Basic Old-Age Protection in Latin America: Noncontributory Pensions, Coverage Expansion Strategies, and Aging Patterns across Countries

CAMILA ARZA

HISTORICALLY, LATIN AMERICAN pension systems were designed following a social insurance model geared toward offering pension benefits to formal-sector workers. From 1981, and especially over the 1990s, several countries implemented structural pension reforms to introduce privately administered individual accounts that more closely linked individual benefits to past contributions (Mesa-Lago 2004). By design, these systems excluded the redistribution of pension resources among workers and pensioners, promoting individual savings instead. In several countries, the contribution records required to receive a minimum pension from the social security system left ineligible most informal-sector workers, as well as agricultural-sector workers and unpaid family workers. As a result, the reformed pension systems suffered from persistently low levels of coverage, and a large share of older adults had no access to a pension.

In more recent years, in a context of economic growth and changing ideas and political balances, several Latin American countries have implemented policies to extend economic protection to older adults who could not obtain a pension in the contributory system. Some countries reformed pension systems that had been privatized in the previous decade (including cases of reform reversals, as in Argentina). Many countries also promoted the expansion of noncontributory pensions for older adults and persons with disabilities or made access to contributory pensions more flexible for some types of workers (Arza 2013; Arza and Knox-Vydmanov 2017; Bosch, Melguizo, and Pagés 2013; Palacios and Knox-Vydmanov 2014; Rofman, Apella, and Vezza 2013). These policies were part of a wider process of welfare expansion in other areas of social protection, which involved greater social expenditures and more social assistance benefits (Barrientos 2011).

This article evaluates the patterns of old-age protection in Latin America after recent expansions of basic pension coverage. It characterizes noncontributory pensions and related programs oriented to offer benefits to older adults lacking a record of formal employment and contributions. It is based on the systematic study of the design features of these policies in 14 Latin American countries, and relies on various data sources, including quantitative data (mainly from IDB 2017 and CEPAL 2017a), comparative databases of noncontributory pensions' design features (CEPAL 2017b, HelpAge International 2015), secondary sources, and official data from countries to complement and update other sources. This article first discusses the need and opportunities for pension coverage expansion in Latin America, referring to pension coverage deficits and the window of opportunity for dealing with them in the past two decades. Second, it documents existing programs that offer cash benefits to older adults not qualifying for contributory pension benefits and identifies different strategies and policy instruments across countries. Finally, the article explores the cross-country differences in living arrangements and retirement choices of older adults, indicators of the interactions between states, markets, and families in providing economic security in old age.

# Inequality, informal work, and population aging: The need and opportunity for pension coverage expansion

Socioeconomic inequality in Latin America is very high and involves earnings inequality as well as unequal access to formal employment, social security, and social services. In most countries, the majority of low-income workers are in the informal labor force, have no access to contributory social security benefits and limited access to social protection at all. Thus, a large share of the population of Latin America lacks what scholars have called the "double incorporation" (Martínez-Franzoni and Sánchez-Ancochea 2014)—i.e., incorporation both into the formal labor force and into the social protection system.

As has been widely documented, many older adults have no right to a contributory pension. Structural pension reforms implemented first in Chile in 1981 and in several other Latin American countries over the 1990s and early 2000s have not solved this problem. These reforms established privately administered individual accounts as a key component of the mandatory pension system, to substitute for or operate jointly with the public earnings-related system. Variations of this model were implemented in Argentina, Bolivia, Chile, Colombia, Costa Rica, the Dominican Republic, El Salvador, Mexico, Panana, Peru, and Uruguay (Mesa-Lago 2004, 2006, 2012a; Madrid 2002).

The reformed pension systems did not perform well. Coverage remained low, and there were concerns in some countries that benefits for many covered workers—especially those with interrupted work histories

CAMILA ARZA 3

or low earnings—would be too low (see e.g., Pension Commission 2006 on the Chilean case). This encouraged governments to introduce new measures, and some countries (like Argentina, Bolivia, and Chile) implemented post-privatization pension reforms that in different ways enhanced the role of the state in old-age protection (Kritzer, Kay, and Sinha 2011; Bertranou, Calvo, and Bertranou 2009; Mesa-Lago 2012b; Mesa-Lago and Ossio Bustillos 2012). Many countries also started a process of expanding pension coverage, by developing new noncontributory pension programs or by extending existing programs to provide economic support to older adults not covered by the contributory pension system.

A positive macroeconomic and fiscal context, in an international environment of high commodity prices, was favourable for the growth of public social expenditures in general, and social assistance programs in particular. On average, social expenditures in Latin America rose from 14.7 percent to 18.8 percent of the gross domestic product between 1998–1999 and 2012– 2013, and the share of social to total public expenditures increased over the same period, from 53.8 percent to 64.8 percent (CEPAL 2014). A political and ideological shift away from market-based orthodoxy toward greater state intervention also provided the political context for expanding cash benefits in several countries. The number of governments situated to the left of center on the political spectrum (notwithstanding their differences) increased (Huber and Stephens 2012). The expansionary trend also went beyond left-of-center governments. In the case of Mexico, for instance, initiatives from progressive forces in local governments and the opposition were relevant in placing these policies within the political debate and eventually encouraged their implementation at the federal level under a government with a different political orientation (see Willmore 2014). Noncontributory pensions started to be promoted by various relevant actors (including international organizations, notably through the International Labour Organization's [ILO] Social Protection Floor Initiative; see ILO 2011, 2012) and, just as happened with conditional cash transfer programs, it became clear that noncontributory pensions could reach many people, involve relatively limited budgets, and enjoy popular support.

Coverage expansion also happened in a context of population aging. On average, the share of the population aged 65 and older reached 7.5 percent in 2015 and is projected to rise to almost 25 percent by 2065 (CEPAL 2017c). In some countries, such as Argentina, Chile, and Uruguay, the aging process is more advanced, with the population aged 65 and older already representing more than 10 percent of the total population. As the share of the elderly population increases, pension coverage and adequacy are likely to become more central public policy issues. For instance, in countries with underdeveloped pension systems characterized by low coverage, the aging process can put greater pressures on younger generations in the family, as fewer children may have to provide economic support for parents

(and sometimes grandparents) who lack a pension. On the fiscal side, the impact of population aging on pension financing (a key concern in more advanced economies) varies across Latin American countries, depending on how advanced the aging process is, as well as on the level of pension coverage and the generosity of benefits.

The expansion of noncontributory pension coverage occurred in the context of these shared needs and opportunities. High levels of socioe-conomic inequality and informal work and the inability of contributory systems and pension reforms to guarantee broad coverage, as well as changes in the socioeconomic and political context, were the scenario in which new basic old-age pension programs developed and expanded. However, not all Latin American countries expanded coverage similarly, and progress remains limited in some. In addition, as we will see, countries that implemented policies to expand the coverage of older adults opted for a variety of specific policy instruments, with differences in aims, reach, and generosity.

