BETTER PENSIONS, BETTER JOBS: STATUS AND ALTERNATIVES TOWARD UNIVERSAL PENSION COVERAGE IN LATIN AMERICA AND THE CARIBBEAN

Mariano Bosch,* Ángel Melguizo** and Carmen Pages-Serra*

This article offers an overview of the current state of labor markets and pension coverage in a wide sample of Latin America and the Caribbean countries, and proposes a series of possible avenues toward universal coverage, not only as an instrument to fight poverty during old age, but also as part of an agenda for increasing formal employment and productivity growth. We conclude that the region overall is experiencing a good demographic, socio-economic, and fiscal period, and this provides a real opportunity for initiating bold reforms in pensions, labor and tax needed to achieve universal coverage.

1 The pending pension reform agenda

During the 1980s and 1990s, Latin America and the Caribbean (LAC) implemented an ambitious agenda of social security reforms largely aimed at restoring financial sustainability to pension systems, and simultaneously building a clear link between contributions and benefits. It was expected that these reforms would contribute to a gradual increase in the percentage of workers who contribute, and eventually, in the percentage of elderly with a pension (see World Bank, 1994 and Lindbeck and Persson, 2003 for an analysis of these and other economic benefits, and Barr and Diamond, 2006 for an opposing view).

With approximately twenty years of experience in the region, the effects of these reforms have been many and varied. A large amount of research has addressed the merits and problems of the type of systems, for example of introducing defined contribution and individually funded systems (usually known as "private systems") compared with public pay-as-you-go systems (see Packard and Yermo, 2005 for an analysis of its impact on implicit debt, development of financial markets and pension coverage for LAC). However, much less analyzed and discussed has been the fact that, irrespective of the pension systems involved, pension coverage depends on the capacity of labor markets to create jobs in which workers and firms contribute to the pension system; in other words, formal jobs. Despite the reforms in the region, pension coverage is still considered generally low.

In the region today, according to national household surveys,¹ only four out of ten citizens aged 65 and older are receiving a contributory pension. Recently, many countries have

^{*} Inter-American Development Bank.

^{**} OECD Development Centre.

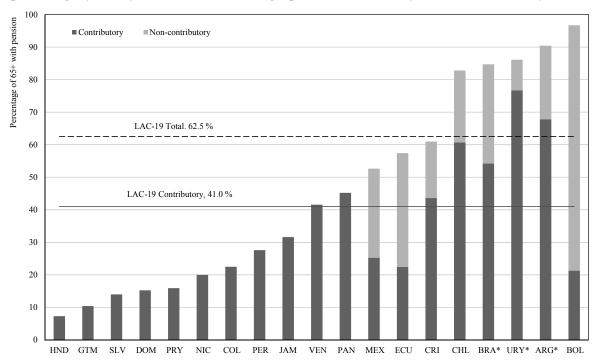
This article is based on the book Bosch, M., Á. Melguizo and C. Pages (2013), *Better Pensions, Better Jobs: Toward Universal Coverage in Latin America and the Caribbean*, edited by the InterAmerican Development Bank. A revised version is accepted for publication in the *Journal of Pension Economics and Finance*.

The views expressed herein are the sole responsibility of the authors and do not necessarily reflect the opinions of their institutions, Executive Boards, nor its country members.

¹ Based on data availability, we are covering the following 19 Latin American and Caribbean economies: Argentina (Encuesta Permanente de Hogares – Contínua, 2010); Bolivia (Encuesta de Hogares, 2009); Brazil (Pesquisa Nacional por Amostra de Domicilio, 2011); Chile (Encuesta CASEN, 2011); Colombia (Gran Encuesta Integrada de Hogares, 2010); Costa Rica (Encuesta de Hogares de Propósitos Múltiples, 2010); Dominican Republic (Encuesta Nacional de Fuerza de Trabajo, 2010); Ecuador (Encuesta Periódica de Empleo, Desempleo y Subempleo, 2010); El Salvador (Encuesta de Hogares de Propósitos Múltiples, 2010); Guatemala (Encuesta Nacional de Empleo e Ingresos, 2010); Honduras (Encuesta de Hogares Permanente de Propósitos Múltiples, 2010); Jamaica (Labor Force Survey, 2010); Mexico (Encuesta Nacional sobre Ingresos y Gastos de los Hogares, 2010); Nicaragua

Pension Coverage in LAC, 2010

(percentage of elderly adults (65+) collecting a pension, contributory and non-contributory, 2010)



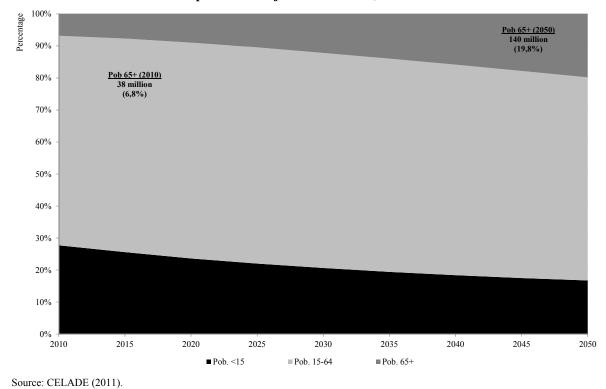
Source: Authors' calculations.

