2006, workers with incomplete contributory histories under the "Moratorium" entered the contributory system on a mass scale, to the extent that the number of beneficiaries doubled;¹⁸ the "Moratorium" was re-opened in 2014, although under stricter conditions of access. Meanwhile, some countries created programs that were completely disassociated from contributory schemes and were part of social assistance policies (Bolivia, Colombia, Costa Rica, Ecuador, El Salvador, Mexico, Panama, Paraguay, and Peru) or family allowances programs (Honduras). Others developed from broadly inclusive social policies focused on families or children (Mexico – the senior citizen component of Oportunidades gradually replaced the 70 y Más program; Ecuador – Bono de Desarrollo Humano; El Salvador – the Pensión Básica Universal [PBU], a component of the Comunidades Solidarias program; Paraguay –Tekopara; and Peru – Juntos). In general, these programs are institutionalized through laws, although in many cases they were implemented

17. Incentives were created for independent, domestic, and rural workers in Brazil, for workers in micro-enterprises in Peru, for domestic workers and other groups in Uruguay, and for women and other specific workers' collectives in Chile in 2009.

18. While these beneficiaries were absorbed under the contributory regime, in many cases they could not have qualified for the benefit in this way. Thus, in practice, this tends to be considered as a semi-contributory program.

through a decree by the executive branch (see Table A1). In Brazil, for example, the minimum salary, according to the constitution, is the minimum value of the pension benefit. Meanwhile, "Mayor" in Colombia provides an aging subsidy for individuals older than 70 in the two poorest quintiles of the population (System of Identification of Social Program Beneficiaries [Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales, SISBEN] I and II and forcibly displaced senior citizens), which reaches only about 7% and 10% of the minimum salary and thus, according to the constitution, does not constitute a right to a pension.¹⁹

In general, the receipt of transfers is for life, but in some cases, individuals may lose their eligibility since there are different criteria for entering and leaving the programs. For example, in Brazil, the rural pension can be forfeited if an individual engages in economic activities that are non-agricultural or outside the domestic economy for more than 90 days or in urban areas; while in the BPC, the beneficiary's economic situation is reviewed every two years. Clauses related to cancelation or suspension of benefits are also in effect in Costa Rica, El Salvador, Mexico, and Panama.

Impact or generosity of benefits

Another relevant impact of the effectiveness of protection is related to vertical coverage or the quality of the benefits provided. High coverage of senior citizens with low or insufficient levels of benefits results in inadequate protection of this sector.

The adequacy of non-contributory benefits can be measured in relation to: a) the basic market food basket or the poverty line; and b) a standard measure of welfare, such as the per capita GDP of a country, given that in this case the objective is not to guarantee a rate of replacement but rather a basic level of economic security or the prevention of poverty. In addition, an indicator is included of the opportunity cost of continuing to participate in the labor market, through which the benefits are dimensioned in relation to the average labor income of senior citizens.

Non-contributory pensions in LA are related to the level of subsistence but vary considerably across countries. In 2012, these pensions were: a) below the line of extreme poverty of \$2.50 per day in purchasing power parity (PPP) in Honduras, Colombia, Mexico, Bolivia, Nicaragua, Guatemala, Peru, and Ecuador; b) above the line of extreme poverty but below the line of moderate poverty of \$4.00 a day in PPP in Paraguay and Panama; and c) above the line of moderate poverty in the rest of the countries: El Salvador, Costa Rica, Chile, Venezuela, Uruguay, Argentina, and Brazil (see Table 1). The countries with the most generous programs are also those with the most wide-reaching ones, such as Argentina, Brazil, Chile, and Uruguay.

19. In Colombia, an effort was made to differentiate Colombia Mayor from a pension benefit in order to prevent future claims to constitutional rights by beneficiaries.

Table 1
Quantitative indicators of performance of non-contributory pension programs, Latin America, 2012

Country	Program	Beneficiaries (in thousands)	65+ (percentage covered)	Monthly benefit (dollars per day PPP, 2005)	Per capita GDP	Benefit (percentage of)		Cost (percentages)			
						Poverty line (\$2.50 PPP)	Poverty line (\$4.00 PPP)	Minimum salary	Average salary (65+)	Public consump- tion ⁽¹⁾	GDP
Argentina	Pensión no Contributiva a la Vejez	34.8	0.8	8.3	21.7	328.1	205.1	47.4	34.4	0.02	0.14
	Moratoria Previsional ⁽²⁾	2,527.4	57.0	13.4	34.9	527.6	329.8	76.2	55.3	2.14	14.40
Bolivia	Renta Dignidad ⁽³⁾	916.7	~ 100	1.24 / 1.65	10.11 / 13.48	48.8 / 65.1	30.5 / 40.7	15 / 20	13.7 / 18.2	0.98	7.28
Brazil	Pensión Rural a la Vejez	5,820.8	40.2	9.3	33.8	368.6	230.3	100.0	31.1	1.07	5.03
	BPC	1,750.1	12.1	9.3	33.8	368.6	230.3	100.0	31.1	0.29	1.37
Chile	Pensión Básica Solidaria (PBS) ⁽⁴⁾	406.1	24.9	5.5	13.3	216.5	135.3	45.3	44.0	0.03	0.21
Colombia	Colombia Mayor ⁽⁵⁾	937.0	32.8	0.84 / 1.25	3.44 / 5.16	32.9 / 49.4	20.6 / 30.9	7.06 / 10.59	9.06 / 14.3	0.07	0.42
Costa Rica	Pensión No Contributiva	94.1	28.7	5.2	18.8	203.2	127.0	35.3	14.2	0.03	0.17
Dominican Republic	Pensión Solidaria ⁽⁶⁾	n. d. ⁽⁸⁾	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.	n. d.
Ecuador	Bono de Desarrollo Humano	587.1	60.7	2.4	11.1	96.1	60.1	17.1	19.1	0.42	3.06
El Salvador	Nuestros Mayores Derechos (PBU)	27.6	6.2	4.8	31.7	188.9	118.0	42.2	71.0	0.04	0.37
Guatemala	Aporte del Adulto Mayor	103.1	15.1	2.0	18.3	78.4	49.0	19.6	32.6	0.13	1.21
Honduras	Bono a la Edad de Oro (formerly: Bono Tercera Edad)	71.6	20.4	0.2	2.2	7.3	4.5	1.4	3.3	0.02	0.12
Mexico	Pensión 65 y más	3,056.8	40.8	1.6	4.6	64.3	40.2	37.9	19.1	0.11	0.97
Nicaragua	Componente Adulto Mayor de Oportunidades	27.4	0.4	1.1	3.2	43.7	27.3	25.8	13.0	0.00	0.01
	Pensiones de Gracia	0.1	0.1	1.7	19.8	67.7	42.3	22.6	24.9	0.00	0.01
Panama	120 a los 70 (formerly: "100 a los 70")	84.7	31.6	3.5	12.0	156.9	98.1	22.5	25.5	0.29	2.92
Peru	Pensión 65	247.7	12.7	2.0	8.9	80.9	50.5	17.4	23.2	0.05	0.47
Paraguay	Pensión Alimentaria para Adultos Mayores	48.6	13.5	3.1	22.9	122.0	76.2	18.7	30.3	0.17	1.32
	Pensión Alimentaria para Adultos Mayores Indígenas	2.4	0.7	3.1	22.9	122.0	76.2	18.7	30.3	0.01	0.06
Uruguay	Pensión No Contributiva a la Vejez	84.4	17.6	6.9	21.1	272.3	170.2	72.9	43.4	0.52	3.87
	Subsidio de Asistencia a la Vejez	4.1	0.9	6.9	21.1	272.3	170.2	72.9	43.4	0.02	0.13
Venezuela	Gran Misión Amor Mayor	516.6	28.7	6.7	40.8	411.5	257.2	54.8	45.9	0.43	3.49

