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Matching Contributions for Pensions in Colombia, Mexico, and Peru: Experiences and Prospects

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Matching Contributions for Pensions in Colombia, Mexico, and Peru: Experiences and Prospects*

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Abstract

Although Colombia, Mexico, and Peru introduced major structural reforms in the mid-1990s, they still exhibit very limited levels of social protection coverage (28 percent of the labor force in Colombia, 27 percent in Mexico, and 22 percent in Peru). These figures reflect the limited effectiveness of basing a pension scheme on employer withholding of contributions in environments in which most employment relations are informal. Better design of matching defined contribution schemes could increase the level of pension savings by the nearly 20 million middle-income workers in the informal sector in the three countries. Such an approach is preferable to ex post solutions to the growing problem of old age as the region ages rapidly, which are not sustainable and strengthen incentives for informality.

Keywords: pensions, defined contributions, matching contributions, pension coverage.

JEL: G23, H55, J32.

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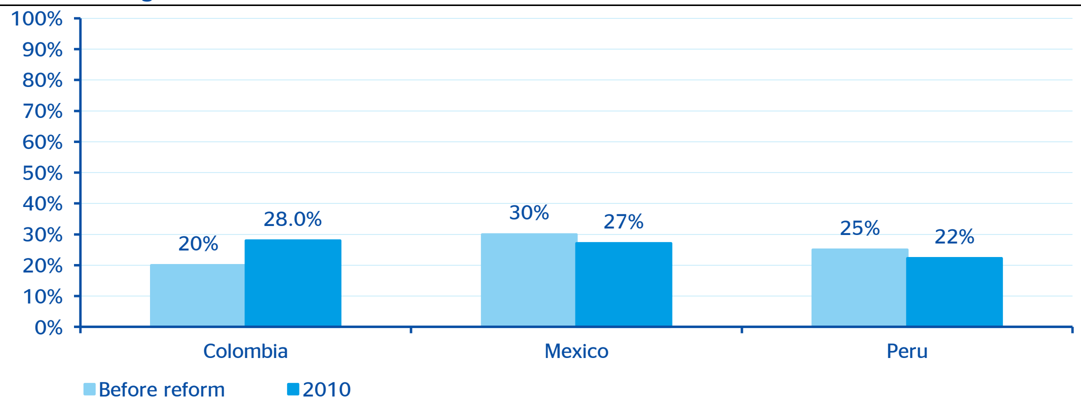
Colombia, Mexico, and Peru implemented structural reforms of their pension systems at almost the same time. Between 1994 and 1997, all three countries introduced mandatory funded systems for retirement based on individual defined contribution accounts. In Colombia and Peru, the reform allowed participants to choose between the existing defined benefit pay-as-you-go system (with some parametric adjustments) and the new defined contribution scheme. In contrast, in Mexico the introduction of privately run savings involved closing the pay-as-you-go system.[1]

These reforms had three explicit objectives: to ease the pressure generated by the pension system on public expenditures, to provide pensions that are more directly linked to the history of contributions, and to create incentives for greater participation in the formal labor market and therefore the pension system. Although the first two objectives were to a large extent achieved, the reform fell short in addressing the problem of low coverage.[2] Coverage rates (measured as the number of contributors as a share of the economically active population) remain low (28 percent in Colombia, 27 percent in Mexico, and 22 percent in Peru in 2010). These levels of participation in the pension system are not only low but slightly below those observed before the implementation of the reforms in Mexico and Peru.

The lack of coverage by large segments of the population represents an enormous public policy issue in these countries. It reflects the often very difficult challenges associated with achieving high coverage rates among low- and middle-income groups and in environments characterized by high levels of informal employment, which are common at this level of development (chart 1).[3]

Chart 1
Pension coverage in Colombia, Mexico, and Peru



Note: Year of reform is 1993 for Colombia, 1996 for Mexico, and 1992 for Peru
Source: National supervisors

The willingness of individuals to contribute voluntarily to a pension system is a significant, albeit less readily quantifiable, factor in determining the observed coverage levels in these countries. Assuming that people at all levels of income have some capacity to consume less and allocate resources for old-age savings, participation in any retirement savings system will to a large extent depend on the features of the product offered and individuals' perceptions of the need to create a formal (as opposed to a family-based) source of support when they are elderly. The willingness to participate in a pension system is also known to increase with age.

An important factor in determining the demand for pension products may also be the type or level of immediate monetary incentives, the most prevalent of which are matching defined contributions (MDCs). These incentives can come from either public or private sources. They represent an important policy instrument, in combination with other interventions, to encourage people in groups that are currently not participating in pension systems to begin saving for retirement.

This chapter reviews the attempts by Colombia, Mexico, and Peru to develop MDC-type pension schemes. It also looks at the extent to which such schemes could be extended to groups that are currently not contributing to the system. The chapter begins by analyzing the reasons why MDC schemes may be relevant in Latin America, focusing on the three countries. It then reviews the experience of MDC schemes in the three countries, including projects that have been implemented, regulatory development in progress, and other initiatives that have been abandoned for the time being. The following section uses household survey data from Colombia, Mexico, and

1: In Mexico, workers belonging to the old pay-as-you-go system until 1997 who were transferred to the new funded system could choose the form in which their pension was calculated, based on either the rules of the pay-as-you-go system or the savings they had accumulated in their individual accounts.
2: For a complete review of the origin of the reforms in Latin America, see Gill, Packard, and Yermo (2004); Holzmann and Hinz (2005); Tuesta (2011a); and World Bank (1994).
3: The term informality covers a range of employment, from illegal activity to exchanges that are outside formal or contractual environments, such as mutual aid between neighbors.