Notes: Based on household surveys (circa 2010). The share of non-contributory pensions in Argentina, Brazil and Uruguay has been obtained by dividing the number of beneficiaries of these programs, calculated as the population 65 and over in the census's administrative records. This could be an imperfect measure of coverage since eligibility for a non-contributory pension could be obtained earlier than 65. Household surveys in Colombia, El Salvador and Paraguay do not record whether individuals received a non-contributory pension. LAC-19 corresponds to the regional weighted average.

substantially increased pension coverage through programs focused on expansion of non-contributory pensions. This expansion has helped raise the proportion of older adults who receive a pension to more than six out of ten. Yet, the majority of pensions (either contributory or non-contributory) pay less than 10 dollars a day. This means that two of the key objectives of pension systems - elimination of poverty in old age and maintenance of an adequate standard of living for workers once they stop working (Barr and Diamond, 2006) are still only achieved for a small number of the region's elderly. In the absence of further reforms, the percentage of workers who contribute to the pension system is not expected to increase significantly. This implies that many will have either a limited or nonexistent access to an adequate future pension in the region (Figure 1). However, very different pension realities coexist in LAC. Our purpose is not to prescribe recipes or formulas, but rather to help understand the causes of certain pension realities and find possible avenues for improvement, taking as a starting point the evidence accumulated from policies already implemented in the region.

⁽Encuesta Contínua de Hogares, 2010); Panama (Encuesta de Hogares, 2010); Paraguay (Encuesta Permanente de Hogares, 2010); Peru (Encuesta Nacional de Hogares, 2010); Uruguay (Encuesta Contínua de Hogares, 2010); and Venezuela (Encuesta de Hogares por Muestreo, 2010).





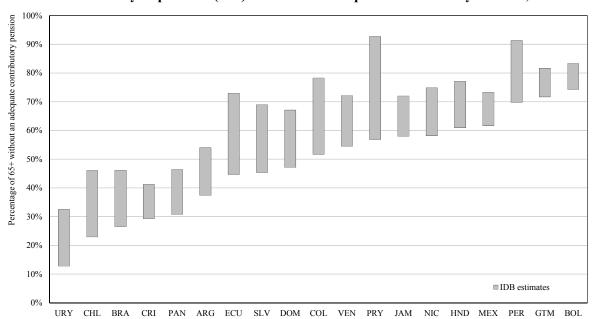
Population Projection for LAC, 2010-50

2 Why is low pension coverage in LAC a problem?

The population in LAC is young but aging rapidly. While in 2010 the percentage of adults who were 65 and older represented only 6.8 per cent of the population, projections by Celade (2011) suggest that by 2050 this age group will grow to 19.8 per cent of the region's total population. Thus, in 2050 there will be more than 140 million people aged 65 and older, nearly four times more than the 38 million elderly living in the region today (Figure 2).

LAC region is confronted with the challenge of providing an adequate income for millions of individuals who will retire in the coming decades. Yet the mechanisms to address these challenges are built on weak foundations. First, there will be fewer potential workers to support each elderly citizen. The number of working-age individuals (age 15-64) for each citizen aged 65 and older will decrease from 9.6 today to 3.2 in 2050, according to the same population projections. Second, contributory pension systems, whose purpose is to transfer present consumption (when a person is able to work) to future consumption (when a person can no longer work), are not currently capable of generating enough savings for old age since most jobs in the region are informal. In other words, the lack of savings stems for the existence of informal jobs in which firms and workers are not contributing to social security.² We will explore this point further later in the paper. Third,

² We use the term 'pension savings' to identify contributions to pension schemes, so that coverage is always referred to as passive coverage (after retirement). This is done to provide clarity since it is only appropriate for individual account systems where contributions are considered savings according to national accounting.



Share of Elderly Population (65+) Without an Adequate Contributory Pension, 2050

according to our projections and using standard formality-growth elasticities, economic growth, even if it continues at the rate of the last decade, will not be sufficient to fix this problem of providing adequate pensions.³ Actually, using cross-section data from Pallares-Miralles *et al.* (2012), the LAC region tends to be well below the international trend. The share of workers contributing to social security in countries like Mexico, Colombia or Peru is between 20 and 30 percentage points lower than their respective GDP per capita would predict.