### Policy design and policy instruments across countries

The expansion of old-age pension coverage occurred in countries with a variety of pension systems—public Pay-As-You-Go (PAYG) systems, privately administered individual accounts, and mixed or parallel systems in which individual accounts coexist with public pensions. While coverage expansion strategies varied across countries in kind and scope, they all shared a key feature: the creation or expansion of programs offering old-age benefits that did not require a record of past contributions as a condition for access (Rofman, Apella, and Vezza 2013; Arza 2013; Arza and Knox-Vydmanov 2017). Table 1 lists the most important of these policies in Latin America. Noncontributory pensions—also referred to as "social pensions"—are "regular government provided cash transfers to older people" (Palacios and Knox-Vydmanov 2014, 251) that are not linked to past contributions. For that reason, they are labeled "noncontributory," and that common usage is followed here, although some key basic pension programs analyzed in this article are partly financed through contributions and administered as part of the general pension system (such as the rural pension in Brazil or the pension moratorium in Argentina, described below). 1 In most cases, noncontributory pensions target the elderly poor. In others, these programs have wider reach and aim to cover, on their own or in combination with contributory benefits, the entire population of older adults. Some benefits are integrated with the contributory pension system, but others are separate programs that work more as poor relief for the impoverished aged than as retirement benefits.

TABLE 1 Background information on noncontributory benefits and other coverage expansion programs for older adults in Latin America

	Program	Targeting	
Argentina	Noncontributory pension program	Means-tested	
	Pension Moratorium	Not means-tested	
	Universal pension for older adults (PUAM)	Pension-tested	
Bolivia	Renta Universal de Vejez "Renta Dignidad" (previously Bonosol)	Universal	
Brazil	Benefício de Prestação Continuada (BPC) (Continuous benefit program)	Means-tested	
	Rural Pension ( <i>Previdência Rural</i> )	Not means-tested (small farmers and subsistence fishermen)	
Chile	Basic Solidarity Pension for Old Age (previously PASIS)	Means-tested	
Colombia	Colombia Mayor (previously PPSAM)	Means-tested	
Costa Rica	Noncontributory pension scheme by basic amount (Régimen no contributivo de pensiones por monto básico)	Means-tested	
Ecuador	Pension for elderly and pension for persons with disability (human development grant program)	Means-tested	
El Salvador	Our Elderly Rights (Nuestros Mayores Derechos)	Means-tested and geographic (shanty towns)	
Guatemala	Economic support for the older adult (Aporte Economico del Adulto Mayor)	Means-tested	
Mexico	Pension for the elderly (previously "70 and over" program)	Pension-tested	
	Program of food support for adults over 68 years old living in Mexico City	Universal (only Mexico City residents)	
Panama	120 at 65: Special program for economic assistance of older adults (previously 100 at 70)	Means-tested	
Paraguay	Food pensions for elderly in a situation of poverty	Means-tested	
Peru	National solidarity assistance program "Pension 65"	Means-tested	
Uruguay	Noncontributory pension for old age and disability	Means-tested	

NOTE: Some programs included in this table also cover persons with disabilities. Programs and features by c. 2017.

SOURCE: Elaborated by the author based on CEPAL (2017b) and Arza (2017a).

Rofman, Apella, and Vezza (2013, 10) made an important contribution in documenting the expansion of noncontributory pension benefits in Latin America. They identified two strategies that countries have adopted to expand coverage: the expansion of traditional contributory pension systems, and the development of poverty reduction programs targeted at older adults. To offer a taxonomy of noncontributory pensions, the

authors compared some of their key design features, specifically looking at whether benefits were: (1) universal or means-tested; (2) integrated with or independent from contributory systems; (3) permanent or temporary; (4) implemented gradually or immediately; and (5) managed by existing or new institutions (ibid., 38–43; see also Rofman, Apella, and Vezza 2015).

In line with that approach, this article aims to move further in the analysis by jointly evaluating a number of dimensions that characterize countries' old-age coverage strategies, including benefit adequacy and the relative role given to contributory and noncontributory benefits. To do this, it considers five main dimensions: (i) the basic benefit amount; (ii) the total old-age coverage rate; (iii) the contributory pension coverage rate; (iv) the noncontributory pension coverage rate; and (v) the eligibility condition for noncontributory benefits (means-tested or non means-tested). On the basis of these five dimensions, Table 2 conceptualizes three alternative strategies for old-age coverage, each combining a particular set of outcomes in the five dimensions. To fit in each model, countries are expected to have a combination of features—i.e., to present a particular value in each indicator, as described in Table 2.

The empirical analysis, which uses the most recent data available at the time of writing, allows the classification of 14 Latin American countries into three groups based on the framework outlined above. The first strategy, labeled "Contributory Plus," was implemented in Argentina, Brazil, Chile, and Uruguay. It characterizes countries that have comparatively high coverage rates in the contributory pension system and that use a variety of instruments (means-tested benefits, flexibility for access, rural pensions) to reach close-to-full coverage. The benefits these countries offer to workers outside the formal labor market are relatively more generous than (or at least not as low as) those of other Latin American noncontributory schemes.

The second strategy, labeled "Universal Minimal," characterizes countries that have low contributory pension coverage and universal or pension-tested schemes with broad coverage and modest benefits (Bolivia and Mexico). Finally, the third strategy involves countries with a more residual approach to old-age protection, that fit in a "Means-Tested Poverty Relief" model. These are countries with low contributory pension coverage rates, which extended the coverage of older adults with noncontributory benefits that are low, means-tested, and separate from the contributory system. Total old-age coverage in this group ranges from low (in El Salvador and Guatemala) to mid-range (in Colombia, Ecuador, Paraguay, and Peru), mainly because of variable efforts in the development of noncontributory pensions, and in all cases a considerable share of the elderly has no benefits. Two countries (Panama and Costa Rica) are situated between this group and the "Contributory Plus" group and are therefore considered to be mixed cases.<sup>2</sup>

 TABLE 2
 Alternative strategies for old-age pension coverage in Latin America

	I—Basic	II—Total		-\VI		
	benefit	old-age	III—Contributory	Noncontributory		
	amount	coverage	old-age coverage	old-age coverage	V—Eligibility	Country cases
Contributory Plus	Above average	High	High	Low to mid-range	Any	Argentina, <sup>a</sup> Brazil, Chile, Uruguay
Universal Minimal	Below average	High	Low	High	Non-means- tested	Bolivia, Mexico <sup>b</sup>
Means-tested poverty relief	Below average	Low to mid- range	Low	Low to mid-range	Means-tested	Colombia, Ecuador, El Salvador, Guatemala, Paraguay, Peru
NOTES: The five strategies are defined as follows:	are defined as follows:					1

II—Total oid-age coverage: "high" (above 80% of the population aged 65 and over receives a beneit); "mid-range" (between 60% and 79%); "low" (under 60%)

III—Contributory old-age coverage: "high" (above 50% of the population aged 65 and over receives a contributory beneit); "mid-range" (between 30% and 50%); "low" (under 30%)

IV—Noncontributory old-age coverage (or similar coverage expansion program): "high" (above 50% of the population aged 65 and over receives a noncontributory or similar benefit); "mid-range" (between 20% and 50%); "low" (under 20%) I—Basic benefit amount: Noncontributory pension benefits (or similar benefits paid to older adults without a full record of contributions), expressed in 2016 US\$ PPP. "Average" refers to the simple average of these benefits in the 14 Latin American countries included in this article (see Table 1).

<sup>a</sup>Contributory coverage (point III), excluding moratorium pensioners, is a few points lower than expected for its group. V- Eligibility: Means-tested or not means-tested

brotal coverage (point II) is a few points lower than expected for its group.