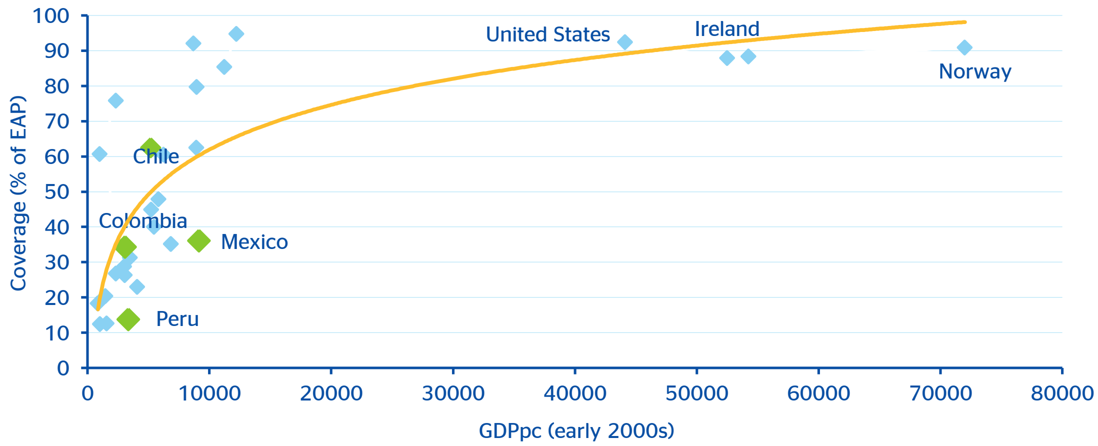
Peru to consider the potential for developing MDC-type schemes and identify groups in the labor force that could be the focus of such an initiative. The last section draws some conclusions.

1. Matching Schemes and Structural Problems behind Low Pension Coverage in Latin America

Latin America has low coverage in social insurance and social protection, particularly in the case of pensions (Rofman, Lucchetti, and Ourens 2008; Rofman and Oliveri 2012). Even though there is a strong correlation (about 80 percent) between the level of coverage and gross domestic product (GDP) per capita (Forteza, Luchetti, and Pallares-Miralles 2009), with the exception of Chile, Latin American countries exhibit pension coverage rates that are below those of other countries with similar per capita GDP levels (chart 2).

Chart 2

Pension coverage as a percentage of the labor force and GDP per capita in selected countries, early 2000s



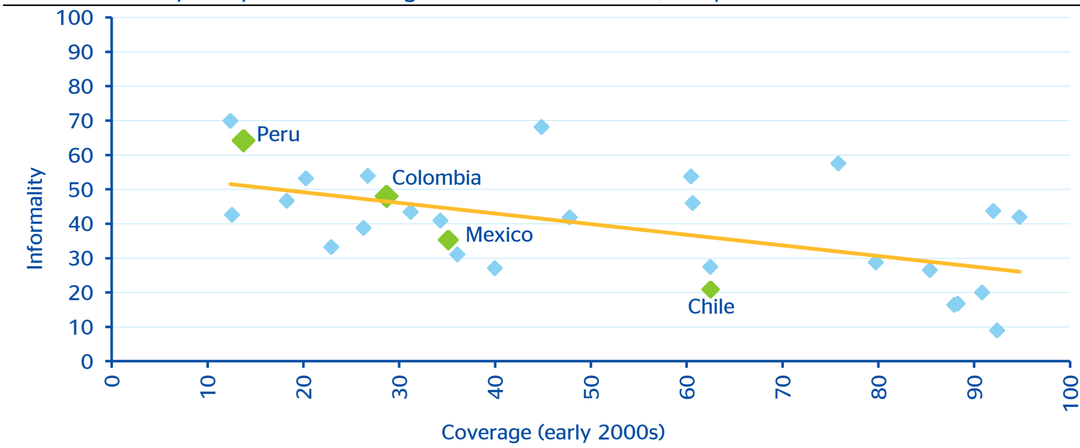
Source: Holzmann, Robalino, and Takayama 2009; World Bank Development Indicators database

1.1. The Challenge of Informality

A number of factors lie behind the problem of low pension coverage in the region. One is the capacity to save, which is closely related to per capita income, among other factors (Costa and others 2011; Ribe, Robalino, and Walker 2010; Robalino and Holzmann 2009; Tuesta 2011a). A second is government inefficiency in various areas (Carranza, Chávez, and Valderrama 2006). Behind the problem of low income generation are poor economic management and ill-conceived growth strategies, a deficient institutional structure, and inadequate policies for dealing with poverty, health, education, and sex (Acosta and Ramírez 2004). A third, particularly serious, problem within the institutional arena is the extent of the informal economy, which makes it infeasible to impose a mandate for pension contributions because the state cannot enforce compliance (Costa and others 2011; Levy 2008; Tuesta 2011b). As shown in chart 3, there is a negative correlation between the level of labor informality and pension coverage rates. Peru is ranked among the economies with the highest levels of labor informality in the world.

Chart 3

Labor informality and pension coverage in selected countries, early 2000s



Source: Holzmann, Robalino, and Takayama 2009; Schneider, Buehn, and Montenegro 2010

Several factors explain the high levels of labor informality in Colombia, Mexico, and Peru (for a survey of the empirical evidence on labor informality in Latin America, see Perry and others 2007):

- **Low institutional quality and burdensome regulation**. Expensive and complicated procedures for creating and winding up firms, difficulties in obtaining licenses and permits, registration problems, and inadequate protection of property rights create an environment that is not favorable for doing business or establishing new companies (Breceda, Rigolini, and Saavedra 2008; Loayza, Serven, and Sugawara 2009; World Bank 2012).
- **Rigid and complex labor legislation**. The combination of minimum wages, relatively high employment benefits, low labor productivity, and restrictions on hiring and firing is conducive to labor informality (Breceda, Rigolini, and Saavedra 2008; Carranza 2012; Chong, Galdo, and Saavedra 2007; Loayza, Serven, and Sugawara 2009).
- **Imperfect land and water markets**. In areas where the land market does not operate properly, it is impossible to accumulate land. In areas where water rights are not transparently assigned, landownership is concentrated among farmers with small holdings or in farming communities. The result is inefficient farming operations with very low productivity and without the capacity to generate levels of income that enable workers to participate in a social security system (De Soto 1989; Loayza 2007; Oviedo 2009).
- **Recent history of high macroeconomic volatility**. Macroeconomic problems include volatile prices, unexpected changes in the tax system, erratic demand, and restrictions on capital flows and foreign exchange regimes that limit the development of financial markets. All these factors have meant that companies cannot easily or predictably comply with their social security or tax obligations. The greater macroeconomic stability achieved over the last decade has improved average incomes, developed capital markets, and led to a steady reduction in labor informality, but formalizing the economy remains a very slow process (Loayza 2007).
- **Explicit or implicit incentives to informality**. The significant number of people who remain in the informal economy generates the political temptation to offer financial assistance and subsidies, either explicit (such as public purchase programs, special tax schemes, subsidies, or programs to write off agricultural debt for small producers) or implicit (exemptions from labor and tax inspection, special application of regulations to physical establishments where informal activities are being carried out) (Carranza 2012; Loayza 2007; Oviedo 2009).