We project that in the absence of reforms, between 47 and 60 per cent of the 140 million elderly adults in 2050 (66 to 83 million people) will reach retirement without having generated the savings needed to fund an adequate pension in their old age⁴ (Figure 3). Given the actual state of the labor market, the coverage deficit will be higher among women than men, and will be heavily concentrated among workers who currently have low-and middle-income jobs, work for small businesses, or are non-wage earners (for example, self-employed).

Source: Authors' calculations.

³ The elasticity of formality to economic growth (measured by per capita GDP increase) is set at 0.1 in the baseline scenario, following Packard (2001), Djankov *et al.* (2002), Loayza *et al.* (2005) and Loayza and Rigolini (2011). This estimate is in line with our own calculations using panel estimates with fixed effects (although lower than results obtained with cross section analysis, which are set around 0.2). We assume elasticities are the same across countries and deciles. Also, we estimate GDP per capita grows in all countries 2.5 per cent annually and contribution rates are set at 10 per cent of total wages.

⁴ The results presented are based on stylized projections exercises. We use the share of workers contributing to social security by decile and by country in 2010 as the baseline. We project this share using GDP per capita growth elasticity of 0.1; *i.e.*, when the GDP per capita doubles, the share of workers contributing increases by 10 percentage points. We also assume a real GDP per capita growth of 2.5 per cent. In order to calculate the coverage share of the population over 65 years, we assume three different hypotheses. First, we assume that present contributors have contribution densities of 100 per cent, and those who do not contribute have contribution densities of 0 per cent. Second, we assume that adequate coverage demands at least a contribution density of 50 per cent. We assume that the share of contributors by decile is a good proxy for the density contributions of that particular decile. Third, we use formality rates of the second exercise and evaluate replacement rates using OECD-IDB-WB (2014). We define as uncovered those with replacement rates under 30 per cent. The calculations presented here provide an interval resulting from the maximum and minimum coverage obtained from each of these three methods.

This low coverage will have significant social, political, fiscal, and economic consequences:

- *Social:* Longer life expectancy and smaller family size means that families will need to devote greater effort and resources to the care of the elderly, which will compete with the investments families must make in health, education, or even housing for future generations.
- *Political:* In the coming decades, adults aged 65 and older will make up between 20 and 30 per cent of the potential electorate of the region, so their needs will be decisive in electing governments. In this context, achieving adequate pension coverage will be a key demand from future governments.
- *Fiscal*: Lack of coverage is a latent fiscal cost in the region. Because democratic governments in LAC are not going to ignore the demands of a growing percentage of the population, countries will have to allocate more resources to compensate for this inadequate pension coverage.
- *Economic*: How coverage gaps are closed can have an impact on the functioning of labor and investment markets and long-term productivity growth.

As a result, pensions are set to become one of the cornerstones of economic and social policy in LAC in the coming decades.

3 The labor market as the epicenter of low coverage

Social protection systems in the region were first established in the 1930s and 1940s under the influence of the social insurance system implemented in Germany by Bismarck during the late nineteenth century. This system was created with the understanding that social benefits are for wage earners who acquire them by means of contributions paid jointly with employers. As a result, by design, only citizens who were wage earners during their working lives, and their families, had access to pensions, leaving others out.

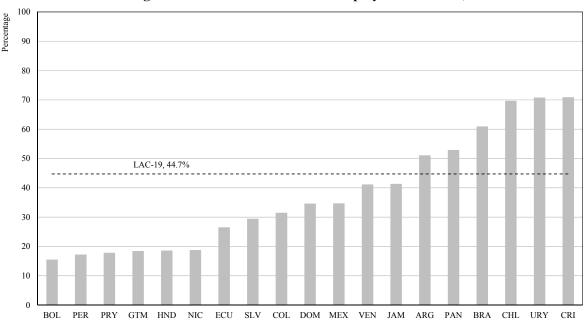
Although some countries in LAC have been including groups of non-wage earners in the pension systems, much of the low coverage observed today is due to this original design. On average, only four out of ten Latin American and Caribbean workers are contributing to a social security system at any given time, according to data taken from the aforementioned national household surveys (Figure 4).

What is even more challenging is that only two out of ten non-wage earners (such as selfemployed and employers), who make up about 30 per cent of workers in the region, contribute to the pension systems; a percentage similar to that observed among wage earners in small businesses. These contributions remain low not only for low-income workers but also among middle-class workers⁵ (Figure 5).

Our view is that a set of decisions taken by the state, workers, and firms has created a disequilibrium in labor markets in LAC in which only a small percentage of medium- and low-wage earners regularly contribute to the pension systems.

In order to move toward universal coverage, it is crucial to change this disequilibrium by increasing the benefits and/or reducing the costs of complying with formality for workers and employers. In the latter case, this means evaluating not only the contributions to the pension system but also the costs associated with labor legislation (health insurance, termination costs, minimum wages, registration costs) as well as other regulations. Equally important, the benefits of being

⁵ We follow Easterly (2001) and consider 'middle class' those workers who are between the third and the sixth deciles of the income distribution.