SOURCES: Own elaboration. See notes to Figure 1 for details on reference years, data sources, and estimation details for country cases.

#### Contributory plus

Argentina, Brazil, Chile, and Uruguay currently have the highest contributory pension coverage in Latin America. In Argentina, total coverage rates increased from 69 percent to 91 percent of the population aged 65 and over between 2005 and 2015 (IDB 2017). Not all of these benefits were fully contributory, however, and the increase in coverage rates reported above was largely the outcome of a "pension moratorium" that made contributory requirements for getting a pension more flexible (Arza 2012a; Arza 2013; Danani and Hintze 2011; Rofman, Fajnzylber, and Herrera 2010). This program made older adults who lacked the contribution records needed for a normal retirement benefit also eligible to a pension. From the new benefit, a monthly deduction was made to compensate for the contributions missing. Open to all, the pension moratorium produced a massive increase in coverage rates, especially among women (Arza 2017b). By 2015, pensions paid to older adults who joined the moratorium represented about 47 percent of all pensions paid,<sup>3</sup> and the benefit amount was normally close to the legal minimum pension. In 2016, a pension reform created the Universal Pension for Older Adults (PUAM, for the acronym in Spanish), a pensiontested benefit for older adults with no other pension, which progressively replaces the pension moratorium as the policy instrument to incorporate older adults lacking contributory benefits.

The Argentine strategy for coverage expansion had two key features. First, older adults not previously covered were incorporated into the same pension system as formal workers, and shared with them the rights to regular benefit indexation and health insurance. This contrasted with the most common strategy in other countries, which was to create a separate noncontributory pension program to incorporate the "outsiders." In fact, a separate noncontributory social assistance pension program also existed in Argentina (Bertranou, Solorio, and van Ginneken 2002), but most older adults availed themselves of the pension moratorium instead, because the conditions were better. Second, the pension moratorium was conceived as a temporary measure (workers could use it only to compensate for past years of informal work performed up until 1993, and later extended to 2003). In terms of financing, the pension moratorium involved a relatively high share of the budget compared with noncontributory pension programs in the region. This was because, unlike those programs, the moratorium also included older adults with some contribution records, and paid more and higher benefits. It was feasible in a context of growing social security revenues and the nationalization of individual pension accounts in 2008, which redirected all workers' contributions and accumulated pension funds to the national social security administration (Arza 2012b).

In the case of Chile, one of the aims of the 2008 pension reform was to improve the protection of the population not covered by the contributory

system (Arenas de Mesa 2010; Berstein et al. 2009; Rofman, Fajnzylber, and Herrera 2010). The reform created the Basic Solidarity Pension for Oldage (PBSV, for the acronym in Spanish) to provide benefits for older adults who had no other pensions and who belonged to the lowest 60 percent of households in terms of income. It currently covers about 29 percent of the elderly population (IDB 2017). The same reform also created the Solidarity Pension Contribution for Old-age, a noncontributory pension supplement for older adults with some pension savings but low benefits. It is estimated that contributory and noncontributory pensions jointly reached about 90 percent of older adults in 2015 (IDB 2017). Benefits were established as rights for all those meeting eligibility conditions, with no quotas or waiting lists. The PBSV is, however, relatively low—the lowest basic benefit amount in the Contributory Plus group, and well below the basic pension in Brazil or Argentina.

In Brazil and Uruguay, coverage rates were already high 20 years ago. In the case of Brazil, this wide-ranging social security system was part of new social rights established in the Federal Constitution of 1988. By the mid-1990s, the old-age coverage rate was (as in Uruguay) already above 80 percent, and in 2015 about 84 percent of older adults received a pension. Two benefits are important to reach the populations that are hard to cover with purely contributory benefits: a social assistance pension (*Beneficio de Prestação Continuada*—BPC) and a Rural Pension (*Previdência Rural*). Following the 1988 Constitution, both benefits were set at the value of the minimum wage, which is the minimum amount for all types of pensions in Brazil.

In the case of Uruguay, old-age pension coverage rates have long been high. A noncontributory pension program was created in 1919 (Amarante and Vigorito 2012; Bertranou, Solorio, and van Ginneken 2002), but the large majority of pensioners have a contributory benefit. From 2005, the government has tried to expand coverage of older adults in various ways: first, through the *Plan de Equidad Social* and the creation of a new noncontributory subsidy for older adults without pensions at ages 65–69 (which complements the existing noncontributory old-age pension for persons 70 and over), and second, through a reform of the contributory pension system that made access more flexible, reducing the minimum number of contribution years required and creating facilities for women with children and for persons of advanced age, among other measures (Papadópulos 2013, 478–480).

Thus, with a range of instruments, applied on structurally different pension systems, these four countries share three key features. First, they are among the best achievers in terms of old-age coverage (with total old-age coverage rates above 80 percent). Second, in all of them, contributory pension coverage represents a high share of total coverage. Finally, the benefit amounts that they offer to older adults with no contribution records are

above the Latin American average and higher than the basic benefits in every other country included in this article.

#### Universal minimal

In most other Latin American countries, contributory pension coverage is significantly lower than in those discussed above. Therefore, these countries have relied more heavily on noncontributory pensions to expand coverage. A couple of them have even implemented universal or pension-tested noncontributory benefits aimed at the entire population of older adults (Bolivia) or at every older adult with no other pension (Mexico), without focusing on the poor or extremely poor only.<sup>5</sup> Since contributory pension coverage in these countries is low, noncontributory programs provide the majority of benefits. However, benefit amounts are very modest (hence the label "Universal Minimal").

The case of Bolivia is particularly interesting, because the universal pension reaches almost every older adult in the country. The first universal pension was established in 1996/97 as part of the structural reform of the contributory pension system. That benefit, called Bono Solidario (or Bonosol) was created with the aim to distribute the public shares of capitalized (i.e., partly privatized) public companies among the population. Bonosol would fulfil that aim by entitling all Bolivians who were aged 21 or older by 1995 (when those companies were privatized) to a benefit as of age 65 (Aponte 2006; Molina 2006; Müller 2009). In 2007, President Evo Morales expanded the universal pension system, replacing Bonosol with Renta Dignidad, a benefit that maintained several key features of Bonosol but was largely financed by hydrocarbons tax revenues, had a lower age of eligibility (60 instead of 65), and no cohort restriction. Coverage increased from 78 percent of older adults aged 65 and over in 2003 to 96 percent in 2015, and the yearly benefit amount rose from about US\$237 to about US\$564 (or US\$43 per month, plus a 13thmonth payment) in 2017.6 Despite that increase, the benefit value remains comparatively low.

In Mexico, current old-age pension coverage rates are the outcome of a process that started with the creation of a universal pension for residents of Mexico City in 2001. This policy was followed by another noncontributory and non–means-tested benefit (70 y más), which was first established in 2007 for older adults in rural areas and small towns and was later expanded to urban areas (Flores-Castillo 2013). From 2013, the Older Adults' Pension was established as a noncontributory benefit for Mexicans aged 65 and older who have no other pension. By 2014, noncontributory pensions covered 52 percent of older adults (and paid more than 5.7 million benefits in 2015; CEPAL 2017b), well above the 26 percent coverage rate of contributory pension benefits (IDB 2017).