This high rate of labor informality, particularly in rural areas, has generated the following structural characteristics:

- A two-tier business structure, in which many very small companies with low labor productivity account for a high percentage of jobs and a few very large companies with high labor productivity account for a high percentage of output
- Small companies that have informal relations with their workers, because low labor productivity does not allow them to pay minimum wages or provide other types of required benefits
- Large companies that have formal relations with their workers but encounter problems when they attempt to expand to take advantage of economies of scale in sectors in which they compete with small informal enterprises (services, retail trade)
- Employment legislation that allows temporary formal employment without benefits; this form of employment tends to be popular among both employers (because of the potentially lower labor costs and more flexible ability to terminate workers) and workers (who usually choose to receive higher cash income in the short term by not participating in social security systems, even when there is typically greater overall value over the longer term in establishing eligibility for the benefits), and affects the level of social security coverage and the employer's incentives to invest in training.

Although macroeconomic growth and stability in Latin America are generating conditions conducive to formalizing the economy—and Colombia, Mexico, and Peru have been examples of stability and growth for more than two decades—formalization is a very gradual process. Moreover, growth alone is not enough to achieve it. Structural reforms are required to introduce greater flexibility to factor markets, establish uniform and simple tax systems, and make it easier to do business. These reforms may be delayed or simply not implemented for political economy reasons.

Formalization is important because, like many industrial economies, Colombia, Mexico, and Peru have established systems that use employers as contractual agents to ensure social security coverage, mandating participation as a condition of employment and collecting contributions through deductions from wages. Informal firms—or firms that maintain informal relations with their employees—do not act as agents of the state in enforcing compliance with the law. As Latin

America ages, the high level of informality is leaving a growing number of people without social protection (in terms of pensions, health, and unemployment).

1.2. Can a Matching Scheme Increase Coverage?

Given these structural difficulties, some countries have given up on looking for schemes that oblige or create incentives for workers to contribute to a social protection scheme during their active lives. Instead, they have opted for ex post solutions aimed at providing means-tested non contributory pensions for the elderly or people who do not otherwise qualify to receive a pension.[4]

Such solutions are problematic for several reasons. First, if the rate of informality remains high and life expectancy continues to rise, public expenditure will face significant political pressures in the future. Second, ex post solutions reinforce the economic incentives for not moving into the formal economy and impose rigid thresholds that could create disincentives for saving by people who might otherwise be capable of and inclined to do so. Third, to the extent that there is a social program with broad groups that are current or potential beneficiaries, there will be considerable political pressure for new initiatives and additions to these programs, which will extend coverage and increase benefits. Development of these social pensions is thus not a long-term solution for the problem of coverage related to the capacity and desire to save during one's active working life (Levy 2008).

The most adequate way to extend coverage in the long term is to find new mechanisms that can increase participation in saving for old age during the period of active employment. Mandatory contribution schemes could play a role, although they have clear limitations in a context of high levels of informality that are likely to be meaningfully reduced only over the long term. A smarter proposal could therefore be to promote voluntary saving by a broad range of groups that are not currently saving by trying to identify the factors that could encourage them to participate.

In a context of limited fiscal resources, particularly in medium- and low-income countries such as Colombia, Mexico, and Peru, the aim should be to identify groups that require government assistance for saving for old age and that are more likely to respond to incentives. Among people who currently do not participate in mandated pension schemes, some independent workers with high income have sufficient resources to make contributions. For such workers, it is probably a good idea to develop strategies or implement changes to the law to make participation mandatory.

The situation differs for low- and middle-income independent workers who have low productivity and unstable relationships with informal enterprises, which makes it difficult for them to generate income, thus limiting their possibility to save. This large group will probably represent the biggest challenge for the government in terms of designing incentives, considering that the incentives to remain in the informal sector and to not contribute are great and difficult to counteract.

chartSome workers in this group are probably in a better position than others and may be able to save for old age if the incentives are appropriate and well designed. MDC-type systems that have significant government support and provide meaningful economic incentives that complement the savings of workers who decide to contribute voluntarily are an option. It is important that incentives be sufficiently attractive to encourage pension saving among low-income groups, where the opportunity cost with respect to other alternatives is usually high (Mitchell and Utkus 2004). Not only the willingness to save but also the adequacy and design of a financial product (that will be used only when people are old enough to retire) are needed. Saving for pensions tends not to be very popular, because it absorbs limited current resources in return for benefits at a distant point in time, which some people will never reach (Selnow 2004).

An MDC scheme may be relevant if it interacts with other incentives that help informal workers overcome other needs that may be more urgent in the short term. Some pension systems that have considered using MDC schemes have complemented them with the possibility of using pension funds to help purchase a first home or access health care. Other schemes have also allowed access to these savings when people suffer negative shocks to their short-term income or experience liquidity needs because of illness or other factors.

MDC schemes should be considered a mechanism for encouraging saving as part of a set of broader instruments. Particularly in the cases of Chile and Colombia, the probability of household saving increases when saving offers access to the future acquisition of a home, health care services, or improved educational opportunities (Cardoso 2007; Fuentes 2010).

4: One example of this type of scheme is the recently approved *Pensión 65* plan in Peru, aimed at very poor people age 65 and older. Bjeletic and Tuesta (2010) review other schemes.

2. Review of Matching Contribution Schemes in Colombia, Mexico, and Peru

Pension legislation in Colombia, Mexico, and Peru has addressed the problem of low coverage through a variety of different initiatives. Each approach has to take into account the specific characteristics of the country and respond to the situations of workers both during their working life (ex ante) and at the time of retirement (ex post). In general terms, reforms must provide a comprehensive response to social, employment, and macroeconomic aspects. At the same time, although reducing labor informality should continue to be a goal and incentives may be introduced for this purpose, transformations must focus on guaranteeing adequate and sustainable pensions for the population (OECD 2010; Ribe, Robalino, and Walker 2010).