Percentage of Contributors over Total Employment in LAC, 2010

Figure 4

Source: Authors' calculations.

informal need to be reduced, and those benefits granted to people who have not saved in the pension system need to be reviewed (Levy, 2008).

4 Experiences toward universal pension coverage

Essentially, there are two ways to increase pension coverage, each with its own advantages and disadvantages: granting pensions to those reaching retirement age who do not have social insurance coverage, or making workers currently in the labor market save for their future (*i.e.*, contribute to a pension scheme).⁶ Finding the balance between the two – providing coverage for current older adults and guaranteeing coverage for future retirees – is the challenge that economic policymakers in the region need to solve.

Experiences in the region among countries with different income and formality situations, such as Bolivia and Chile, reveal that non-contributory pensions are effective in increasing the number of people with access to income in old age. In fact, it is the only tool able to provide coverage to the elderly who are currently without social insurance, as well as for the long-term informal workers who will retire in the coming decades. However, depending on their design, non-contributory pensions could significantly affect the decision to participate in the labor market and in the contributory systems (Carvalho Filho, 2008; Galiani and Gertler, 2009; Bosch and Guajarro, 2012; Rodrigues de Oliveira and Kassouf, 2012; and Juárez and Pfutze, 2012). Advances in coverage achieved through non-contributory pensions are very important (see Rofman

⁶ See OECD (2010) and Ribe *et al.* (2010) for an extended summary of policy options to increase coverage, and OECD (2013) for a summary of recent reforms in OECD countries.

100% Percentage of contributors Salaried --- Non-salaried _ 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 100% Percentage of contributors 90% 80% 70% 60% 50% 40% 30% 20% 10% ---- Small (2-5) ---- Medium (6-50) Large (50 +) 0% D1 D3 D10

Pension Savings: Contributors to the Pension System in LAC by Income Decile, Occupation and Firm Size, 2010

Source: Authors' calculations.

D2

D4

D5

D6

D7

D8

D9

et al., 2013, for a detailed description of these programs in LAC), but the design of these tools must include not only proposals for financial sustainability, but also the possible effect of these non-contributory pensions on the labor market and, in particular, on the incentives for participating in the contributory systems.

Moreover, non-contributory pensions are only part of the solution to low coverage. Although they can alleviate or even completely eliminate poverty in old age, they are not effective in ensuring that individuals, particularly those in the middle class, maintain their standard of living in old age. To generate adequate levels of future pensions, pension savings for today's workers need to be urgently increased by expanding both the number of contributors and the frequency of their contributions. To do this, the region has followed different paths. Implementing a reduction of social security costs seem to be effective in generating formal employment, especially in the groups that tend not to be associated with the pension system, such as young people, non-wage earners, and wage earners in small businesses. For example in Chile, a social security subsidy for employees and firms hiring young disadvantaged workers increased the share of these workers in between 2.5 and 4.1 percentage points (Universidad de Chile, 2012). Indeed, several countries are moving in this direction. Colombia's recent tax reform cut formal labor costs by eight percentage points (from 33 to 25 per cent of wages) for all workers, and Brazil has eliminated social security contributions for strategic sectors with the aim of increasing formal employment. Although the question remains to what extent subsidies targeted to particular groups, such as the self-employed or small business employees, could result in discouraging firms from growing or encouraging self-employment. Such outcomes could, in turn, have adverse consequences for the productivity of the economy.

The empirical literature also suggests that the increase in formality (especially among small firms) requires greater supervision but also an improvement in how firms and workers value the benefits of formality. In a controlled experiment, Andrade *et al.* (2013) show that none of the information or financial incentives had an impact on formalization of small firms in Brazil; only a visit by a labor inspector prompted an increase in the registration of these small firms. Although it seems clear that stricter monitoring in the labor market expands the number of formal jobs, it can also destroy jobs that cannot survive regularization due to low productivity or because the firms and workers reject the benefits of social security. Therefore, increased supervision needs to be accompanied by an improvement in the benefits offered by formality and/or reduction in their cost.

Innovations in how the State, and social security agencies in particular, relate to citizens can constitute a low-cost policy for expanding pension coverage. These innovations include financial education campaigns, and improvement in information and channels that facilitate contributions. For example, pilot programs in Peru and Bolivia suggest that sending reminders via a text message or a letter can be an effective and low-cost way of stimulating savings (Karlan *et al.*, 2012).

Overall, it is difficult to suggest or establish a single policy capable of correcting all the problems related to coverage given the diverse realities of the region. In order to achieve long-term solutions, governments will need to explore and make progress on several dimensions. Since the LAC countries are at very different starting points, emphasis on a particular dimension will depend on the specific challenges faced by each.