Notes

⁽¹⁾ Only national government programs are included.

⁽²⁾ Only the beneficiaries and the expenses related to old age benefits (retirement and pensions) are included. Benefits for disability, which can also be part of these programs, are not included.

⁽³⁾ If the benefits are not monthly, as indicated in Table A1 in the Appendix, monthly values are calculated in order to be able to compare with other programs.

⁽⁴⁾ Values within the table.

⁽⁵⁾ The source for public consumption data are from national accounts available through the World Bank, which also include current expenditures of the national government for the purchase of goods and services (including payment of salaries of personnel). In addition, it includes the majority of expenditures for defense and national security and excludes those military expenditures that are part of public investment.

⁽⁶⁾ Semi-contributory benefit.

⁽⁷⁾ The minimum and maximum value of transfers is provided.

⁽⁸⁾ In Chile, in 2008, a new and unique Pilar Solidario was created to replace the former system of social assistance pensions – PMS – and the government's Minimum Guaranteed Pension program (Pensión Mínima Garantizada, PMG). This new system provides a PBS for individuals 65+ who are living in conditions of poverty and meet the criteria of assets and residence, on the one hand, and, on the other, provides a Solidarity Pension Contribution (APS) to those who have made contributions and receive small pensions. In this table only PBS data are included.

⁽⁹⁾ This program is awaiting implementation.

⁽¹⁰⁾ n.d.: no data available.

Source: Compiled by author based on administrative data from the programs obtained from official sources in each country and world development indicators (WDI), the World Bank for GDP and public consumption, and CEPAE (2013), CEPAL and the United Nations for the 65+ population.

In Brazil, for example, the level of benefits is linked to the evolution of the minimum wage. When it comes to the relationship between benefits and the average salary of 65+ workers, it becomes clear that NCP benefits do not reach a quarter of the average salary that the beneficiaries could obtain on the labor market (Honduras, Colombia, Mexico, among others). For this reason, it is more probable that there are no disincentives to labor market participation by current or future beneficiaries in these countries. In contrast, in countries like Argentina (in the "Moratorium" program), the NCPs account for 55% of the average salary of senior citizens; while in El Salvador, the benefit amounts to 71% (see Table 1).

Cost and sustainability

The cost of non-contributory programs is usually financed from general revenues or specific funds. For example, in Bolivia, a share of a tax on hydrocarbons is used exclusively for this program. The majority of the countries in the region assign few resources to finance these types of programs - less than 0.1% of GDP. Another group of countries assigns between 0.1% and 0.5% (Mexico, Guatemala, Paraguay, Brazil, Panama, Ecuador, and Venezuela). Among those that spend the highest percentage are Uruguay (0.52%); Bolivia (0.98%); Brazil, which through both of its programs (rural pensions and BPC in urban zones) spends 1.36% of GDP on social pensions; and Argentina, which, including total expenses on the "Moratorium" and the NCPs for old age, spends around 2%. In Uruguay, Brazil, and Chile expenditures on social pensions are greater than the conditional cash transfer programs that are common in LA.²⁰ Looking at the countries in the same order, it is noteworthy that the latter ones assign a greater proportion of aggregate public consumption to these programs, which absorb between 3.87% and a little more than 14% of total public consumption.

2. SOCIOECONOMIC CHARACTERISTICS OF SENIOR CITIZENS IN LATIN AMERICA

2.1. ¿Who are the senior citizens in the region and how do they live?

According to estimates for LA-18, in 2012, there were about 45 million 65+ senior citizens in the region (a number equivalent to 8.2% of the total population). Of these, 56.5% live in Brazil and Mexico, reflecting the size of the total population of these countries. In Argentina, Uruguay, Chile, and Ecuador, senior citizens account for more than 10% of the population, representing 14% in Uruguay. At the other extreme we find Nicaragua and Guatemala with less than 6%.

20. Cerutti *et al.* (2014).

In terms of individual characteristics, it is conspicuous that women make up a larger share of senior citizens than men in LA (55%) and the proportion of women increases as this population ages. In the region, three-fourths of senior citizens for whom data are available live in urban areas.²¹ Still, there are countries where a large percentage lives in rural zones such as Honduras (50.6%) or Guatemala (48%).

Senior citizens currently have an average of 5.3 years of schooling. A high percentage (78.5%) have a low level of education (between zero and eight years of school), 12.9% have a medium level of education (between nine and thirteen years) and only 8.6% completed 14 or more years of schooling; nevertheless, there is considerable variation across countries.

In LA, the role of the family and of society is important in guaranteeing adequate life conditions in old age. Traditionally, the family has had the greatest responsibility in caring for senior citizens due to the lack of pension coverage and the absence of an institutional and communal tradition of care for senior citizens (Del Popolo 2001). The expansion of NCPs could modify this relationship within the household and increase or intensify the independent economy of senior citizens, putting them in a position to care for the family. Of course, this type of transfer could be considered as part of the household's income, but it is difficult to determine whether individual senior citizens are dependent on household income or whether, conversely, they are providers of resources. In practice, one can observe the interrelation of both arrangements, given that 18% of LA households have a senior citizen as the head of household and 64% of senior citizens are heads of household. The majority of senior citizens live in multi-generational households (in 14.7% of the households of the region, senior citizens live with other generations) and only 7.1% of households include only senior citizens (living alone or with others).²² The latter percentage is higher in countries with higher pension coverage (in Argentina and Uruguay, it is 13% and 16% of households, respectively).

In addition to public transfers, private transfers – that is, income received by households where senior citizens live – can play an important role in evaluating the level of poverty in old age (in El Salvador and in Honduras, 16.6% and 14% of households receive remittances from abroad, respectively).

21. Argentina and Venezuela are not included in this calculation.

22. This is equivalent to saying that 67.4% of senior citizens in the region live with family members, who may or may not be senior citizens themselves.