Given that employment informality is widespread and old-age poverty is persistent in Latin America, reinforcing the solidarity pillar in the short term is an inevitable first step in strengthening the retirement income system. The Inter-American Development Bank has proposed establishing a general social protection system financed through consumption taxes (Levy 2008; Pagés 2010); the Economic Commission for Latin America and the Caribbean proposes extending existing minimum pensions (ECLAC 2006). One way of strengthening this pillar could be to reduce the number of years of contribution required to obtain a minimum contributory pension. Another would be to introduce social non contributory pensions, although this option would require the commitment of significantly more public resources (1–2 percent in the case of very small cash transfers to the elderly population in poverty according to estimates). As broad fiscal commitment to a basic non contributory pension could become a strong disincentive to formality, it may be advisable for minimum pensions to be directly linked to contributions up to a certain level, as they are in Chile.

One of the few ways of providing a solution to the lack of coverage that is sustainable socially and economically in the long term is to increase the savings of people working now. Ex ante policies thus appear to offer more room for maneuvering toward a reform of pension systems.

The most direct political option is to make it mandatory for self-employed workers to be members of the system. Such workers represent about half of informal urban middle-income workers in Colombia, Mexico, and Peru (8.8 million, of which fewer than 0.7 million have completed tertiary education).[5] However, the case of Brazil, which has introduced mandatory payment, shows that coverage continues to be unequally distributed, as high-income independent workers contribute significantly more than low- and middle-income ones. Clearly, it is not easy to introduce this policy effectively (Costa and others 2011). Ensuring that workers make contributions is difficult, and requiring them to do so may not be the best or a sufficient way to provide for their old age, given their limited capacity for saving. Some countries have considered a semi-mandatory hybrid option, in which workers are automatically registered but may decide to quit the system. This option may be accompanied by modifications to adapt to special cases, such as greater flexibility in the amount and frequency of contributions or permission to withdraw payments in some circumstances, such as long-term unemployment or health problems (Hu and Stewart 2009).

In recent years, the debate has begun to focus on the use of matching contributions to enhance participation in defined contribution pensions by introducing transfers from the government that are contingent on the level of voluntary contributions made to individual pension accounts. Unlike minimum pensions and social pensions, MDCs can have a significant impact on informal sector middle-income workers (Ribe, Robalino, and Walker 2010). However, the likely effect will depend on the size of the coverage problem and the factors behind it.

The sources of finance of these incentives may be diverse, and they may differ in scope and form. The experiences in Colombia, Mexico, and Peru have been specific to each country's circumstances. The fiscal prudence shown by their finance ministers has influenced the design and limited the progress of these programs. The often contrasting vision of experts and policy makers has also played a role in each country. In many cases, matching contribution projects, and even laws already approved, have not been implemented because of a lack of consensus. As a result, MDC schemes in the three countries have so far been fairly limited; in no case have they ended up being generally applicable.

It is important to underscore that matching schemes—or any other incentive that seeks to increase participation without solving the underpinnings of labor informality— will not be enough. Structural reforms (for example, in the labor market or on the regulatory side) beyond pension policy will be necessary to effect real change and spur workers to save for old age.

5: Independent workers in Colombia are required to contribute to both pension and health insurance schemes.

2.1. Colombia

Since the Act of 1993, when structural pension reforms were implemented, the Colombian pension system has implemented two core mandatory schemes. One was the new private mandatory defined contribution scheme known as the Individual Savings System with Solidarity (*Régimen de Ahorro Individual con Solidaridad*—RAIS). The other was the pay-as-you-go public scheme known as the Average Premium System (Régimen de Prima Media—RPM). Workers must choose and contribute exclusively to one of these schemes. They contribute 16 percent of their base income, although the percentage allocated to savings for old-age pensions is different in each scheme: 11.5 percent of income is allocated to the individual account in the RAIS; 13 percent goes into the RPM. The remaining amount is allocated to the payment of administrative costs in both schemes and to disability and survivors' insurance, to the Minimum Pension Guarantee Fund (*Fondo de Garantía de Pensión Mínima*—FGPM) in the RAIS and to disability and survivors' pensions in the RPM. In both systems, the employer is responsible for 75 percent and the employee for 25 percent of the contribution. Independent workers are responsible for all their own contributions to the system (Llanes and Alonso 2010).

Based on this structure, three MDC pension schemes can be identified in Colombia. Two already work as part of the RAIS and the RPM; the third, which is in the process of implementation, is intended to be part of a more general scheme aimed at boosting saving for old age outside of the formal pension system.

The two MDC pension schemes currently in operation are associated with contributions to (1) the private individual accounts system through the FGPM of the RAIS and (2) the Pension Solidarity Fund (*Fondo de Solidaridad Pensional*—FSP), which is supported by contributions of workers from the RAIS and the RPM. The aim of the first is to benefit pensioners in the RAIS who contributed to their individual accounts but whose accumulated account value is insufficient to obtain a minimum pension under the requirements of the law (frequency of contributions and age).[6] The matching mechanism for RAIS members operates ex post, by activating the use of the FGPM once the pensioner has used up his or her individual account fund. The FGPM is funded from 1.5 percent of the worker's monthly income (part of the 16 percent contribution). Because the RAIS is fairly new, few pensioners have accessed the minimum pension guarantee.[7]

The second type of matching scheme operates through the FSP, which is divided into two subaccounts. The first, the solidarity subaccount (a matching scheme), temporarily subsidizes contributions to the pension system for some groups deemed to have financial limitations. The second, the subsistence subaccount, which has been in place since 1993, is intended to provide protection against poverty in old age. For this account, a previous contributory history is not required (this subaccount is not a matching contribution scheme). These subaccounts are financed by contributions of workers to the public (RPM) or private system (RAIS) who earn more than four times the minimum wage. The subsistence subaccount is also financed by the resources of contributors who earn more than 16 times the minimum wage.

The solidarity subaccount is designed exclusively to subsidize the monthly contribution of workers who meet certain conditions (earning a monthly payment less than a minimum salary, among others) who have difficulty making required contributions and thus may find themselves ineligible for a pension. The matching benefit is provided ex ante; it makes up for the contributions that are lacking to qualify for pension benefits. In order to qualify for this benefit, the member is also required to have previously contributed for a certain number of weeks (table 1).