5 Eliminating poverty in old age and supporting formal employment

In our view, it is possible to move toward universal pensions coverage in LAC, and that under certain conditions, the system is affordable now and in the future. Achieving this goal requires not only establishing sustainable and efficient anti-poverty pensions, but also making a firm commitment to create more formal jobs for the people that are in the labor market today. This is the only sustainable strategy for providing adequate pensions in the long term. Informality is the outcome of the original designs of social welfare systems, the incentives provided by the state in labor markets, and the value placed by workers and firms on the benefits of formality, all of which can be changed.

For this matter, it is not feasible or desirable to propose a single reform for all LAC countries. However, it is possible to set out a series of key principles for any of the options chosen. The most important are:

- *Universality*: understand the interaction of the pension system with the labor market and tax system.
- *Integrality*: acknowledge the interactions and attempt to connect all the provisions of the social insurance system (contributory and non-contributory) such as retirement, disability, survivors' pensions, and health and unemployment insurance.
- *Efficiency*: create good incentives for pension savings and participation in formal employment.
- *Transparency*: simplify the rules so they are understood by citizens and firms.
- *Innovation*: experiment with subsidy mechanisms for contributions and in the channels that facilitate contributions.

Based on these principles, a set of financial and non-financial instruments designed to expand coverage could be evaluated. The financial instruments, consistent with the two objectives of pension systems (poverty reduction and maintenance of the standard of living of workers after retirement), could include:

- An anti-poverty non-contributory pension for all citizens. Established with strict eligibility criteria in terms of age, and at a level sufficient to reduce poverty in old age. This type of pension should have a stable funding source, allow for receiving both non-contributory and contributory pensions, and be supported by strong fiscal institutions (for example, a Fiscal Council).
- *Mechanisms to promote formal employment.* Among other options, subsidies can be offered to reduce contributions for wage and non-wage earners, favoring the incorporation of low- and middle-income workers into the formal system.⁷

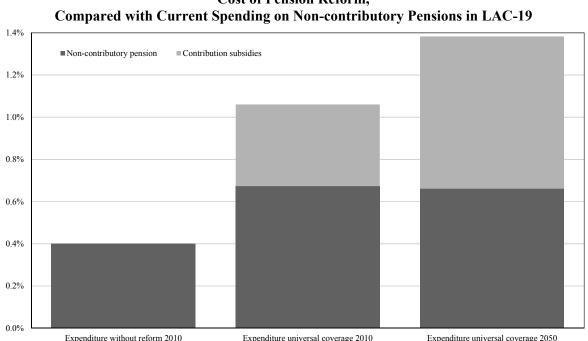
These financial instruments would be supplemented by changes in the design and implementation of pension policies, including:

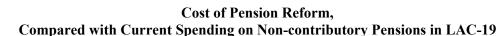
- *Phasing non-wage earners into social security.* Establishing the obligation to contribute for all workers, irrespective of their occupational category (wage earner or not), on financial conditions equal to those of wage earners. Today, affiliation for independent workers is voluntary for all or a subset of non-wage earners in 4 countries in the region (Bolivia, Ecuador, Mexico and Venezuela). Recognition of the special characteristics of this group should be considered when designing new ways for contributing.
- *Progress in supervision, information, and financial education.* Based on links to information sources, improved inspection, and a better pension culture.⁸

Reforms that respect these principles and use the range of financial instruments could completely eliminate poverty in old age, and lead to a significant and sustainable increase in formal employment and pension savings in LAC.

⁷ A number of experiences considering subsidies and matching contributions for low-, middle- and high-income countries have been summarized in Hinz *et al.* (2012).

⁸ Hastings and Mitchell (2011) and Hastings *et al.* (2010) show how financial literacy can enhance pension savings.





To illustrate this proposal and its budgetary implications of reforms, on average in the region, a pension that provides an income of 10 per cent of per capita GDP for all those aged 65 and older in 2010 costs annually an average of 0.7 per cent of GDP (ranging from 0.4 per cent in Guatemala and Jamaica to 1.4 per cent in Uruguay).⁹ This level of spending would remain stable in terms of GDP if the pensions are adjusted for inflation. Measures to stimulate formal employment require additional resources. For instance, if the government subsidizes workers' (wage earners or not) pension contributions with an amount equivalent to 50 per cent of what a worker earning a minimum wage should contribute, the total cost (universal pension and subsidies) rises to 1.1 per cent of GDP in 2010 and 1.4 per cent in 2050^{10} (Figure 6).

This implies that the reform would require an additional budgetary effort of around one percentage point of GDP per year more than the amount that the region is already allocating to noncontributory pensions, and would eradicate poverty among citizens aged 65 and older and significantly increase formal employment. These gains would be even greater if, parallel to the introduction of financial instruments, the contribution channels and supervision were improved.