In both Bolivia and Mexico, noncontributory benefits have a high coverage rate and, together with contributory pensions, cover the majority of the population (almost every older adult in Bolivia, due to the universal design, and about 73 percent of them in Mexico). However, in both cases, noncontributory benefit amounts are very modest and well below contributory benefits. This also contributes to explaining why labor force participation rates of the older population remain high in both countries (especially in Bolivia) and are substantially higher than in Argentina or Brazil (see below). Besides that, the choice of universal (or pension-tested) benefits in both countries (rather than means-tested pensions, which was the most common choice in other countries) makes them part of a particularly broad-ranging coverage expansion strategy.

#### Means-tested poverty relief

Most other countries that expanded old-age pension coverage opted for benefits targeted to older adults living in poverty or extreme poverty. These programs are means-tested, are separate from the contributory pension system, and pay low benefits. Some emerged as a part or complement of other social assistance programs, as was the case in Ecuador (*Bono de Desarrollo Humano*), Colombia, and Peru (*Juntos*) (Albornoz and Oleas 2013; Lavigne 2013; Mina Rosero 2013, 15). Those are examples of relatively wide programs, but in other countries, like El Salvador, Guatemala, and Honduras, noncontributory pensions have a more limited scope, in terms of both coverage and the resources involved (Mesa-Lago 2012a).

Colombia is a good example of a coverage expansion strategy based on means-tested benefits. The contributory pension system in Colombia has long had limited coverage. A structural pension reform in 1993/94 introduced a system of individual accounts operating in parallel to a reformed public system. Despite some increase over the past decade, coverage of contributory pensions remained low, and by 2016, benefits reached only about 27 percent of older adults (IDB 2017). Over recent years, policies to expand old-age coverage included both contribution subsidies and social assistance. The Program for Social Protection of Older Adults (PPSAM, for the acronym in Spanish), which was created in 2004, started a steady expansion of noncontributory pensions, offering modest means-tested benefits paid bimonthly (Rofman 2013; Villar et al. 2015).

In 2012, another means-tested program, *Colombia Mayor*, replaced the PPSAM. The mechanism for selecting new beneficiaries prioritizes those who are oldest and most vulnerable; in practice, most beneficiaries are women and belong to the oldest age-groups (Villar et al. 2015, 49). Despite the development of this program, which in 2016 paid about 1.5 million benefits (CEPAL 2017b), the coverage gap remains large, and many older adults still receive no benefits. It is estimated that in 2017, *Colombia Mayor* 

benefited about one-quarter of older adults.<sup>8</sup> Thus, contributory and non-contributory programs jointly offer benefits to just over half of the elderly population. The benefits paid by *Colombia Mayor* are very modest, however, and the program is separate from the contributory pension system.

Other countries in this group share with Colombia the key features of this model (i.e., means-tested benefits of low amounts directed to the poorest older adults). In other words, this is a pension coverage strategy that does not guarantee full coverage or adequate benefits, but which has expanded access to cash benefits among older adults considerably in some countries. Countries pursuing this strategy can be more or less ambitious in terms of coverage, and indeed, coverage rates vary widely across countries in this group; in all cases, though, a considerable share of the elderly population continues to receive no benefit. These countries also have an institutionally segmented system of old age protection, consisting of a contributory pension system for formal workers and a separate system of noncontributory cash transfers for the elderly poor (similar to other social assistance programs, such as conditional cash transfer programs).<sup>9</sup>

## Coverage, adequacy, retirement choices, and living arrangements of older persons

The three old-age coverage strategies presented above help to conceptualize the wide cross-country variation of both coverage and generosity of pension benefits. To capture the degree of progress in these two dimensions jointly, Figure 1 presents a purpose-built measure—the "index of basic old age protection"—that combines coverage rates with the benefit generosity of noncontributory pensions. The aim is to incorporate the differences in noncontributory benefit amounts into the comparative analysis of old-age pension coverage strategies. This measure is calculated by weighting noncontributory coverage with the benefit level, so that if coverage is high but the benefit amount is low, the index will take on a proportionally lower value. The indicator ranges from 0 to 1 (lower values indicate lower coverage, lower noncontributory benefits, or both) and focuses on basic protection, rather than on income replacement or adequacy for the full satisfaction of older adults' needs.

Among the 14 Latin American countries included in this article, the best-situated are Argentina, Brazil, Chile, and Uruguay. These countries, all in the "Contributory Plus" cluster, achieve high coverage rates with a wider contributory pension system and relatively better benefits than their neighbors for the population with no access to contributory pensions. Other countries with wide noncontributory pension coverage but low benefits, such as Bolivia, Mexico, and Peru, rate lower in terms of this indicator. In practice, this measure is also associated to the country's income level and reflects the pension system's degree of development: countries that perform

CAMILA ARZA

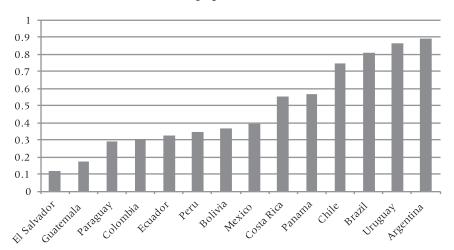


FIGURE 1 Index of basic old-age protection, 14 Latin American countries

NOTES: Data are estimated based on coverage rates and benefit amounts corresponding to the year 2016, except for Costa Rica (benefit amount for 2015); Argentina, Bolivia, Brazil, Chile, El Salvador, Panama, and Paraguay (coverage rates for 2015), and Mexico (coverage rate for 2014). In cases where noncontributory benefits with different amounts exist, estimations take the maximum benefit amount. Benefits were converted to US\$-PPP using the World Bank conversion factors (World Bank 2018).

For Argentina, coverage under a noncontributory pension is own estimation for pension moratorium coverage based on the coverage goal in the national budget for 2015 (Ministerio de Economía 2015). Benefit level is estimated for March 2016 based on MTESS (2016).

For Brazil, for the purposes of this estimation, the rural pension is taken as a noncontributory benefit, and coverage is estimated based on the number of rural pensions as a percentage of total retirement pensions in January 2017 (MPS 2017).

For Colombia, coverage under the noncontributory pension Colombia Mayor is own estimation based on household survey data (DANE 2017) for April 2017.

For Guatemala, coverage under a noncontributory pension is estimated from administrative data (number of benefits paid in 2016, from CEPAL 2017b) and population projections (benefits over population aged 65 and over) (CEPAL 2017a).

For Uruguay, coverage rates are based on BPS (2017a), Table C.1, p. 125, and BPS (2017b), Table IV.7. SOURCES: Elaborated by the author based on data from IDB (2017) for coverage rates and CEPAL (2017b) for benefit amounts, except otherwise indicated in the notes.

better are those that Carmelo Mesa-Lago (1986) long ago classified as "pioneer" countries in social security development.