6: The minimum pension in Colombia is the legal minimum wage, which is annually discussed in a tripartite commission made up of representatives from the government, unions, and employers. If they do not reach agreement, the wage is set by a government decree.
7: The public defined benefit pay-as-you-go scheme (RPM) does not have a similar fund. The reserves of the social security were depleted in 2004. When a worker completes the number of weeks of contribution required and reaches the age of retirement, the government pays the minimum pension through a transfer from the budget.

Table 1

Requirements for accessing the solidarity subaccount of Colombia's Pension Solidarity Fund

	Conditions		Benefits	
Population Group	**Age**	**Previous Weeks**	**Lengths of subsidy (weekly)**	**% of subsidy**
Self-Employed of the Rural and Urban Sector	RPM: 35 -55 RAIS: 35-58	250	650	75%
Municipal Councilor, Administrative Categories 4.5 And 6	RPM: >55 RAIS: >58	500	500	75%
Disabled Workers	n.a	500	750	95%
Community Mothers	n.a.	0	750	80%
Unemployed	RPM: >55 RAIS: >58	500	650	70%

Note: To access the FSP, a worker must be affiliated with the General System of Social Security for Health. n.a. = not applicable
Source: Departamento Nacional de Planeación 2009

The target population of the matching contribution from this subaccount includes people with very low contribution densities, including rural workers, people with disabilities, and women providing care for children (*madres comunitarias*—community mothers).[8] To access the matching contribution, pensioners must first be over the age of 55 (RPM) or 58 (RAIS) and have contributed to the system for a minimum of 500 weeks (based on the 16 percent of income contribution). In 2009, these conditions were relaxed, and the minimum age was reduced to 35 years. Other groups were added, such as councillors in certain local councils. The percentage of the value subsidized depends on the specific population group eligible for the subsidy.

To qualify for the subsistence subaccount, beneficiaries must be Colombian, have lived in Colombia for the past 10 years, be at least three years younger than the retirement age,[9] and be classified as having a standard of living at the lower two levels.[10] The local authority selects beneficiaries (after verifying their social conditions) and determines the level of the subsidy. In order to increase coverage, the Ministry of Social Welfare selects beneficiaries residing in welfare centers for the elderly, after completing notice and verification requirements. The grants covered by this subsidy include money and basic social services, such as food and medicine. The value of the subsidy cannot exceed 50 percent of the monthly legal minimum wage.

Another potentially interesting scheme, for which the implementing regulations have not yet been passed, is the Periodic Economic Benefits (*Beneficios Económicos Periódicos*—BEP) scheme.[11] Once enacted, this program will provide monthly payments equal to less than the minimum wage to elderly people who do not meet the conditions required to receive a pension. Since by constitutional mandate, a pension has to be at least equal to the legal minimum wage, the BEP scheme is thus not a pension. The BEP scheme seeks to meet the needs of people working in informal low- and middle-paying jobs, who typically have inadequate income and few incentives to save for old age. It would provide incentives of around 20 percent of accumulated savings at the time of retirement (up to 0.85 times the minimum wage) to stimulate people to make voluntary contributions to the scheme.[12] The goal is to reach some of the low and middle-income groups that are not reached through the participation mandate of the pension systems. The financing of the match will come from government resources rather than a special fund.

8: Community mothers are women hired by the Welfare Family Institute to provide child care in a community.
9: The age for retirement is 62 for men and 57 for women.
10: According to the Identification System of Potential Beneficiaries of Social Programmes (*Sistema de Identificación de Potenciales Beneficiarios de Programas Sociales*), a tool that classifies individuals according to their living standard. It is used to objectively select potential beneficiaries of social programs managed by the state.
11: Legislative Act 01 of 2005 and *Decreto* 4944 of December 18, 2009.
12: Among the incentives policy makers are considering is the possibility of allowing the funds to be used as a guarantee for obtaining credit, including for housing.

2.2 Mexico

At least two matching-type schemes in Mexico function within the general mandatory defined contribution pension system established in the reforms of the late 1990s. The first, which targets low-wage workers, is the Social Contribution (*Cuota Social*), which is part of the defined contribution scheme administered by the Mexican Social Security Institute (*Instituto Mexicano de Seguridad Social*—IMSS). The second, "solidarity savings," is included in the defined contribution scheme of the Institute for Civil Servant Social Insurance and Services (*Instituto de Seguridad Social y Servicios Sociales de los Trabajadores del Estado*—ISSSTE). It targets workers who opt to increase their contributions voluntarily (table 2).

Table 2
Matching schemes in Mexico

Financial scheme	IMSS	ISSSTE
General contribution rate	6.5% SBC	11.3% SBC
Matching Schemes		
1. Social Contribtuion	Progressive scheme for workers up to 15 MW	5.5% MW97/[a] indexed to inflation, for all workers
2.Solidarity Savings (confirmed by the state)	No matching contribution	3.25 times the worker's contribution/[b]
Guaranteed pension	Mex$2096 monthly	Mex$3626 monthly

Note: SBC = basic contribution salary (salario base de cotización); MW = minimum wage.
a. 5.5% of minimum salary in 1997, indexed to inflation (Mex$3.50 daily).
b. The allowed worker's contribution is up to 2% of SBC.
Source: OECD 2011

The Social Contribution is a matching payment by the federal government to the individual accounts of lower-income workers. Up to 2009, it consisted of a government subsidy of 5.5 percent of the minimum wage of 1997 in the Federal District for each day of work, adjusted quarterly by the rate of inflation. The Social Contribution significantly increases the retirement savings of lower-income workers. When the new IMSS defined contribution system began operating in July 1997, the Social Contribution was introduced as a welfare instrument for all workers holding pension rights. However, in May 2009, the federal government limited payment of the Social Contribution to workers who earned less than 15 times the minimum wage in the Federal District. The value of the contribution is progressive, decreasing by steps with multiples of the minimum wage.[13]

The Social Contribution scheme can be considered a matching scheme in which the government complements the worker's contribution to the defined contribution system. As this is a public contribution to workers who are already paying into the system, this assistance may be interpreted as more of an incentive to prevent workers already in the system from stopping their contributions rather than a scheme for attracting new contributors. The scheme's matching does not reduce the cost of formality; it increases future benefits for people who enter the system and contribute.