Source: Authors' calculations Note: LAC-19 refers to the simple average

This benefit corresponds to a daily monetary transfer of 4 to 8 USD in PPP in Argentina, Chile o Uruguay, and between 1 and 2 USD PPP in Bolivia, Guatemala and Honduras.

In the central reform scenario, we assume that a 10 per cent subsidy increases the elasticity of the share of workers contributing to their pensions with respect to per capita GDP from 0.1 (base scenario) to 0.14. This is within the bounds obtained by Heckman and Pages (2008), Kugler and Kugler (2009) and Madrian (2012). We also depicted conservative and optimistic scenarios, with 0.12 and 0.18 formality to per capita GDP growth elasticities. GDP per capita grows in all countries 2.5 per cent annually and contribution rates are set at 10 per cent of total wages. In the reform scenarios, we assume that formality only increases in deciles 3 to 10, which roughly correspond with the wage range where formal jobs are concentrated. The social contributions' subsidy (for employees or firms) is set at 50 per cent of the wage of decile 3, which for LAC-19 represents approximately the minimum wage.

The expansion of non-contributory programs could substantially reduce poverty in old age, consolidating the advances that the region has made over the last decade (Lustig and López-Calva, 2012). But perhaps more importantly, if the measures proposed here are able to shift labor from informal to formal jobs, there would be an expansion in coverage in other social insurance elements that are packaged together with pensions, for example health, disability and life insurance. Furthermore, improvements in productivity and growth will be expected to follow in the medium run as firms become more formal (Busso *et al.*, 2012).

Even so, it is worth emphasizing that there is no single formula for universal coverage of pensions. Depending on their initial coverage conditions, social preferences, institutional capacity, and availability of resources, countries can implement different reforms within this framework of principles and instruments. In particular, countries with very low pension coverage levels may consider extending their non-contributory pillars, paying particular attention to the institutional design to avoid lowering incentives to contribute, and ensure fiscal sustainability in the future. Other countries with relatively high coverage with well-developed and relatively generous non-contributory programs such as Uruguay, Brazil, and Argentina, could advance on the integration of contributory and non-contributory programs to enhance incentives to contribute. All countries would benefit in increasing formality levels using a combination of the tools presented here to close the gap with the OECD average. In particular, countries with high combined non-wage labor costs should consider shifting taxation away from payroll taxes to increase formal employment.

The set of reforms proposed here is not a substitute for parametric reforms (increasing retirement age, reducing benefits or increasing contributions) that are necessary in some defined benefit systems that are projected to be impacted from the rapid demographic change that the region will experience over the next few decades. In fact, increasing coverage can put additional pressures on these systems.

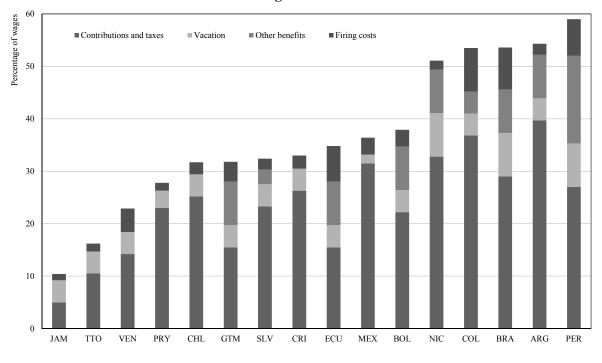
6 On the political economy of pension and tax reform

LAC is experiencing a good demographic, economic, and fiscal period. These factors provide a real opportunity for initiating bold reforms to move toward universal pension coverage. Demographically, the region is still young. Only Argentina, Brazil, Chile, Costa Rica, Cuba, and Uruguay show an advanced stage of demographic transition. However, this window of opportunity, which now facilitates political approval of the reforms, will gradually close as the population ages, and the reforms will become more urgent and costly.

In economic terms, reforming pension systems, especially in relation to improved functioning of the labor market, is a key element in a strategy to boost productivity and potential growth, and is considered a motivation shared by all economies in the region (Pagés, 2010). Some simulations show that if all countries in the region implemented appropriate reforms, including labor and pensions, the region's potential growth could increase by up to two percentage points per year, overcoming the so-called 'middle-income trap' (Powell, 2013).

Finally, the pension reforms aimed at expanding coverage, especially those implemented during the working life of citizens, could improve the fiscal situation in the medium and long term. In the absence of changes in pension systems, the size of the population unprotected during old age in LAC will increase significantly. As a result, social pressure on governments to establish and/or expand non-contributory pension programs will intensify.