This indicator provides a more complete picture of old-age protection than coverage rates alone. Taking the analysis further, we can look beyond pension policies. In line with the welfare regimes approach (Esping-Andersen 1990, 1999, and related literature), we could explore the relative roles of states, markets, and families in providing old-age protection. For this purpose, this article looks at two indicators of the roles of markets and families, respectively, and evaluates how they are associated with the index of basic old age protection (our main indicator of the state's role). Specifically, labor force participation in old age is taken as an indicator of the role of the market and living arrangements of older adults as an indicator of the role of the family.<sup>12</sup>

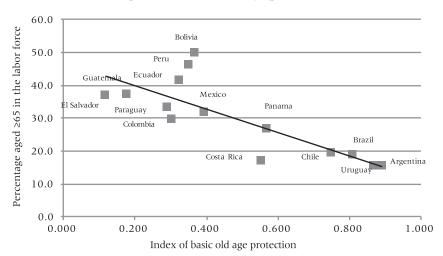
As the empirical literature has shown, states, markets, and families influence and complement each other in the production of welfare.

Historically, pension systems had an effect on the roles of markets and families in providing economic security in old age. By intervening in choices between work and retirement, pension systems contributed to shaping people's life courses, creating a predictable sequence and timing between work and retirement (Kohli 2007). In countries with wide-ranging pension systems, pensions play a key role in the institutionalization of retirement as a normal stage in the life course, to be both expected and possible, because a benefit entitlement replaces earnings from work. At the same time, in those cases, pension systems also contributed to making older adults economically more autonomous from both families and markets, facilitating the spread of independent living arrangements observable in most developed countries.

In Latin America, however, in a context of segmented and exclusionary labor markets and widespread informal work, a similar economic autonomy in old age has not been possible for a majority of older adults who do not have access to adequate pension benefits. The possibility of retirement is thus restricted to some individuals (formal-sector workers), and the rest must either continue working or depend on family support during old age. As discussed in the previous section, noncontributory pensions have expanded coverage, but in most countries the amounts paid are too low to fully cover an elderly person's consumption needs. Therefore, many of these benefits may provide some economic support but not enough for older adults to retire from the labor force.

Labor force participation rates among older adults remain high in countries where pension coverage is low, as well as in countries where pension coverage is high but basic pension benefits are low, such as Bolivia, Ecuador, and Peru. Figure 2 shows that labor force participation rates for the population aged 65 and over correlate with our measure of basic old age protection, and Table 3 illustrates the distribution of countries across these two variables. In countries with a lower index of basic old age protection, more older adults are in the labor force. Retirement is not a "normal" stage in the life course for all, and especially not for men and for the rural population, who are more likely to stay in the labor force after age 65 (CEPAL 2017c, 47). Analyses based on household survey data also suggest that older adults continue to participate in the labor force even after receiving noncontributory pensions. In the case of Colombia, scholars have observed that older adults living in households receiving a noncontributory benefit have labor force participation rates that are high and similar to those of older adults living in nonbeneficiary households (Rofman 2013, 215, based on data from 2010-2012). Thus, the market (i.e. the labor market) still plays a significant role in providing income during old age in these countries: it is often not the formal labor market with associated social security rights, but the informal and more precarious labor market that employs most older lower-income workers in Latin America.

FIGURE 2 Percentage of the population aged 65 and older participating in the labor force, by index of basic old age protection



NOTES: Data for 2016, except for Bolivia, Brazil, Chile, El Salvador, Panama, and Paraguay (2015), and Mexico (2014).

SOURCES: Elaborated by the author based on data from Figure 1 and on IDB (2017) for labor force participation rates.

TABLE 3 Labor force participation in old age and index of basic old age protection: Placement of specific countries

Labor force	Index of basic old age protection			
participation rate (ages 65 and older)	High	Middle	Low	Very Low
High			Bolivia, Ecuador, Peru	El Salvador, Guatemala
Middle			Colombia, Mexico, Paraguay	
Low		Panama		
Very low	Argentina, Brazil, Chile, Uruguay	Costa Rica		

NOTES: Index of basic old age protection: High (> 0.700), middle (0.501-0.700), low (0.250-0.500), very low (< 0.250).

Labor market participation rates among older adults (65+): High (>35%), middle (27–35%), low (20–26%), very low (<20%).

SOURCES: Elaborated by the author based on data from Figures 1 and 2.

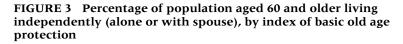
On the other hand, families have always been and continue to be a fundamental pillar of old-age protection, providing economic support and care based on bonds of kinship, mutual affection, reciprocity, and long-standing social norms. In countries with comprehensive pension systems, families continue to be important, but the kinds of help provided may shift (toward types of support other than economic) or may even change direction, as scholars have observed in Europe when looking at intergenerational

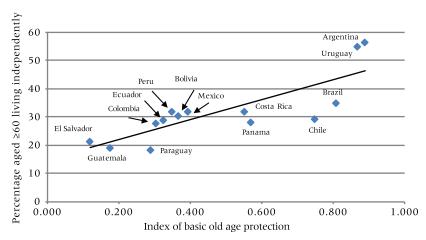
transfers of time and money *from* older adults *to* their children and grand-children (e.g., Kohli 1999; Kohli and Albertini 2007).

One dimension of old age that varies widely across countries, based on countries' income level and social security development, is older adults' living arrangements. As pension systems develop and provide wider and more adequate coverage, older adults have more possibilities to live independently from their children, either alone or with their spouse. Similarly, as more do so (or have the expectation to do so), social demands for adequate pensions are likely to grow, stimulating further pension system development. Indeed, around the world, we see this pattern: most developed countries in North America and Europe, with comprehensive pension systems and aging population structures, have a higher share of older adults living independently. A recent study conducted by the United Nations Population Division shows stark differences in the prevalence of independent living arrangements for older adults around the world (from over 70 percent in Europe and Northern America to 33 percent in Latin America and the Caribbean, and even less in Asia and Africa) (United Nations 2017, 18). The study also shows a trend toward independent living and away from intergenerational coresidence in all regions, along with the resilience of traditional family structures in middle- and lower-income countries, where the dominant living arrangement for older persons continues to be coresidence with their children. 13

Previous studies looking at living arrangements of older persons in Latin America have shown that living arrangements are associated with income levels both across and within countries: coresidence is less common among older adults in richer countries, as well as in higher-income households across countries (OECD 2014, 23-24). Our analysis also shows that in Latin America, the incidence of independent living among older adults correlates with the index of basic old age protection (Figure 3). Countries where pension systems offer broader coverage and more adequate basic benefits also have a higher share of older adults living independently. This exploratory finding suggests an interaction between family arrangements (and the role of the family in providing for old-age protection) and public policies for old-age security, including all types of pensions. This finding is also consistent with the welfare regimes literature in Latin America, which has stressed the key role of families in compensating for the lack of adequate state provision, especially in countries with exclusionary welfare regimes, where the presence of the state is very limited and labor markets are highly segmented and unequal (Martinez Franzoni 2008). As Figure 4 shows, the index of basic old age protection also tends to be higher in countries where population aging is more advanced.

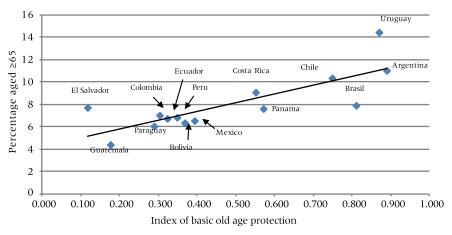
Overall, these findings suggest the existence of different old-age regimes in Latin America—one for countries with more comprehensive pension systems, where older adults have lower labor force participation





NOTES: Living independently includes persons living alone or with a spouse. Latest data available, corresponding to c. 2010–2015 for all countries except for Chile and Paraguay (2002) and El Salvador (2007). The index of basic old age protection is for c. 2016 (see details in notes to Figure 1). SOURCES: Elaborated by the author based on data from Figure 1 and on United Nations (2017) for living arrangements.