The Social Contribution provides increased pension benefits for many lower-income workers affiliated with the pension system. The 2009 reform establishing an income cap as an eligibility requirement tightened the scheme's focus on lower-income groups. The policy could be better targeted by, for example, having the state contribute 11 percent of the 1997 minimum wage instead of the current 5.5 percent for people earning up to three times the minimum wage (Herrera 2010). Under such a reform, the fiscal cost of increasing the Social Contribution for people with salaries up to three times the minimum wage would be fully compensated by eliminating benefits by workers earning more than this amount.

In the scheme run by the ISSSTE, the match originates with the reforms implemented in 2007. The new system is based on funded defined contribution individual accounts for public sector workers. It includes the establishment of the National Pension Fund for Civil Servants (PENSIONISSTE), a public body that is an offshoot of the ISSSTE. The National Commission for the Retirement Saving System (Consar) regulates and supervises the fund's operation, administration, and execution. PENSIONISSTE is thus a state body. It operates in a manner similar to the Afores, the private pension fund administrators that manage the funds for private sector workers.

PENSIONISSTE is financed through the collection of fees from member accounts. The law stipulates that for each Mex$1 workers contributes voluntarily to their individual pension accounts, the state will contribute Mex$3.25. This voluntary contribution has a ceiling of 2 percent on the employee contribution base and a maximum match from the employer that cannot exceed 6.5 percent. This matching scheme, which is attractive for the worker, can increase a pensioner's replacement rate

13: The progressive incremental scheme starts with a daily amount equivalent to Mex$$4.35 for workers earning up to 1 minimum wage (MW); Mex$4.16 for workers earning 1-4 MWs; Mex$3.98 for workers earning 4-7 MWs; Mex$3.80 for workers earning 7-10 MWs; and Mex$3.62 for workers earning 10-15 MWs.

by up to 20 percentage points if it is maintained over a full working life. This ex ante–type matching scheme aims to increase the mandatory pension contributions of public sector workers.

In addition to these schemes, firms in Mexico can develop employer pension plans. Various types of matching contribution schemes encourage worker participation. These plans are registered at Consar. In 2010, more than 1,830 of these plans were operating, accounting for about 3 percent of GDP (Turner 2011). The plans may be defined benefit, defined contribution, or mixed, depending on the firm. More than half of all plans operate under schemes in which contributions are shared by employer and employee.

In 2006, Mexico proposed the Mechanism for Saving for Retirement Opportunities (*Mecanismo de Ahorro para el Retiro Oportunidades*—MAROP), as part of the *Oportunidades* human development program (*Secretaria de Desarrollo Social* 2006). Under the scheme, Mexicans between the ages of 30 and 69 who were participating in the *Oportunidades* program who saved Mex$20–Mex$50 a month would receive equal matching contributions from the state. Seven million people would have been eligible for the scheme. With savings of Mex$50 a month and an equal match from the state, savers would have received pensions of Mex$1,000 a month at age 70. In the end, the project was not approved, because of doubts regarding the consistency of including a saving objective for groups in the *Oportunidades* program, who lived in poverty.

2.3 Peru

In June 2008, Legislative Decree No. 1086 established the objective of promoting the competitiveness, formality, and development of micro- and small enterprises (known as the Spanish acronym MYPES, from micro and *pequeñas empresas* which are firms with up to 10 workers for microenterprises and between 11 and 100 workers for small enterprises).

One main component of the decree was to create a permanent regime for the support of MYPES. Registration requirements were made more flexible for firms with up to 100 workers and annual sales of no more than 1,700 tax units (*Unidad Impositiva Tributaria*), which in 2012 represents sales of S/. 6.2 million (around $2.3 million). Some 95 percent of all Peruvian companies fall within these limits, but most of them do not contribute to any pension scheme although it is mandatory. This behavior, common in high-level informal economies, has been explained by the lack of enforcement by the Peruvian state and the obvious income constraints of employees working in very low-productivity firms. Thus, the decree's objective was to introduce incentives for workers and firms to follow the law by directly reducing the cost of labor by giving wage complements of 50 percent (nonsalary payments) and a third of severance payments for each worker hired. A key aspect for implementing this component had been to define a different minimum wage for these enterprises by the National Employee Council. However, this never occurred, and the Ministry of Finance, which promoted this law, lost interest in implementing it (Carranza 2012).

A second interesting component of the decree was the introduction of the Welfare Pension System (*Sistema de Pensiones Sociales*) for workers and owners of microenterprises, which was never implemented. This component of the 1998 decree was taken up in the recent Private Pension Reform Law No. 29903 of July 2012.[14] The Welfare Pension System is now obligatory for workers in microenterprises who are less than 40 years old and voluntary for those who are older. The workers in these firms will contribute according to a graduated contribution rate (to be defined by regulation) of up to 4 percent of the legal minimum wage. The government will then match that contribution by giving a percentage of it (also to be defined by regulation) through a recognition bond to be redeemed when the worker reaches retirement. This matching is only provided to workers who receive less than 1.5 times the legal minimum wage. Workers can make additional contributions exceeding the matching limit, but those contributions will not be matched. For microenterprises, the formalization process has not gained momentum, for two reasons. First, the National Employment Council has not created a different minimum wage for microenterprises, a move that would allow for a more market-based approach. Second, no pension contributions have been collected by the Welfare Pension System, because the National Pension Office (*Oficina de Normalización Previsional*) has not been able to implement the operational system to manage individual contributions of independent workers.

14: Law No. 29903 takes into account various modifications of the private pension system, such as industrial organization, investment regime, corporate governance, and law enforcement, among others. The Welfare Pension System is one of the issues considered by this law.

2.4. Assessment of Matching Schemes in Colombia, Mexico, and Peru

Of the three countries analyzed in this chapter, only Colombia and Mexico have implemented matching schemes for pensions. The schemes in Colombia—the FGPM and the solidarity subaccount—have been aimed largely at increasing the savings of groups of contributors to the system who could end up ineligible for a minimum pension or receive a very limited benefit in old age. The financing source for the matching payments has been higher income savers, without any support from employers or the state in the case of Colombia. In Mexico, the target population is the same (low-density, low-income affiliates), but the funding of the more general schemes, such as the Social Contribution of the Retirement Savings System and the solidarity saving of ISSSTE comes from the state.