However, recognition of the importance of pension reform and the favorable moment are not enough; challenges related to funding and the political economy must be overcome. The funding of pension reform, at least in the short term, requires an increase in the resources allocated to these



Non-wage Costs in LAC

policies, a not insignificant challenge in the region in technical and political terms (Corbacho *et al.*, 2013). A central recommendation would be to limit the heavy charges on formal employment, or at least not add additional burdens, because of their negative effects on formal employment. It is important to note that it is plausible to have low fiscal pressure (over GDP) but high non-wage costs on formal workers. In fact, countries with large informal sectors tend to have higher non-wage costs and less taxation revenues (e.g. Colombia, Mexico and Peru) (Figure 7). In this respect, initiatives have appeared that aim to allocate, in a formal way, part of the collection of value-added tax (VAT) or natural-resource taxes to fund the non-contributory pillar.

The funding challenges are compounded by the fact that, perhaps because of the young population, pensions are not social or economic priorities of citizens of LAC. Pensions do not appear in the top 20 main priorities/concerns of the Latin American population. The *Social Protection Survey* in Chile and similar surveys conducted by the IDB (IDB, 2008) show that a great majority of citizens have never thought how they will finance their old age, even those close to the retirement age. This lack of concern about future pensions, in principle, limits the set of potential contributors and reduces governments' priority for moving forward in this area.

However, these citizens themselves expressed two aspirations that are intrinsically related to pension reform as proposed in this study: reduction of poverty and unemployment. They are even willing to pay more taxes to fund quality public services in health, education, and security (Daude and Melguizo, 2010). These demands from the population could be capitalized in favor of the reforms.

Source: Pages (2010). Note: The 2012 tax reform in Colombia may have reduced non-labor cost 13.5 percentage points, down to 40 per cent of wages.

Access to formal job facilitates access to the middle class, and has even been considered a necessary condition. The reality in Latin America and the Caribbean is that the region's new middle classes are still largely informal and exposed to great vulnerability if economic conditions are no longer favorable (OECD, 2010 names them *middle sectors*; Ferreira *et al.*, 2012 the *strugglers*). In this context, the emerging middle classes of LAC could act as triggers for a series of ambitious pension changes, in line with the contents of the proposed reform, leading to an expansion of formal employment for people with low and medium incomes.

REFERENCES

- Andrade, A., M. Bruhn and D. McKenzie (2012), "A Helping Hand or the Long Arm of the Law? Experimental Evidence on What Governments Can Do to Formalize Firms", World Bank, Policy Research, Working Paper, No. 6435.
- Barr, N. and P. Diamond (2006), "The Economics of Pensions", Oxford Review of Economic Policy, Vol. 2, No. 1, pp. 15-39.
- Bosch, M. and J. Guajardo (2012), "Labor Market Impacts of Non-contributory Pensions: The Case of Argentina's Moratorium", IDB, Working Paper, pp. 78-158.
- Busso, M., M.V. Fazio and S. Levy (2012), "(In)formal and (Un)productive: The Productivity Costs of Excessive Informality in Mexico", IDB, Working Paper, No. 341.
- Carvalho Filho, I.E. (2008), "Old-age Benefits and Retirement Decisions of Rural Elderly in Brazil", *Journal of Development Economics*, Vol. 86, No. 1, pp. 129-46.
- CELADE (Centro Latinoamericano y Caribeño de Demografía División de Población de la CEPAL) (2011) *Estimaciones y proyecciones de población a largo plazo, 1950-2100. Revisión 2011*, Santiago de Chile, CEPAL.
- Corbacho, A., V. Fretes and E. Lora (eds.) (2013), *More than Revenue: Taxation as a Development Tool*, Development in the Americas (DIA) Series, Washington (D.C.), IDB.
- Daude, C. and A. Melguizo (2010), "Taxation and More Representation? On Fiscal Policy, Social Mobility and Democracy in Latin America", OECD, Development Centre, Working Paper, No. 294.
- Djankov, S., R. La Porta, F. López-de-Silanes and A. Shleifer (2002), "The Regulation of Entry", *The Quarterly Journal of Economics*, Vol. 117, No. 1, pp. 1-37.
- Ferreira, F.H.G., J. Messina, J. Rigolini, L.F. Lopez-Calva, M.A. Lugo and R. Vakis (2013), *Economic Mobility and the Rise of the Latin American Middle Class*, Washington (D.C.), The World Bank.
- Galiani, S. and P. Gertler (2009), "Informe Final sobre los Cambios del *Programa 70 y más*", Documento de discusión de Sedesol, Mexico City, Sedesol, Instituto Nacional de Salud Pública.
- Gill, I., T. Packard and J. Yermo (2005), *Keeping the Promise of Old Age Income Security in Latin America*, Washington (D.C.), World Bank and Stanford University Press.
- Hastings, J.S. and O.S. Mitchell (2011), "How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors", NBER, Working Paper, No. 16740.
- Hastings, J.S., O.S. Mitchell and E.T. Chyn (2010), "Fees, Framing, and Financial Literacy in the Choice of Pension Manager", Pension Research Council, Working Paper, No. 2010-09.
- Heckman, J.J. and C. Pagés (eds.) (2008), *Law and Employment: Lessons from Latin America and the Caribbean*, Chicago (IL), The Chicago University Press, American Bar Foundation and IDB.
- Hinz, R., R. Holzmann, N. Takayama and D. Tuesta (eds.) (2012), Matching Defined Contributions Schemes: Role and Limits to Increase Coverage in Low and Middle Income Countries, Washington (D.C.), World Bank.
- IDB (2008), Encuesta longitudinal de seguridad social en Lima metropolitana y México DF, Washington (D.C.), IDB.