FIGURE 4 Percentage of population aged 65 and older, by index of basic old age protection.



NOTE: Population in ages 65 and over as a percentage of the total population estimated for 2015. Index of basic old age protection is for c. 2016 (see details in notes to Figure 1). SOURCES: Elaborated by the author based on data from Figure 1 and on CEPAL (2017a) for population aged 65 and older.

and more independent living arrangements, and in which the aging process is more advanced (higher income countries in terms of per capita GDP); and another for countries with more limited pension systems (in terms of both coverage and adequacy), where older adults are more likely to

participate in the labor force after the normal retirement age and less likely to live independently, and where the aging process is less advanced. Further research should deepen this analysis to incorporate more indicators of the strategies of old-age security and evaluate the implications that alternative state-market-family arrangements can have for social development.

#### Final remarks

Over the past two decades, many Latin American countries have expanded benefits oriented to providing economic support to older adults who are not receiving contributory pension benefits. Some countries have achieved high coverage rates by complementing contributory pensions with noncontributory benefits. A few countries adopted a universal or pension-tested model, achieving high coverage with modest benefits. Most other countries implemented means-tested benefits, directed solely to the elderly poor and administered separately from contributory pensions. Through the systematic assessment of the main policy instruments for coverage expansion, this article has identified three models that characterize countries' strategies for old-age basic economic security.

Two types of countries achieved the highest rates of old-age pension coverage: (1) countries where the aging process is more advanced and the social security system was already widely developed before recent expansion (Argentina, Brazil, Chile, and Uruguay), and (2) countries with low contributory coverage that implemented modest universal (or pensiontested) benefits (Bolivia and Mexico), rather than adopting the more common option of means-tested benefits for the elderly poor. Coverage also increased in some countries with a more residual approach to basic pensions, in which benefits are low and means-tested and coverage gaps in most cases remain large. Despite coverage expansion, most noncontributory pension programs in Latin America still offer very low benefits. As we have shown, the joint assessment of coverage (contributory and noncontributory) and basic benefit adequacy offers a more complete picture of the levels of old-age protection achieved across countries than does analysis of coverage rates alone.

The findings in this article also confirm the interaction in the roles of states, markets, and families in providing old-age economic security. In countries where public old-age protection systems are weak (in terms of both coverage and adequacy), older adults are more likely to remain in the labor force after the legal retirement age and are less likely to live independently. This suggests that different old-age regimes exist in the region, each with a different balance in the roles of states, markets, and families to provide economic security in old age.

#### **Notes**

An earlier version of this article was prepared within the United Nations University World Institute for Development Economics Research (UNU-WIDER) project on "The Political Economy of Social Protection Systems" and was published as a working paper (Arza 2017a). This revised and expanded version includes a wider discussion of coverage, basic benefit adequacy and old-age patterns. The author gratefully acknowledges financial support from UNU-WIDER for the original paper on which this article is based and from Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) for longer-term research on noncontributory pensions in Latin America.

- 1 Some authors call these programs "semi-contributory" to account for these particularities (e.g. Bertranou et al. 2011). In this article, I consider them as a coverage expansion program, together with noncontributory pensions, due to their similar aim and impact: the extension of benefits to older adults who do not meet the contributory requirements for ordinary pensions.
- 2 Both have just above-average basic benefit amounts, and mid-range contributory and total old-age coverage.
- 3 Own calculation, based on the national budget, including old-age and survivors' pensions (see Ministerio de Economía 2015).
- 4 The rural pension (previdência rural) is based on a special regulation (segurado especial) for farmers working individually or in small family farm production, and subsistence fishermen, who do not need to have a record of contributions to obtain a pension. These workers do not pay a contribution on earned income. Instead, the purchaser of the rural product must pay a contribution of 2.2 percent of the sales price (Schwarzer and Querino 2002, 10). Coverage data presented in this article are based on IDB (2017) and include rural pension coverage. Unfortunately, IDB (2017) does not report noncontributory pension coverage separately for Brazil (BPC), and we lack data from other sources to fill that gap.

- 5 Palacios and Knox-Vydmanov (2014) suggest that for some purposes, universal and pension-tested benefits can be analyzed together as part of a similar family of nonmeans-tested benefits aiming at full coverage.
- 6 Latest value, based on Law 953 of year 2017 and converted to US\$ using the exchange rate of June 1, 2017.
- 7 After finishing this article, Mexico announced a reform of noncontributory pensions to make them universal and increase the benefit amount (see Mexican Government 2019). That reform is beyond the scope of this article, but it does not alter the position of the country as here described.
- 8 Own calculation, based on GEIH (DANE, 2017). CEPAL estimates a similar coverage rate (27 percent) based on administrative data for 2016 (CEPAL 2017b).
- 9 Rofman, Apella, and Vezza (2013, 39-40) also find that in all of these cases, benefits are separate rather than integrated into traditional pension institutions.
- 10 In contrast, contributory coverage is taken as given because these programs normally have minimum benefit regulations. The calculation formula is as follows: covcp + covnc \* (min (ben/minben), 1); where covcp is the coverage rate of the contributory pension, covnc is the coverage rate of the noncontributory pension, *ben* is the monthly benefit amount of noncontributory pension in US\$-PPP, and minben is the minimum monthly basic benefit adequacy target, set at US\$-PPP 450 (i.e., 15 US\$-PPP per day). This minimum adequacy threshold is consistent with the minimum income that Ferreira et al. (2013) deem necessary to place a household in the "middle class" (i.e., neither poor or vulnerable, nor rich)—that is, a per capita income of US\$10-US\$50 per day (2005 US\$ PPP).
- 11 In their study of noncontributory pensions in Latin America, Rofman, Apella, and Vezza (2015) argue that benefit adequacy relates to the goal of universality, in such a way that countries aiming to reach universal coverage have higher benefits.

They note, however, that this does not apply for two cases—Bolivia and Mexico. In this article, those two countries fit into a separate group, "Universal Minimal," which captures the particularity of these countries to have very high coverage and low benefits. As a result, these countries also have a lower value in the index of basic old age protection than other countries with similarly high total oldage coverage.

12 These indicators do not tap all possible dimensions of market and family's roles

(nor does pension policy cover all dimensions of the state's role), but they are effective means to explore interactions and complementarities that exist in different strategies for old-age income security.

13 Co-residence with children may also be influenced by the possibility of young adults' forming their own households independently from their parents. Measuring the incidence of this factor is, however, beyond the scope of this article.