Participation in these programs was limited by two factors. First, fiscal resources for implementing more ambitious programs were scarce, because of the transition from the old public pay-as-you-go systems to the new funded private systems. Second, the matching programs implemented in Colombia and Mexico were designed for people who participated in mandatory schemes; they failed to take account of the high barriers to participating in the formal economy (Levy 2008). Where these costs are high, matching schemes are not enough to bring "outsiders" (informal workers) into the system.

More ambitious matching schemes have not succeeded in advancing beyond the planning stage, and some laws—including the MAROP in Mexico, the BEP scheme in Colombia, and the Welfare Pension System in Peru—have not been implemented. It is difficult to speculate as to whether these matching programs would have provided enough incentives to increase pension participation.

It is important to put in context the importance of MDC schemes in incentivizing pension participation. Given the very large size of the informal sector in these economies (almost 70 percent in Peru), it is difficult to imagine that a monetary incentive to contribute could solve a core structural socioeconomic problem. Bringing workers who are currently not covered by pension systems into the system requires creating incentives that really matter to them. Money (a matching program) could be an incentive, but other factors could provide "nudges" (Thaler and Sunstein 2009) to contribute. Countries such as China, Germany, and New Zealand achieved success by including other incentives, such as allowing partial withdrawals from pension savings in case of liquidity constraints or the financing of a first mortgage.

In developing a policy, perhaps the first step is to determine which workers in the informal sector are in the best position to save and to tailor a program for them. The next section examines this point.

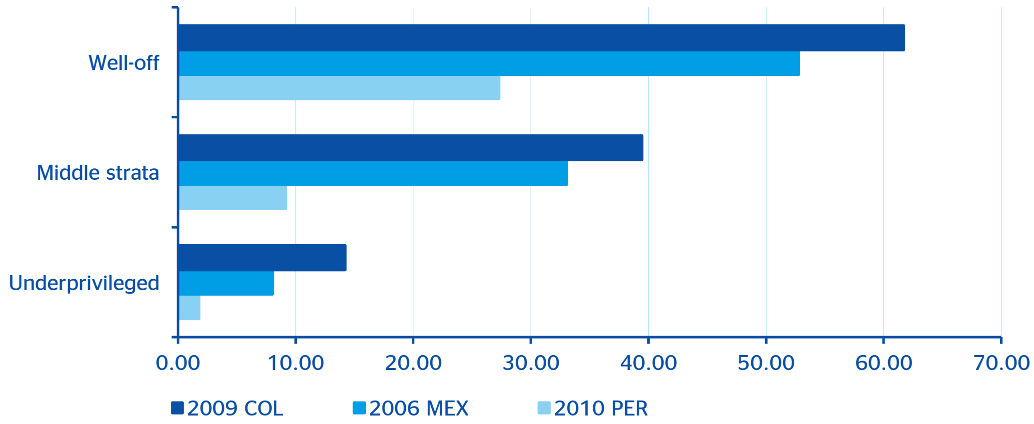
3. Focusing on the Middle Classes

Among the groups of workers with the greatest potential to respond to voluntary MDC style savings schemes are middle-income workers, defined as people with per capita income of 50–150 percent of the average.[15] These workers have some capacity to save, and many lack adequate pension coverage. According to household survey data, just 43 percent of workers age 14–64 in Colombia make pension contributions. This percentage is even lower in Mexico (37 percent) and Peru (17 percent).[16] These three countries have among the lowest coverage levels in Latin America (Rofman, Lucchetti, and Ourens 2008; Rofman and Oliveri 2012). The proportion of middle-income households that make regular pension contributions is 39 percent in Colombia, 33 percent in Mexico, and 9 percent in Peru (chart 4).

The low affiliation and contribution rates partly reflect informality, which is common among even among the urban middle class. Only a third of middle-income workers in Colombia and Mexico, and slightly more than 20 percent in Peru, are formally employed (defined as having a written employment contract) (chart 5).[17] The vast majority of middle-income workers in the three countries are dependent workers without a contract or independent workers, with about equal numbers employed in each group.

15: Empirical studies on poverty and income distribution often use half the average income as the poverty line. Middle-classes workers represent 41 percent of workers in Peru, 50 percent in Colombia, and 55 percent in Mexico.
16: The chart for Colombia (the number of contributors) comes from the 2009 Great Integrated Household Survey, which covered 13 cities. The chart for Mexico (number of affiliates receiving a wage) comes from the 2006 National Household Income and Expenditure Survey. The number for Peru (number of contributors who declared having made contributions during the year) comes from the 2010 National Household Survey. See Costa and others (2011) for a detailed description of the methodology and an analysis of pensions and informality in Bolivia, Brazil, Chile, and Mexico.
17: Using this criterion to define formality facilitates international comparisons, as it reflects a form of regulation that is common to Latin American countries: the obligation to formalize and register an employment relationship.

Chart 4
Pension coverage in Colombia, Mexico, and Peru, by household income level



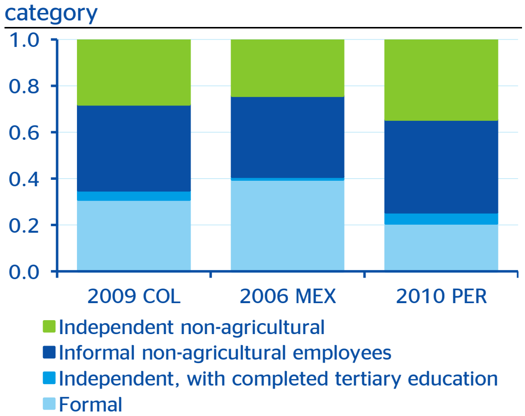
Note: Charts includes affiliates who are paid a wage (sueldo) in Mexico and contributors in Colombia and Peru
Source: Costa and others 2011 for Mexico; authors' calculations for Colombia and Peru, based on data from national household surveys

Informality not only implies significantly lower rates of affiliation and contribution, it can also have a regressive impact on the pension system. Inequality in Latin America has fallen somewhat since 2000, as a result of the increase in social expenditures, particularly conditional cash transfers programs, and a decline in the returns from education (López- Calva and Lustig 2010). But inequality still remains very high. In the absence of further pension reforms, the contributory social insurance systems will continue to be regressive, as (formal sector) workers with higher incomes are more likely to participate in the system (and by definition contribute at higher levels) than low- and middle-income workers in the informal sector.