- Juárez, L. and T. Pfutze (2012), *The Effects of a Non-contributory Pension Program on Labor Force Participation: The Case of* 70 y Más *in Mexico*, mimeo, Instituto Tecnológico de México.
- Karlan, D., M. McConnell, S. Mullainathan and J. Zinman (2012), "Getting to the Top of Mind: How Reminders Increase Saving", NBER, Working Paper, No. 16205.
- Kugler, A. and M. Kugler (2009), "Labor Market Effects of Payroll Taxes in Developing Countries: Evidence from Colombia", *Economic Development and Cultural Change*, Vol. 57, No. 2, pp. 335-58.
- Levy, S. (2008), Good Intentions, Bad Outcomes: Social Policy, Informality, and Economic Growth in Mexico, Washington (D.C.), Brookings Institution Press.
- Lindbeck, A. and M. Persson (2003), "The Gains from Pension Reform", Journal of Economic Literature, Vol. XLI, No. 1, pp. 74-112.
- Loayza, N.V., A.M. Oviedo and L. Servén (2004), "Regulation and Macroeconomic Performance", World Bank, Policy Research, Working Paper, No. 3469.
- Loayza, N. and J. Rigolini (2011), "Informal Employment: Safety Net or Growth Engine?", *World Development*, Vol. 39, No. 9, pp. 1503-15.
- Lustig, N. and L.F. López-Calva (eds.) (2010), *Declining Inequality in Latin America. A Decade of Progress?*, Washington (D.C.), Brookings Institution Press.
- Madrian, B.C. (2013), "Matching Contributions and Savings Outcomes: A Behavioral Economics Perspective", in R. Holzmann, R. Hinz, N. Takayama and D. Tuesta (eds.), *Matching Defined Contributions Schemes: Role and Limits to Increase Coverage in Low and Middle Income Countries*, pp. 289-309, Washington (D.C.), World Bank.
- OECD (2010), Latin American Economic Outlook 2011: How Middle-class is Latin America?, Paris, OECD.
 - (2013), Pensions at a Glance 2013. OECD and G20 Indicators, Paris, OECD.
- OECD-IDB-WB (2014), Pensions at a Glance in Latin America and the Caribbean, Paris, OECD.
- Pages, C. (ed.) (2010), *The Age of Productivity. Transforming Economies from the Bottom Up*, New York, Inter-American Development Bank and Palgrave Macmillan.
- Packard, T. (2001), "Is There a Positive Incentive Effect from Privatizing Social Security? Evidence from Latin America", World Bank, Policy Research, Working Paper, No. 01/17.
- Pallares-Miralles, M., C. Romero and E. Whitehouse (2012), "International Patterns of Pension Provision II: A Worldwide Overview of Facts and Figures", World Bank, Social Protection, Discussion Paper, No. 1211.
- Powell, A. (coord.) (2013), *Rethinking Reforms: How Latin America and the Caribbean Can Escape Suppressed World Growth*, Latin America and the Caribbean Macroeconomic Report, Washington (D.C.), IDB-Intal.
- Ribe, H., D.A. Robalino and I. Walker (2010), From Right to Reality: Achieving Effective Social Protection for all in Latin America and the Caribbean, Washington (D.C.), The World Bank.
- Rodrigues de Oliveira, P. and A.L. Kassouf (2012), "Impact Evaluation of the Brazilian Non-contributory Pension Program Beneficio de Prestação Continuada (BPC) on Family Welfare", Partnership for Economic Policy, Working Paper, No. 2012-12.

- Rofman, R., I. Apella and E. Vezza (eds.) (2013), *Más allá de las pensiones contributivas. Catorce experiencias en America Latina*, Buenos Aires, World Bank.
- Universidad de Chile (2012), Evaluación de Impacto del Programa de subsidio al empleo joven. Informe final corregido, Santiago de Chile, Centro de Microdatos.
- World Bank (1994), Averting the Old Age Crisis. Policies to Protect the Old and to Promote Growth, Oxford, The World Bank and Oxford University Press.