2.2. Participation and labor market insertion

We will now turn to the participation and type of insertion of senior citizens in the labor market. Their participation in the labor market has implications for economic security since it may not be a preferred option so much as an economic necessity, even when health limitations exist. The combination of low pension coverage with inadequate levels of benefits, lack of family support, or sufficient savings can be a determining factor in the labor market becoming the only option for senior citizens to avoid situations of poverty and maintain an adequate level of subsistence. Thus, the labor market becomes an important source of income for them and their households. The labor income of senior citizens reduces the probability of falling into poverty and increases their capacity to deal with unexpected expenses. In addition, the labor market can become a source of access to financial markets (pension plans), credit markets, and even mechanisms of health insurance for senior citizens and their families.

In the region, there is high labor participation in old age (26.2%²³ of senior citizens continued to be active in 2012, while in the group of countries in the Organization for Co-operation and Economic Development [OECD] the percentage is only 13.2%) and departure from the labor force is gradual even after reaching retirement age. Consequently, the labor market continues to be an important source of economic security in old age. The labor market participation of senior citizens is considerably higher among men (39.2%) than women (15.8%). At the same time, participation is higher in rural areas (45.1%)²⁴ than in urban areas (20.4%),²⁵ and diminishes with age (33.7% for adults between 65 and 74 years of age and 15% for those 75 and over). This could reflect a loss of autonomy and health problems. The levels of employment among older adults follow the same pattern (reaching 25.7%). These averages, however, hide important heterogeneity between countries.

Among senior citizens in LA, 6.6% state that they have a second occupation. This percentage is higher in countries with lower pension coverage such as Honduras (28.4%) or Peru (19.8%). On the other hand, the level of unemployment does not seem to be a problem for this age group (at only 1.9%). As will be seen below, the problem has more to do with the quality of insertion in the labor market.

23. They are considered economically active if they are working or unemployed in the period covered by the survey, and inactive in the opposite case.

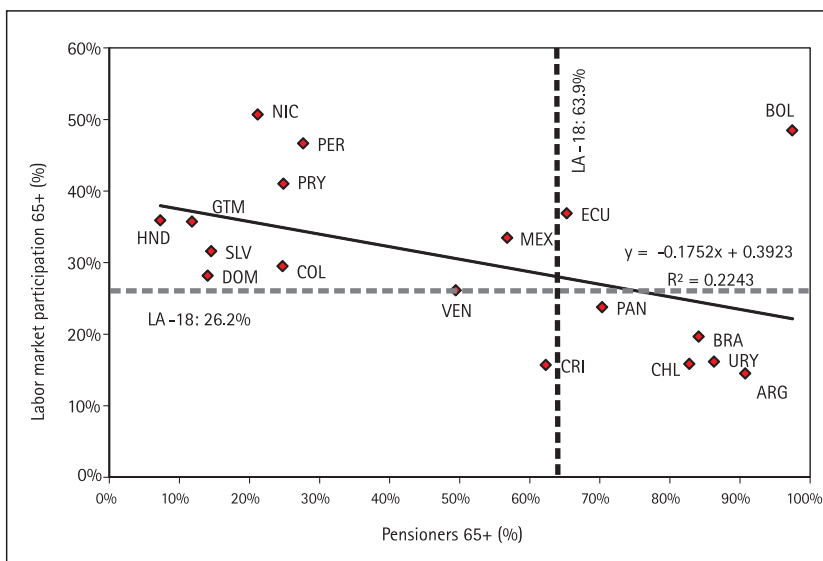
24. Argentina and Venezuela are not included in this calculation due to lack of information.

25. In rural areas, the participation of senior citizens is double or more than in urban zones in Brazil, Panama, Mexico, and Peru.

Graph 2 shows the negative relationship that exists between more pension coverage and labor market participation (and retirement) of senior citizens. It is probable that this relationship is linked to the adequacy of the benefits described in Section 1. For example, Bolivia is presented as an extreme case in which both coverage (because of universal non-contribution) and labor market participation are high, indicating that benefits may be insufficient to permit people to consider leaving the labor market as a source of income. In contexts of poverty and low pension coverage, it is probable that reduction in economic activity in the late years of life is a reflection of few labor opportunities and not a desire to leave the labor market (Lloyd-Sherlock 2000).

Graph 2

**Labor participation and pension coverage in old age (65+), Latin America, circa 2012
(in percentages)**



Note: Labor market participation refers to the percentage EAP among senior citizens 65 years of age or more.
Source: Compiled by author based on LA-18.

An analysis of the intensity of work in old age reveals that those senior citizens who work do so for a considerable number of hours (35.7% per week), and over 40 hours a week in some countries. Among the economically active senior citizens in LA, labor market insertion is principally through independent work, given that half are self-employed and 12.5% are managers or employers. In addition, 24.6% are salaried and 12.5% are unremunerated family workers (generally in household tasks primarily done by women).

In LA, the informal sector included 44.8% of workers between 15 and 64 years of age in 2012.²⁶ Formal employment opportunities decrease as age increases and as a result, senior citizens tend to be inserted in the labor market in precarious, informal or low paying jobs. In addition, as already noted, self-employment increases in old age. This type of labor market does not allow senior citizens to be covered for contingencies such as unemployment, illness, disability or death. In addition, participation in the informal sector earlier in life limits access to the benefits of contributory pension systems.

Insertion into the informal sector tends to be determined by the lack of opportunities in the labor market for senior citizens, the lack of competencies or specific abilities related to technological changes or, simply, because senior citizens continue to engage in the same activities as when they were young. Informality in old age exists among 87.8% of senior citizens still working and 62.2% of salaried workers, and its incidence is considerably greater in comparison to that among adults between 45 and 64 years of age (57.7% of workers and 32.5% of salaried workers).

2.3. Poverty and vulnerability

Available estimates of poverty focusing on senior citizens in LA countries are few (Whitehouse 2000; Huenchuan and Guzmán 2006; Del Popolo 2001; and in greater detail, Gasparini *et al.* 2007).²⁷ However, an understanding of the real conditions faced by senior citizens is key for development of concrete social security policies.

An analysis of household surveys indicates that poverty²⁸ in LA has fallen significantly since the beginning of the 2000s, accompanied by economic growth in the region. Total poverty, measured as the proportion of people with available income of less than \$4.00 a day, at 2005 PPP,²⁹ affected 34.4% of the total population in 2000 but had decreased to 20.4%

26. In order to calculate the pension coverage of the working population, individuals between 15 and 64 years of age were included; people were considered as being covered if they contributed to or were enrolled in social security.

27. There are studies dealing with countries outside the region that also serve as references. See, for example, Barrientos and Mase (2012), who did a study comparing Brazil and South Africa, and García and Moore (2012) who provide an analysis of the evolution of transfer programs, including social pensions, in sub-Saharan Africa.