#### References

- Albornoz, Vicente, and Daniela Oleas. 2013. "Ecuador," in Rafael Rofman, Ignacio Apella, and Evelyn Vezza (eds.), *Más allá de las pensiones contributivas. Catorce experiencias en América Latina*. Buenos Aires: World Bank, pp. 259–286.
- Amarante, Verónica, and Andrea Vigorito. 2012. "The expansion of non-contributory transfers in Uruguay in recent years," Research Brief 29. Brasilia: International Policy Centre for Inclusive Growth.
- Aponte, Guillermo. 2006. "Bonosol: Aspectos institucionales y políticos de la aplicación del seguro universal de ancianidad," in Guillermo Aponte, Luis Carlos Jemio, Roberto Laserna, Sebestian Martínez, Fernando Molina, Erick Schulze, and Emmeline Skinner (eds.), *La inversión prudente. Impacto del bonosol sobre la familia, la equidad social y el crecimiento económico*. La Paz: Fundación Milenio, pp. 39–86.
- Arenas de Mesa, Alberto. 2010. Historia de la reforma previsional en Chile. Una experiencia exitosa de política pública en democracia. Santiago: International Labour Office.
- Arza, Camila. 2012a. "Extending coverage under the Argentinean pension system: Distribution of access and prospects for universal coverage," *International Social Security Review* 65(5): 29–49.
- Arza, Camila. 2012b. "Policy change in turbulent times: The nationalization of pension funds in Argentina," in Peter Utting, Shahrashoub Razavi, and Rebecca Varghese Buchholz (eds.), *The Global Crisis and Transformative Social Change*. Basingstoke: Palgrave Macmillan, pp. 123–140.
- Arza, Camila. 2013. "Basic pensions in Latin America: Towards a rights-based policy?" in Rubén Lo Vuolo (ed.), *Citizen's Income and Welfare Regimes in Latin America*. New York: Palgrave Macmillan, pp. 87–112.
- Arza, Camila. 2017a. "The expansion of economic protection for older adults in Latin America. Key design features of non-contributory pensions," Working Paper 2017/29. Helsinki: United Nations University World Institute for Development Economics Research (UNU-WIDER).
- Arza, Camila. 2017b. "Non-contributory benefits, pension re-reforms and the social protection of older women in Latin America," *Social Policy and Society* 16(3): 361–375.
- Arza, Camila and Charles Knox-Vydmanov. 2017. "The role of redistributive pension systems," in *Investing in an Ageing World: Shifting Debates from Costs to Investments*. London: HelpAge Internacional, pp. 46–56.
- Barrientos, Armando. 2011. "On the distributional implications of social protection reforms in Latin America," Working Paper 2011/69. Helsinki: UNU-WIDER.
- Berstein, Solange, Pablo Castañeda, Eduardo Fajnzylber, and Gonzalo Reyes (eds). 2009. *Chile 2008: A Second-Generation Pension Reform*. Santiago: Superintendence of Pensions.
- Bertranou, Fabio M., Carmen Solorio, and Wouter van Ginneken (eds.). 2002. *Pensiones no contributivas y asistenciales. Argentina, Brasil, Chile, Costa Rica y Uruguay*. Santiago: International Labour Office.

Bertranou, Fabio M., Esteban Calvo, and Evelina Bertranou. 2009. "Is Latin America retreating from individual retirement accounts?" *Issue in Brief* 9–14. Chestnut Hill, MA: Center for Retirement Research, Boston College.

- Bertranou, Fabio, Oscar Cetrángolo, Carlos Gruska, and Luis Casanova. 2011. *Encrucijadas en la seguridad social argentina: reformas, cobertura y desafíos para el sistema de pensiones*. Buenos Aires: ECLAC and ILO.
- Bosch, Mariano, Ángel Melguizo, and Carmen Pagés. 2013. *Mejores pensiones, mejores trabajos: Hacia la cobertura universal en América Latina y el Caribe*. Inter-American Development Bank.
- BPS. 2017a. "Boletín del adulto mayor 2017," N°3, Montevideo: Asesoría general en seguridad social (Uruguay). Accessed June 10, 2018. http://www.bps.gub.uy/1929/boletin-adultomayor.html.
- BPS. 2017b. "Evolución de las pasividades 2017," Banco de Previsión Social (Uruguay). Accessed June 10, 2018. http://www.bps.gub.uy/1931/evolucion-de-las-pasividades.html.
- CEPAL. 2014. "Panorama social de América Latina. Anexo estadístico," Santiago: Economic Commission for Latin America and the Caribbean. Accessed June 21, 2016, http://repositorio.cepal.org/bitstream/handle/11362/37626/5/anexo\_estadistico2014\_es. zip.
- CEPAL. 2017a. "Cepalstat. Databases and Statistical Publications," Santiago: Economic Commission for Latin American and the Caribbean. Accessed December 10, 2017. http://estadisticas.cepal.org/cepalstat/portada.html?idioma=english.
- CEPAL. 2017b. "Base de datos de programas de protección social no contributiva en América Latina y el Caribe," Santiago: Economic Commission for Latin America and the Caribbean. Accessed November 15, 2017. http://dds.cepal.org/bdps/.
- CEPAL. 2017c. "Derechos de las personas mayores: retos para la interdependencia y autonomía" (LC/CRE.4/3/Rev.1). Santiago: Economic Commission for Latin America and the Caribbean.
- Danani, Claudia, and Susana Hintze (eds.). 2011. *Protectiones y desprotectiones. La seguridad social en Argentina 1990–2010*. Buenos Aires: Universidad Nacional General Sarmiento.
- DANE. 2017. "Gran Encuesta Integrada de Hogares GEIH 2017," Departamento Administrativo Nacional de Estadística (DANE), Gobierno de Colombia. Accessed February 15, 2018. http://microdatos.dane.gov.co/index.php/catalog/458/get\_microdata.
- Esping-Andersen, Gøsta. 1990. The three worlds of welfare capitalism. Cambridge: Polity.
- Esping-Andersen, Gøsta. 1999. Social foundations of postindustrial economies. New York: Oxford University Press.
- Ferreira, Francisco H. G., Julian Messina, Jamele Rigolini, Luis-Felipe López-Calva, Maria Ana Lugo, and Renos Vakis. 2013. *Economic Mobility and the Rise of the Latin American Middle Class*. Washington, DC: World Bank.
- Flores-Castillo, Atenea. 2013. "Transferencias no contributivas a personas mayores. Análisis comparativo de dos programas: 70 y más y Pensión Alimentaria de la Ciudad de México," Mexico City: Economic Commission for Latin America and the Caribbean.
- HelpAge International. 2015. "Social Pensions Database. Version 25/03/2015," Accessed December 9, 2017. http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database/.
- Huber, Evelyne, and John D. Stephens. 2012. *Democracy and the Left. Social Policy and Inequality in Latin America*. Chicago: University of Chicago Press.
- IDB. 2017. "Labour Market and Social Security Information System," Inter-American Development Bank. Accessed December 13, 2017. https://www.iadb.org/en/databases/sims/home %2C20137.html.
- ILO. 2011. "Social Protection Floor for Fair and Inclusive Globalization. Report of the Social Protection Floor Advisory Group," Geneva: International Labour Office.
- ILO. 2012. "The strategy of the International Labour Organization. Social security for all. Building social protection floors and comprehensive social security systems," Geneva: International Labour Office.
- Kohli, Martin. 1999. "Private and public transfers between generations: Linking the family and the state," *European Societies* 1(1): 81–104.