Among the 33.3 million middle-class workers in Colombia, Mexico, and Peru, 19.8 million are informal (4.4 million in Colombia, 11.9 million in Mexico, and 3.5 million in Peru). Many workers alternate frequently between periods of employment and unemployment as well as between formal and informal employment. In Mexico, for example, the probability of remaining in the same employment situation between 2002 and 2005 was 63 percent for independently employed men (it was much lower among all types of workers analyzed) (Jütting and de Laiglesia 2009).

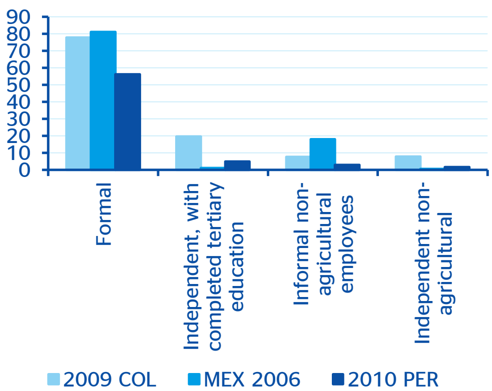
Among informal middle-income workers, independent workers who completed tertiary education have higher coverage rates than other informal workers (chart 10.6). These rates are still low, however: 20 percent in Colombia, 1 percent in Mexico, and 5 percent in Peru. They are far below those of formal workers in the same countries: 78 percent in Colombia, 81 percent in Mexico, and 56 percent in Peru. Except in Mexico, where the coverage rate of informal nonagricultural workers is 18 percent, informal workers rarely contribute to a pension system.

Chart 5
Nonagricultural middle-income workers in Colombia, Mexico, and Peru by employment category



Source: Costa and others 2011 for Mexico; authors' calculations based on national household surveys for Colombia and Peru

Chart 6
Pension coverage of middle-class nonagricultural workers in Colombia, Mexico, and Peru, by type of employment



Note: charts are for affiliates who are paid a wage (sueldo) in Mexico and contributors in Colombia and Peru. Charts for Mexico include only workers who also earned wages and should therefore be interpreted with caution
Source: Costa and others (2011) for Mexico; authors' calculations based on national household surveys for Colombia and Peru

Informal middle-income workers are therefore the group on which matching defined contributions could have the greatest impact. This group numbers about 19.8 million workers in these three countries. On average, the remuneration of these workers is similar to the minimum wage in Colombia and Peru and up to twice the minimum wage in Mexico. Their labor income alone places them significantly above the national poverty threshold, suggesting that they could respond positively to incentives for pension savings.

4. Conclusions

Although Colombia, Mexico, and Peru introduced major structural reforms in the mid-1990s, they still exhibit very limited levels of social protection coverage (28 percent of the labor force in Colombia, 27 percent in Mexico, and 22 percent in Peru). These charts reflect the limited effectiveness of basing a pension scheme on withholding of contributions by employers in environments in which most employment relations are informal.

A high level of labor informality in the region is the result of various factors, including weak institutions; excessive regulation; rigid and complex employment legislation; the combination of minimum wages, relatively high employment benefits, and low labor productivity; imperfect land and water markets; the still recent history of high macroeconomic volatility; and incentives to informality, whether explicit (such as public purchase programs, special tax regimes, subsidies, or programs to write off the debt of small farmers) or implicit (exemption from employment, tax, and building inspections). This combination of factors has had several worrisome consequences. It has led to a two-tier firm structure, made up of a large number of very small companies, which employ workers with low productivity, and a small number of very large companies, which employ workers with high productivity. It has also incentivized small companies to maintain informal relations with their workers, because low labor productivity does not allow them to pay the minimum wage and provide benefits. It has made it more difficult for large companies to compete with informal enterprises (services, retail trade). As some employment legislation allows formal hiring temporarily without benefits (for example, the law promoting nontraditional exports in Peru), employers tend to choose this method of employment relation, reinforcing the low level of coverage of social security and the lack of employer investment in training employees.

Addressing the lack of social protection cannot rely solely on the formalization process, which will be gradual. Several programs in the three countries aim to support savings for old-age income through ex post or ex ante incentives and subsidies. Ex post policies provide direct subsidies when benefits are calculated on the basis of the value of savings accounts at retirement or establish a noncontributory pension for people who reach the retirement age without having participated in a pension system. Rather than attempt to provide universal coverage, these kinds of programs could target specific groups. Implementation of ex post schemes should take account of their fiscal effects, the distortions they could generate in assigning resources, and the disincentives to saving that could result for groups that are currently saving or who have the potential to do so.

Ex ante schemes provide a preferable alternative, not only because they reduce distortions and are more manageable from the fiscal point of view but also because they address the basic problem of limited participation and long-term savings within the pension system. In order to design an adequate reform, it is important to identify the limitations of the existing mandatory schemes, study the level and types of informality, and take into account the inherent economic conditions potential savers face. These conditions include low productivity, high exposure to economic shocks, difficulty in accumulating a continuous employment history, the need to cover basic shorter-term demands (for housing, education, and health services), and others.

MDC schemes could be appropriate for some workers who are not currently making contributions to the pension system, provided that the monetary transfer by the state is sufficiently attractive to encourage saving. An MDC scheme could be of significant value if it includes certain features, such as allowing funds to be withdrawn to purchase a first home, access health services, or weather negative shocks to short-term income.

Colombia, Mexico, and Peru have very limited experience with matching-type schemes, which have focused mainly on increasing the savings of groups of workers who are already participating in some part of the pension system. These schemes do not seem attractive enough to people who are not contributing or are not even affiliated.

Future reform efforts should target groups that have the capacity to save and might respond to government incentives. The emerging middle class, among whom pension coverage remains very low, is beginning to show some capacity for saving. The nearly 20 million informal middle-income workers in Colombia, Mexico, and Peru could well benefit from MDC schemes.

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