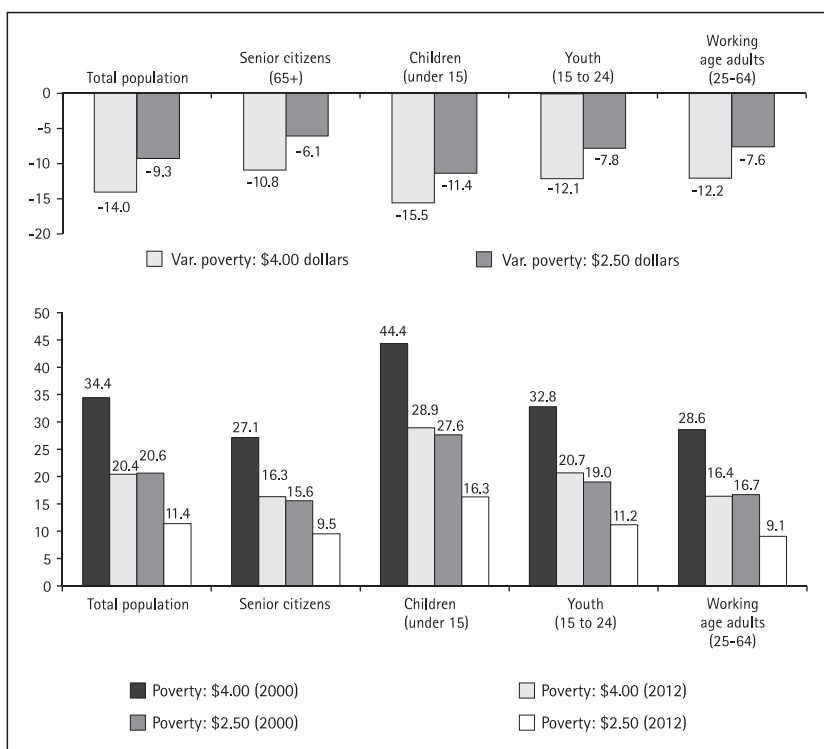
28. In relation to poverty, there is ample consensus in the literature that it is a multidimensional condition in terms of its causes as well as its effects (see: Kakwani and Silber 2008; Gasparini, Marchionni, Olivieri, and Sosa Escudero 2013; Alkire and Santos 2013). Given empirical limitations, the focus in this study is unidimensional and centered on the analysis of poverty caused by lack of income, following the literature on the region (Gasparini *et al.* 2007; Cotlear 2011).

29. Here and later in this article, in the calculation of measures of poverty, income available is adjusted for the size of the household utilizing the modified scale of equivalencies of the OECD: 1 = head of household, 0.5 = minors to 16 years of age, and 0.7 = other adults.

by 2012.³⁰ This phenomenon in LA has been documented by various authors (Alvaredo and Gasparini 2013; Levy and Schady 2013). The tendency was generalized for all age ranges, although more intense for some than for others. Among senior citizens, moderate poverty affected 16.3% (approximately 2.5 million people) and was reduced substantially (10.8 percentage points [pp]) in comparison to the year 2000 (see Graph 3). In addition, 9.5% of senior citizens in the region live in extreme poverty (with a disposable income of less than \$2.50 a day, at 2005 PPP).

Graph 3

Extreme and moderate poverty at the individual level, by age groups, Latin America, 2000 and 2012 (variation and absolute value)



Source: Compiled by authors based on LA-18.

30. Groups with the greatest risk of poverty among senior citizens include: women (in countries with less coverage); senior citizens who live in rural areas (except in Brazil); the most elderly (in countries with less coverage); the least educated (due to their lower contributory labor history); and those with the least coverage from the pension system (both contributory and non-contributory).

Graph 3 illustrates that the incidence of poverty among senior citizens in LA is less than among any other age group and this was already true in 2000, before the expansion or creation of NCP programs. On the other hand, between 2000 and 2012, it is the age group with the least reduction in poverty in percentage points.

This reduction of poverty is not only associated with the increase in NCP programs. There are other factors that accompany this process, such as the incidence of other government transfers focused on children or the family.³¹ In addition, the literature often points to other types of non-work private income such as intra-family transfers (within a country or from abroad) and the growth of labor income (associated with the growth of labor productivity).³² Azevedo *et al.* (2013), using a counterfactual analysis, find that the principal determinant factor in the reduction of aggregate poverty since 2000 is the increase in labor income. The authors also point out that demographic change has played an important role in the reduction of poverty, especially in those countries where the level of dependency has fallen.

The literature shows mixed results in relation to age and poverty both in developed and developing countries (Barrientos 2006; Gasparini *et al.* 2007; Kakwani and Subbarao 2005). As was found in other studies, this analysis demonstrates that a positive correlation does not exist between age and poverty in LA. Both moderate poverty as well as extreme poverty in LA as a whole are similar in senior citizens and adults between 25 and 64 years of age, slight below the rates for young adults and less than the incidence in children (less than 15 years of age).³³ According to the definitions provided to this point, in LA, 16.3% of those older than 65 are considered poor.

Three groups of countries stand out in relation to poverty among senior citizens: a) countries with low poverty (< 4.7%): these have pension systems with the highest levels of coverage and generosity and the highest percentage of senior citizens, such as Argentina, Uruguay, Brazil, and Chile; b) countries with intermediate poverty levels (between 8.4% and 15.4%): Costa Rica, Panama, and Venezuela; c) countries with the highest levels of poverty (more than 25%), which include the rest in the group (11 of the 18 analyzed), with Peru, the Dominican Republic, and Nicaragua standing out, at one extreme, with 30%-40% of senior citizens living in poverty and, at the other extreme, Guatemala and Honduras with almost 60%.

31. For an analysis of the expansion of these types of programs in the region, see Cerruti *et al.* (2014).

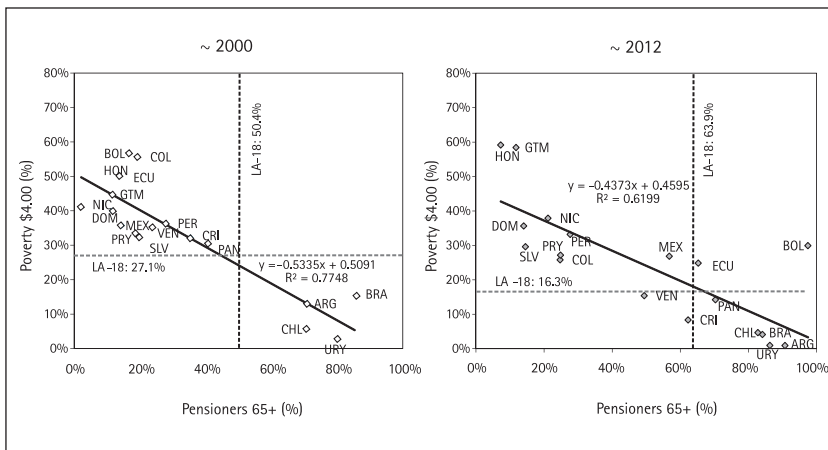
32. See Inchauste *et al.* (2012).