- Kohli, Martin. 2007. "The institutionalization of the life course: Looking back to look ahead," Research in Human Development 4(3-4): 253–271.
- Kohli, Martin, and Marco Albertini. 2007. "The generational contract in the family. Explaining regime differences in financial transfers from parents to children in Europe," Working Paper 2007–24. Barcelona: Universitat Pompeu Fabra.
- Kritzer, Barbara E., Stephen J. Kay, and Tapen Sinha. 2011. "Next generation of individual account pension reforms in Latin America," *Social Security Bulletin* 71(1): 35–76.
- Lavigne, Milena. 2013. "Sistemas de protección social en América Latina y el Caribe: Perú," Documento de proyecto, Santiago: Economic Commission for Latin America and the Caribbean /Ministerio Federal de Cooperación Económica y Desarrollo/GIZ.
- Madrid, Raul L. 2002. "The politics (and economics) of pension privatization in Latin America," Latin American Research Review 37(2): 159–182.
- Martínez Franzoni, Juliana. 2008. Domesticar la incertidumbre en América Latina: Mercado laboral, política social y familias. San José: Universidad de Costa Rica, Instituto de Investigaciones Sociales.
- Martínez Franzoni, Juliana and Diego Sánchez-Ancochea. 2014. "The double challenge of market and social incorporation: Progress and bottlenecks in Latin America," *Development Policy Review* 32 (3): 275–298.
- Mesa-Lago, Carmelo. 1986. "Social security and development in Latin America," *CEPAL Review* 28: 135–150.
- Mesa-Lago, Carmelo. 2004. "An appraisal of a quarter-century of structural pension reforms in Latin America," CEPAL Review 84: 57–81.
- Mesa-Lago, Carmelo. 2006. "Structural pension reform privatization in Latin America," in Gordon L. Clark, Alicia H. Munnell, and J. Michael Orszag (eds.), *The Oxford Handbook of Pensions and Retirement Income*. Oxford: Oxford University Press, pp. 663–683.
- Mesa-Lago, Carmelo. 2012a. "The performance of social security contributory and tax-financed pensions in Central America, and the effects of the global crisis," *International Social Security Review* 65(1): 1–27.
- Mesa-Lago, Carmelo. 2012b. "Pension re-reform in Chile," Zeitschrift für ausländisches und internationales Arbeits- und Sozialrecht (ZIAS) 26(3): 197–211.
- Mesa-Lago, Carmelo, and Lorena Ossio Bustillos. 2012. "Pension re-reform in Bolivia," Zeitschrift für ausländisches und internationales Arbeits- und Sozialrecht (ZIAS) 26(3): 235–257.
- Mexican Government 2019. Programa para el Bienestar de las Personas Adultas Mayores. Accessed July 1st, 2019. https://www.gob.mx/bienestar/acciones-y-programas/programa-para-el-bienestar-de-las-personas-adultas-mayores.
- Mina Rosero, Lucía. 2013. "Sistemas de protección social en América Latina y el Caribe: Colombia," Documento de proyecto, Santiago: Economic Commission for Latin America and the Caribbean/Ministerio Federal de Cooperación Económica y Desarrollo/GIZ.
- Ministerio de Economía. 2015. "Ley de Presupuesto. Distribución por jurisdicción Entidad. Administración Nacional de la Seguridad Social (Entidad 850)," Ministerio de Economía y Finanzas Públicas, Secretaría de Hacienda, Oficina Nacional de Presupuesto (Argentina). Accessed September 16, 2015. http://www.mecon.gov.ar/onp/html/presutexto/ley2015 /leydosquince.html.
- Molina, Fernando. 2006. "Biografía del Bonosol," in Guillermo Aponte, Luis Carlos Jemio, Roberto Laserna, Sebestian W. Martínez, Fernando Molina, Erick Schulze, and Emmeline Skinner (eds.), *La inversión prudente. Impacto del Bonosol sobre la familia, la equidad social y el crecimiento económico*. La Paz: Fundación Milenio: 19–38.
- MPS. 2017. "Boletim Estatístico da Previdência Social," Vol. 22, No. 1, January 2017, Secretaria de Políticas de Previdência Social, Ministério da Previdência Social, Brasil. Accessed April 16, 2018. http://www.previdencia.gov.br/dados-abertos/boletins-estatisticos-da-previdencia-social/.
- MTESS. 2016. Boletín Estadístico de la Seguridad Social. Primer trimestre 2016, Secretaría de Seguridad Social, Ministerio de Trabajo, Empleo y Seguridad Social (Argentina).

Müller, Katharina. 2009. "Contested universalism: From *Bonosol* to *Renta Dignidad* in Bolivia," *International Journal of Social Welfare* 18(2): 163–172.

- OECD. 2014. *Pensions at a glance: Latin America and the Caribbean*. Paris: Organization for Economic Cooperation and Development.
- Palacios, Robert, and Charles Knox-Vydmanov. 2014. "The growing role of social pensions: History, taxonomy and key performance indicators," *Public Administration and Development* 34(4): 251–264
- Papadópulos, Jorge. 2013. "Uruguay," in Rafael Rofman, Ignacio Apella, and Evelyn Vezza (eds.), Más allá de las pensiones contributivas. Catorce experiencias en América Latina. Buenos Aires: World Bank: 461–496.
- Pension Commission. 2006. El derecho a una vida digna en la vejez. Hacia un contrato social con la previsión en Chile, vol. I. Diagnóstico y propuestas de reforma. Santiago: Consejo Asesor Presidencial para la Reforma Previsional, Gobierno de Chile.
- Rofman, Rafael. 2013. "Colombia," in Rafael Rofman, Ignacio Apella, and Evelyn Vezza (eds.), Más allá de las pensiones contributivas. Catorce experiencias en América Latina. Buenos Aires: World Bank: 199–226.
- Rofman, Rafael, Eduardo Fajnzylber, and Germán Herrera. 2010. "Reformando las reformas previsionales: En la Argentina y Chile," *Revista de la Cepal* 101: 85–109.
- Rofman, Rafael, Ignacio Apella, and Evelyn Vezza. 2015. "Expanding economic protection to the elderly in Latin America," *International Social Security Review* 68(1): 1–22.
- Rofman, Rafael, Ignacio Apella, and Evelyn Vezza (eds.). 2013. *Más allá de las pensiones contributivas. Catorce experiencias en América Latina*. Buenos Aires: World Bank.
- Schwarzer, Helmut, and Ana C. Querino. 2002. "Non-contributory pensions in Brazil: The impact on poverty reduction," *Extension of Social Security* 11. Geneva: Social Security Policy and Development Branch, International Labour Office.
- United Nations. 2017. *Living Arrangements of Older Persons: A Report on an Expanded International Dataset*. (ST/ESA/SER.A/407). New York: Department of Economic and Social Affairs, Population Division.
- Villar, Leonardo, Carmen E. Flórez, David Forero, Natalia Valencia-López, Nadia Puerta, and Felipe Botero. 2015. *Protección económica a la población mayor en Colombia*. Bogotá: Editorial Fundación Saldarriaga Concha.
- Willmore, Larry. 2014. Old Age Pensions in Mexico: Toward Universal Coverage. Luxemburg: International Institute for Applied Systems Analysis.
- World Bank. 2018. "PPP conversion factor, private consumption (LCU per international \$)," Accessed June 10, 2018. https://data.worldbank.org/indicator/PA.NUS.PRVT.PP.