33. In recent years, conditional cash transfer programs and other monetary and non-monetary transfers for children and families have expanded considerably in the region (Cerruti *et al.* 2014) with undeniable consequences for the reduction of poverty.

The relationships between poverty and pension coverage is negative in LA - that is, the higher the level of coverage by pension systems, the lower the level of poverty in old age (see Graph 4). In 2012, a trend can be observed in many countries toward the lower right quadrant (indicating greater coverage and lower incidence of poverty), whereas in 2000, only Argentina, Brazil, Chile, and Uruguay appeared. The most notable cases in this regard are Bolivia, Panama, Ecuador, Costa Rica, Mexico, and Venezuela.

Graph 4

Relationship between pension coverage and poverty (\$4.00 PPP) among senior citizens (65+) in Latin America, circa 2000 y circa 2012



Note: in the case of Argentina, the poverty line was determined using an alternative indicator of prices (the consumer price index [CPI] prepared by the Argentine Congress) instead of the official indicator published by the National Institute of Statistics and Censuses (Instituto Nacional de Estadística y Censos, INDEC), due to repeated concerns about the latter's veracity.

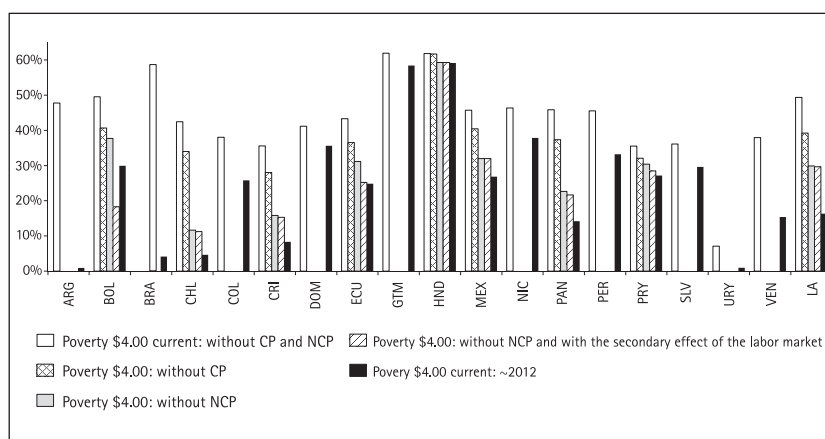
Source: Compiled by author based on LA-18.

In order to illustrate the weight that pensions have on this condition, Graph 5 presents comparisons for senior citizens according to the following indicators: a) actual poverty; b) poverty in a scenario in which pensions (whether contributory or non-contributory) do not exist; c) poverty in the absence of CPs; and d) poverty in the absence of NCPs. The implicit assumption behind these estimates is that there are no secondary effects that would lead to changes in the decisions of senior citizens (or those who live in their households) regarding the generation of alternative sources of income (private transfers or labor income) in the absence of pension benefits. Under this assumption, the exercise assumes that in the absence of a pension system, senior citizens would experience a reduction in their

income equal to the total transfers currently received from the system, both contributory and non-contributory.³⁴ The results indicate that senior citizens are more at risk of falling into poverty when there is an absence of public pension benefits.

Graph 5

Comparison of the condition of poverty (\$4.00 PPP) among senior citizens (65+) in the absence of a pension system, Latin America, circa 2012 (in percentages)



Notes

(i) CP, NCP and ~ 2012 refer to the current situation without any assumptions.

(ii) The differences in the incidence of poverty are shown taking into account the NCP and CP separately in those countries where they can be distinguished from each other on the basis of household surveys, and not in those countries where they cannot.

(iii) LA represents the average of the weighted indicator for the population of the 18 countries, except for the poverty indicator without NCP, which was estimated only taking into account the nine countries for which the information was available.

Source: Compiled by author based on LA-18.

Graph 5 shows that the differences in the incidence of poverty in old age in the absence of pension systems would be high, above all in countries with extensive pension coverage (Argentina, Brazil, and Chile, with a lesser degree of difference in Uruguay), but also in countries with medium or not so extensive coverage (such as Panama, Costa Rica, and Venezuela). In the absence of pension systems, with the indicated assumptions, poverty would increase by 33 pp in LA. In the case of the nine countries for which it is possible to discern the existence of NCPs, there is a difference between the incidence of real poverty and the incidence of poverty among those with access to NCPs, of around 8 pp in Panama

34. A similar estimate was prepared by Cotlear (2011) for some countries for 2006, using a poverty line of \$2.50 a day in PPP.

and Bolivia and 7 pp in Chile and Ecuador. In the rest of the countries for which information is available, the difference between both rates is smaller.

For those countries in the survey for which information about NCPs is available, the study went beyond this exercise in order to estimate the secondary effects on the labor market in the absence of NCPs (this exercise is provided in an additional scenario [e]). Here it was assumed that all individuals older than 65 and younger than 75 years of age who currently receive NCP benefits and are working, in reality are working and receiving an income equal to the average labor income of people in this age range. From this, it follows that in the majority of countries, the labor income received by the individual who continues working would not make it possible to lift the individual and their family out of poverty. This is so because the levels of poverty found coincide with those that would exist in a world without NCPs. The only country in which poverty would fall is Bolivia. However, this is not a very plausible scenario, since non-contributory coverage is universal in this country; therefore, the exercise assumes that all adults between 65 and 75 years of age would have access to a job with an income equal to the average salary and this seems not to be the case in reality. On the other hand, since it is a universal benefit, one assumes that it would generate an income effect on individuals and not a substitution effect.

Given that NCPs attempt to replace labor income, the transfers tend to be greater than those of social assistance programs (Grosh *et al.* 2008). This is reflected in the generosity of the benefits. Two indicators of generosity per quintile of income were estimated: one with the current distribution of income and the other under the assumption that the NCPs did not exist.³⁵ The latter case is equivalent to discounting the sum of the transfer when organizing the individuals according to quintile of income (without the possibility of indirect effects). In the countries analyzed, the NCPs represent between 35% (Mexico) and 63% (Paraguay) and the income of the poorest beneficiaries. Nevertheless, under the assumption that the NCPs did not form part of the household income, it should be kept in mind that, for the majority of countries considered, the NCPs represent more than 89% of the income of the poorest beneficiaries (except Mexico, where they represent 53%).

Beyond the fact that poverty continues to be a significant problem in many LA countries, a high percentage of senior citizens are in a situation of vulnerability (30.4% on average),³⁶ which implies that the possibility of their falling into poverty is greater. The situation in

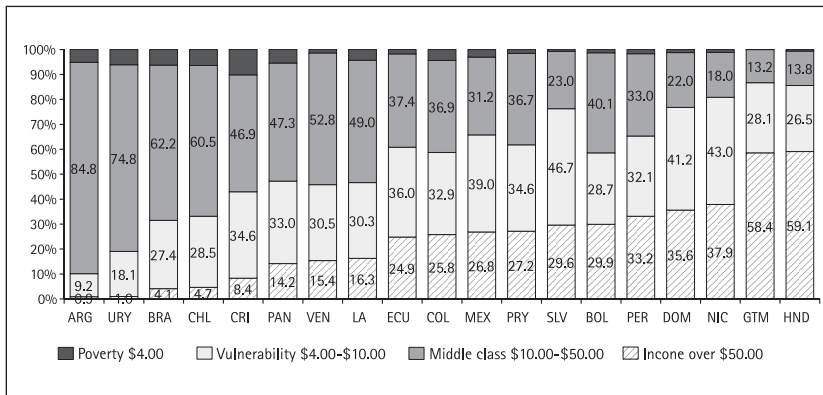
35. These were used by Cerruti *et al.* (2014).

36. In these calculations, the OECD scales of equivalences were utilized, that is, 1 = head of household, 0.5 = minors under 16 years of age, and 0.7 = the remainder of the adult population. The definition of the parameters for identifying individuals that are middle class is that used by Ferreira *et al.* (2013).

countries such as Honduras and Guatemala is of particular concern since conditions of poverty and vulnerability among senior citizens are 85.6% to 86.5%, respectively (see Graph 6).

Graph 6

Level of poverty and vulnerability among senior citizens (65+), by daily income, Latin America, circa 2012



Source: Compiled by author on the basis of LA-18.

3. BREAKDOWN IN CHANGES IN POVERTY AMONG SENIOR CITIZENS

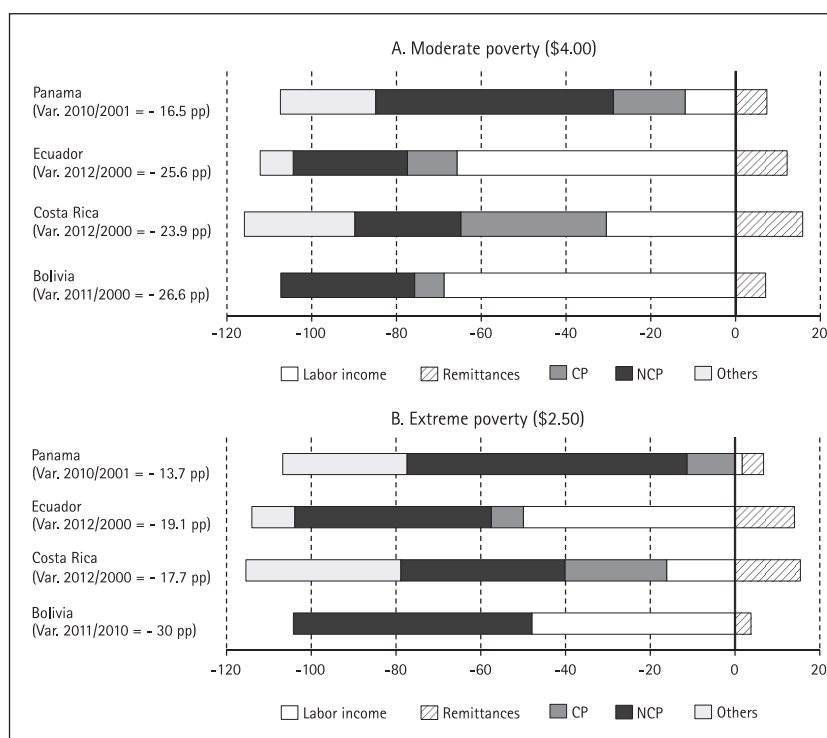
Availability of data for the period 2000–2012 allows us to understand the factors behind the changes in poverty in old age in terms of direction and magnitude. Because of the limitations of some data and important expansions in coverage, four LA countries were chosen (Bolivia, Costa Rica, Ecuador, and Panama³⁷) in which changes in extreme and moderate poverty were more substantial during the stated period of time (extreme poverty was reduced by between 14 and 30 pp and moderate poverty between 16 and 26 pp). The breakdown of changes in poverty makes it possible to answer the following questions: a) which factor contributed the most to the reduction of poverty in old age?; and b) what was the role of the NCPs in the change?

Micro-breakdown methods are subject to the problem of path dependence, which is to say that the order in which the cumulative effects are calculated is important. For this reason, breakdowns were calculated in all possible orders and the averages of these

37. See Table A2 in the Appendix.

estimations are presented. Following the algorithm proposed by Azevedo *et al.* (2012a and 2012b), Shapley-Sorrocks estimations were calculated for each component. In this case, the following were quantified: contributions to the reduction of poverty due to changes in labor income, private transfers among family members (remittances from abroad), CPs, NCPs, and other income. This method generates a complete counterfactual distribution that makes it possible to distinguish the contribution to the reduction of poverty resulting from a change in each of the components at the same time.³⁸ Indicators of welfare used for the calculations were measures of poverty at \$2.50 (extreme poverty) and \$4.00 (moderate poverty) per day in PPP adjusted on the OECD scale used throughout this study.

Graph 7
Breakdown of changes in poverty in selected countries, 2000–2012 (in percentage points)



Source: Compiled by authors based on household surveys.

38. The STATA Adecamp module created by Azevedo *et al.* (2012a) was used to prepare the breakdowns.

These estimates make it possible to carry out a quantification exercise of the changes in poverty but not to identify the causal effects. This is because, for example, the existence of NCPs can lead to a change in decisions regarding participation of senior citizens in the labor market, thus affecting this type of labor income. Nevertheless, the breakdowns continue to be useful for identifying regularities and allow attention to be focused on those factors that are quantitatively more important for describing distributional changes. The NCPs played an important role in the reduction of extreme poverty in 2000–2012 and a relatively lesser, though still notable, role in the reduction of moderate poverty (except in Panama where NCPs accounted for 56% of the reduction). In terms of the reduction of extreme poverty, the NCPs explain 66.1% of its decline in Panama, 56.3% in Bolivia, 46.4% in Ecuador, and 38.7% in Costa Rica (see Graph 7 and Table A2 in the Appendix). In the case of moderate poverty, NCPs account for between 25% (in Costa Rica) and 56% (in Panama) of its decline.

4. CONCLUSIONS AND DISCUSSION

LA currently faces a situation of accelerated aging and low contributory pension coverage. In this scenario, the present study examines recent changes in pension systems in the region, characterized by the increase in non-contributory pension programs. In addition, using harmonized indicators based on household surveys conducted in 18 countries in the region around 2012, it analyzes the situation of senior citizens following the expansion of these types of programs. It also reviews non-contributory strategies implemented in the different countries based on government information. Using these two sources, it is possible to compare experiences and results across a broad set of dimensions.

LA-18 includes about 45 million senior citizens (8.2% of the total population) who live primarily in urban areas. In addition, in LA, the majority live with other household members and have a high level of labor participation. This indicates that both the family and the labor market play an important role in guaranteeing quality of life in old age. Those that are economically active have long working hours (35.7% hours, on average) and work primarily in the informal sector or are self-employed.

Pensions and, NCPs in particular, undoubtedly have an effect on reducing the level of poverty of senior citizens and their families. Intrinsically, their objective in both cases is the reduction of poverty in old age. This study attempts to assess the association among these variables and the gaps that remain to be closed in the various countries. Evidence was found that there is a negative association between the two variables. This work also estimates the levels of poverty that would exist if there were no pensions (whether contributory or non-contributory), assuming the existence or absence of second order

effects. The results of the simulation show that in a comparison between a scenario with pensions and another without pensions, changes in the levels of poverty are greater the more extensive the coverage of current programs.

Changes in pension systems are reflected in the improvement of coverage in old age in LA, although there is considerable heterogeneity across countries. At one extreme, there are those countries with greater pension coverage (of contributory as well as non-contributory programs), whose non-contributory programs provide adequate pensions, and which have lower levels of poverty and decreased labor participation in old age (Argentina, Brazil, Chile, and Uruguay). At the other extreme, in countries such as Honduras, Guatemala, Nicaragua, and Peru, low levels of pension coverage are combined with high levels of labor participation and high levels of poverty in old age. In these countries, non-contributory pensions still provide insufficient protection.

The analysis indicates that despite the expansion of NCPs in the region, there are still gaps to be closed (63.9% of senior citizens were covered in 2012 by some kind of program). In some cases, the increase in coverage was not accompanied by pensions that were sufficient to guarantee quality of life in old age. Among senior citizens, 16.3% live in poverty (approximately 2.5 million people) and many others are vulnerable to falling into poverty. In this scenario, senior citizens employment is probably the only available source of income. In LA, 26.2% of senior citizens participate in the labor market (although this percentage is higher in countries with less pension coverage) and the majority live with other household members (especially in countries with less coverage). On the other hand, non-contributory programs with greater coverage imply more fiscal investment, which emphasizes the need to take into account questions of long-term sustainability in the design of these programs.

The different routes adopted by these countries to deal with the poverty among senior citizens reflect their cultural, historical, political, and institutional histories. One can find efficient and innovative practices in the region, but these are not necessarily directly transferable to other countries. The effectiveness of the policies depends on their being imbedded in the specific realities of each country. For this reason, it is important to understand these realities as well the different policies in order to be able to learn from both their successes and their errors.

From this study, we can conclude that NCPs constitute an effective and efficient policy to deal with the problem of poverty and vulnerability in old age and will play a relevant role in combatting extreme poverty in this stage of life in the region. As described in this article, there are examples of LA countries that were able to effectively manage the quandaries

between different aspects: that the benefits that are provided guarantee a minimum level of subsistence, that they cover a significant percentage of the unprotected population, and that the fiscal cost is relatively low and sustainable over time.

Of the variety of policies available to respond to demographic change and the vulnerability or exclusion of older adults, there are solutions that go beyond the pension system. These are primarily related to employment policies, education (professional training throughout life), and health (healthcare system). While they are outside the scope of this study, they are important and should be explored in future research. Moreover, the shared role of the family, the state, the market, and society in the reduction of the risk of poverty and social exclusion of senior citizens has to be recognized.

The focus of reforms in recent years has been an increase in passive coverage (short or medium term). While countries have adopted measures to improve coverage in the active stage (long term), informality in the region today exists at very high levels (42% of the economically active population). For this reason, it is very important to seek new solutions to increase active coverage by reducing labor informality and providing alternatives so that individuals can finance their consumption during their passive stage and thus avoid dependence on non-contributory pension programs, which are unsustainable in the long term.

APPENDIX
Table A1.
Qualitative characteristics of the non-contributory pension programs, Latin America, 2012

Country	Program	Year created	Mechanism of beneficiary eligibility				Benefit			
			Age of eligibility / gender	Geographic scale	Verification of means of support	Universal	Auto selection	Periodicity	Delivery format	
									Cash	In kind
Argentina	Pensión No Contributiva a la Vejez Monetaria Previsional ⁽¹⁾	1948	70+	National	x			Monthly	x	x
		2005–2007 (a component remains in effect)	65+ H / 60+ M							
Bolivia	Renta Dignidad	2008	60+	National	(2)	x		Monthly	x	
Brazil	Pensión Rural a la Vejez	1991	60 H / 55 M	National (rural area or artisanal fishery or urban up to 50,000 inhabitants)				Monthly	x	
		1996	65+	National	x ⁽³⁾				x	
Chile	BPC	2008	65+	National	x ⁽⁴⁾			Monthly	x	
Colombia	Colombia Mayor	2003	59 H / 54 M	National (regional)		x		Monthly	x	x
Costa Rica	Pensión No Contributiva	1974	65+	National		x		Monthly	x	
Dominican Republic	Pensión Solidaria	2001 (normativa) / 2013	60+	National		x		-		
Ecuador	Bono de Desarrollo Humano	1998	65+	National		x		Monthly	x	
El Salvador	Nuestros Mayores Derechos (PBU)	2009	60+	National (urban, slums)		x		Monthly	x	x
Guatemala	Aporte del Adulto Mayor	2005	65+	National		x		Monthly	x	
Honduras	Bono a la Edad de Oro (formerly: Bono Tercera Edad)	2010	70+	National		x		Annual	x	
Mexico	Pensión 65 y más	2007 (70+), 2013 (65+)	65+	National / small localities (< 2012)		x		Bimonthly	x	
Nicaragua	Componente Adulto Mayor de oportunidades	2006	70+	National		x			x	
Panama	Pensiones de Gracia	1982	60+	National				Monthly	x	
		2009	70+	National		x		Bimonthly	x	
Peru	Pensión 65	2011	65+	National		x		Bimonthly	x	
Paraguay	Pensión Alimentaria para Adultos Mayores	2009	65+	National (geographic prioritization)		x		Monthly	x	
Uruguay	Pensión Alimentaria para Adultos Mayores Indígenas	2010	65+	60 communities (16 indigenous people)				Monthly	x	
		1919	70+	National		x		Monthly	x	
Venezuela	Subsidio de Asistencia a la Vejez	2008	65–69	National	x ⁽⁵⁾			Monthly	x	
		2011	60 M / 55 F	National		x		Monthly	x	

(continuation)		Programs preceding the current one	Legal framework	Institution responsible	Implementing agency
Country	Program				
Argentina	Pensión No Contributiva a la Vejez		Law N° 13,478/84; Decree 432/97; Decree 582/03; Law 23,746/89; Law 18,910; Decree 2,360/90; Decree 1,450/05	MDS	Nacional Commission on Non-Contributory Pensions
	Moratoria Previsional ⁽¹⁾	Past "Moratorias" and Plan Mayores (2003) a component of the Programa Jefes y Jefas de Hogar Desocupados	Art. 6° of Law 25,994	ANSES	ANSES
Bolivia	Renta Dignidad	Bonosol (1996), Bolivia (1998)	Law N° 3,791 (2007); Supreme Decree N° 29,400 (2007); Supreme Decree N° 29,417 (2008); Supreme Decree N° 29,423 (2008)	APS	Administrators of pension funds
Brazil	Pensión Rural a la Vejez BPC		Law N° 8,212; Law N° 8,213 Law N° 8,742 (1993)	MDS	INSS
Chile	PBS	Pasis (1975) and PMG of the contributory system (1981)	Law N° 20,255	Ministry of Labor and Social Pensions	Social Pensions Institute (formerly: INP)
Colombia	Colombia Mayor		Law N° 787 (2003); Regulating decrees N° 569 and N° 4,112/2004; document CO/PPES 70 (2003); 78 (2004) and 82 (2004); Decree N° 3,771 (2007)	Ministry of Social Protection	Colombian Institute of Family Welfare; Prosperar Hoy Consortium
Costa Rica	Pensión No Contributiva		Law N° 5,662 (1974)	Costa Rican social Security Office	Social Development and Family Benefits Fund
Dominican Republic	Pensión Solidaria		Law N° 87-01 (2001) and CNSS Resolution N° 320-02 (2013)	CNSS	CNSS
Ecuador	Bono de Desarrollo Humano		Executive Decree N° 347-A (2003); Executive Decree N° 12 (2007); Executive Decree N° 1,824 (2008); Executive Decree N° 1,838 (2008)	MIES	Social Protection Program (PPS)
El Salvador	Nuestros Mayores Derechos (PBU)		Legislative Decree N° 179 (2009)	Technical Secretariat of the Presidency	FISDL
Guatemala	Aportedel Adulto Mayor		Decree N° 85 (2005)	MTPS	Office of Social Pensions, MTPS
Honduras	Bono a la Edad de Oro (formerly: Bono Tercera Edad)		Component of the Family Allowance Program (PRAF) governed by Decree Law N° 127 (1991), Legislative Agreement N° 127 (1991) and Legislative Agreement N° 135 (1992)	Secretariat of Finances, PRAF	Secretariat of Finances, PRAF
Mexico	Pensión 65 y más	Pensión 70 y más (2007-2013)	Law on the Rights of Senior Citizens (2002); General Law on Social Development and Operation Regulations of P70+ (SEDESOL)	DGAGP in SEDESOL	DGAGP
	Componente Adulto Mayor de Oportunidades		Regulations of the Program on the Development of Human Development	SEDESOL	Department for the National Coordination of the Program of Human Development, decentralized agency of the Ministry of Social Development

(continuation)					
Country	Program	Programs preceding the current one	Legal framework	Institution responsible	Implementing agency
Nicaragua	Pensiones de Gracia		Decreto N° 1,181	INSS	INSS
Panama	120 a los 70 (ex 100 a los 70)		Law N° 44 (2009), Law N° 86 (2010); Resolution N° 225 (2013); Law N° 673 (2014)	MDIS	MDIS
Peru	Pensión 65	Gratitud (2005-2011)	Supreme Decree N° 081-PCM (2011); Emergency Decree N° 56 (2011)	Presidency of the Council of Ministers	National Program of Direct Support of the Poor, JUNTOS
Paraguay	Pensión Alimentaria para Adultos Mayores		Law N° 3,728 (2009)	Office of Non-Contributory Pensions, Ministry of the Finance	Office of Non-Contributory Pensions, Ministry of the Finance
	Pensión Alimentaria para Adultos Mayores Indígenas		Law N° 3,728 (2009); Law N° 294 (1993)		
Uruguay	Pensión No Contributiva a la Vejez		Law N° 6,874 (1919); Law N° 14,117 (1973); Institutional Act N° 09 (1979); Law N° 15,841 (1986); Law N° 16,713 (1995); Law N° 16,759 (1996); Law N° 16,928 (1998); Law N° 17,266 (2000)	Ministerio de Desarrollo Social	Banco de Previsión Social
	Subsidio de Asistencia a la Vejez	Subsidio de Asistencia a la Vejez	Law N° 18,241 (2008)		
Venezuela	Gran Misión Amor Mayor		Decreto N° 6,694 (2011)	Supreme Body of the Great Mission of Greater Love, Venezuela (entity of the Presidency)	NSS

Notes

- (1) Semi-contributory benefit.
- (2) The amount is differential in the case of another existing pension.
- (3) Except if it is medical assistance, not exclusive with the Bolsa Familia.
- (4) Only compatible with pensions provided under laws N° 8,056 (discretionary), 19,123 and 19,980 (Rettig), 19,234 (those dismissed from employment for political reasons under the Pinochet regime) and 19,992 (Valech), as long as these are less than the PBS; in such a case, the benefit will be equal to the total after subtracting from the basic old age pension the amount received from the pension(s) that the applicant receives under the aforementioned laws.
- (5) Except where the benefit received is less than the sum paid in (equal to NCP), in which case the transfer will offset the difference until this value is reached.

Source: Compiled by author on the basis of official sources.

Table A2
Contribution to the decline in poverty in old age, selected countries, 2000–2012

Indicators	Bolivia (2011/2000)	Costa Rica (2012/2000)	Ecuador (2012/2000)	Panama (2010/2001)
Poverty \$2.50 (65+)				
Initial period (%)	46.91	20.67	33.31	19.6
Final period (%)	16.9	2.94	14.14	5.88
Total change (pp)	- 30.0	- 17.7	- 19.1	- 13.7
Breakdown				
Labor income (%)	- 48.0	- 16.1	- 50.0	1.7
Remittances (%)	3.8	15.4	14.0	5.0
CP (%)	0.3	- 24.0	- 7.6	- 11.3
NCP (%)	- 56.3	- 38.7	- 46.4	- 66.1
Others (%)	0.2	- 36.5	- 10.1	- 29.3
Total contribution (%)	- 100	- 100	- 100	- 100
Poverty \$4.00 (65+)				
Initial period (%)	56.5	32.2	50.5	30.6
Final period (%)	29.9	8.4	24.9	14.2
Total change (pp)	- 26.3	23.9	- 25.6	- 16.5
Breakdown				
Labor income (%)	- 68.8	- 30.5	- 65.7	- 11.9
Remittances (%)	7.1	15.9	12.2	7.4
CP (%)	- 6.9	- 34.3	- 11.7	- 16.9
NCP (%)	- 31.6	- 25.0	- 26.9	- 56.1
Others (%)	0.2	- 26.0	- 7.8	- 22.5
Total contribution (%)	- 100	- 100	- 100	- 100

Source: Compiled by author on the basis of household surveys.

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