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Socially inclusive and financially sustainable pension reforms

Pension re-reforms in the Americas hemisphere: A preliminary comparative perspective

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An increasing number of workers do not have regular jobs and cannot contribute to social security on a regular basis. In Latin American countries (LAC) the precariousness of occupation, a traditional problem, was combined after the 1980's with unprecedented levels of unemployment.¹ Alternatively, in countries with higher GDP per capita like Canada, and especially the USA, rising unemployment was not a problem until 2008, but precariousness seems to represent, more and more, a challenge.

The 1990's represented an age of pension and labour market reforms in order to stimulate savings and market friendly policy measures. Nevertheless, the results do not seem to match their goals since economic performance was modest, and social security coverage remains limited in LACs. Conversely, institutions of countries with integrated and complex economies like the USA, Canada and Brazil reject this kind of solution as a way to organize the core services delivered by public social security institutions.

Recent studies point out that social policy based on universality and focused on tax-financed pension are essential to avoid social exclusion and poverty.

1. Paradigmatic reforms

1.1. Major changes, poor results

Countries that build social security institutions to protect their families face unresolved challenges. Situation may vary, but it is possible to conclude that demands towards those services are high and the contributive capacity of the average worker is weak. Periods characterized by poor economic performance tend to generate major financial problems for pension systems. This kind of period stimulates the demand for benefits and does not generate higher levels of contribution in a situation of economic slowdown. Among countries with poor institutional traditions, this scenario could easily generate bankruptcies and may be

¹ This paper is not dedicated to study the effect of exogenous factors from pension systems in their performance. This subject was analyzed in detail by Uthoff (2002), ECLAC (2006); IEG (2006) Matijascic and Kay (2006); and Matijascic, Ospina and Kay (2007).

confronted with insolvency of pension plans, regardless if they are funded or not. In such a situation political interference is unavoidable.

Although the former description might be widely accepted by most experts, policy proposals are far from achieving a consensus. Those who supported policies inspired by the Washington Consensus believe that the key problem was the structure of traditional pension systems, since they stimulated opportunistic behaviour by the insured and did not generate sufficient incentives to enhance the relation between the replacement rate benefits based on the total amount of contributions.

According to the Washington Consensus point of view, generous promises for benefits created heavy fiscal burdens for the future. This vicious cycle could be halted by paradigmatic reforms based on market incentives to contribute on a regular basis.² Those arguments sustained pension reform based on fully funded individual retirement accounts. They could benefit from the accumulation of assets and reduction of government fiscal commitment since those schemes were not based on solidarity as pay-as-you-go (PAYG) ones.

There is not a unique approach for paradigmatic reforms. There are several types as stated by International Federation of Pension Funds Administrators (FIAP) (2010):

- single system – membership of the system is mandatory. Funds are managed by private agencies supervised by a government agency. This system completely replaces the existing PAYG system;
- integrated mixed system – the individually funded system coexists with the PAYG system; and
- mixed in competition system – the individually funded and PAYG systems compete.

Table 1 presents LAC pension systems according to their type, year of paradigmatic reform and population who were included or excluded from those reformed systems.

Table 1. Paradigmatic reforms in LAC – Basic characteristics

Country	Year	Type	Social assistance	Population
Chile	1981	Single	Means tested	Excludes military and police
Peru	1993	Competition	None	Excludes military and police
Argentina	1994	Integrated	Means tested	Excludes military and police
Colombia	1994	Competition	Minimum benefit	Private sector
Uruguay	1995	Integrated	Means tested	Private sector
Bolivia	1997	Single	Means tested	All
México	1997	Single	None	Excludes survivor and disability
El Salvador	1998	Single	Minimum benefit	Population born before 1962
Costa Rica	2000	Integrated	Universal	Excludes public servants
Dominican Republic	2003	Single	Universal	No restrictions

Source: FIAP.

The profile of paradigmatic pension reforms is not uniform. Approaches were different according to country singularities and characteristic political processes to produce a reform. However, Chilean influence was decisive and most arguments to make the case of the reform were quasi-identical among LAC.

² Pension reforms were classified by many studies. The taxonomy adopted for our purposes utilized Pierson and Myles (2000). Most studies characterize them as structural reforms rather than paradigmatic as Mesa-Lago (2004).

1.2. Some basic outcomes so far

The outcomes of the process should be evaluated according to initial expectations of reformers. To understand how pensions have evolved and how their outcomes have changed as a result of reforms over the last two decades, it is necessary to observe how coverage evolved. Reformers made a strong case for paradigmatic reform as an option to create a more solid link between contributions and benefits to stimulate the regularity of contributive effort. As shown by table 2, non-coverage remained high and did not overcome historical paths.

Table 2. Contributor's coverage as percentage of EAP (economically active population) for selected years

Country	Initial coverage		Final coverage 2006 – %
	Year	%	
Argentina	1992	46.8	39.2
Bolivia	1999	13.8	12.5
Chile	1990	62.2	62.7
Colombia	1996	25.3	31.7
Costa Rica	1990	66.9	62.7
Ecuador	1990	39.4	26.2
Mexico	1998	34.3	35.9
Panama	-	-	45.0
Peru	1999	10.8	14.0
Uruguay	1991	58.0	60.9

Source: National household surveys. Rofmann, Luccheti and Ourens (2007).

When the analysis focuses the beneficiaries, the conclusion is similar. Coverage did not increase in most countries and non-coverage remains an issue (Table 3).

Table 3. Beneficiaries as percentage of the aged 65 years or more in selected years

Country	Initial coverage		Final coverage 2006 – %
	Year	%	
Argentina	1992	78.1	70.5
Bolivia	1992	38.1	18.0
Chile	1990	73.0	61.7
Colombia	1992	20.0	25.1
Costa Rica	1992	25.6	41.3
Ecuador	1990	18.6	17.5
Mexico	1992	16.7	23.3
Panama	1991	35.6	41.7
Peru	1998	29.9	27.7
Uruguay	1991	88.1	85.6

Source: National household surveys. Rofmann, Luccheti and Ourens (2007).

One of the primary motivations for paradigmatic reform was to improve efficiency and reduce costs. However, competition has been limited, as most pension fund markets have become oligopolies. Pension funds have generally not competed on price.

The brokerage firm CB Capitales calculated that when commission charges are taken into consideration in Chile, the real average annual return on worker contributions between 1982

and 1999 was 5.1 per cent — not 11 per cent as calculated by the Superintendence of pension funds - because the official figures only calculated returns before commission and insurance charges. The report found that the average worker would have done better, earning a real average return of 7.2 per cent, simply by placing their pension fund contributions in a savings account. (Matijascic and Kay, 2006).

Arza (2008, pg. 2704-5), using pension individual's account data from Argentina shows that yearly average real rates of return from 1994 until 2007 were equivalent to 1.4 per cent when administrative costs and fees were deducted. If the deduction considers only administrative costs, the rate of return would be 4 per cent, that is, inferior to the presumed rate of return of the PAYG scheme of 4.6 per cent. The nominal interest rate of a fixed-term deposit of 60 days or over has been higher than the pension fund nominal return (net of administrative fee) for the period 1994–2006 (10.4 per cent compared to 8.4 per cent in private pension funds).

In sum, paradigmatic reforms did not achieve their goals and the public debate evolved to focus on alternative reforms.

2. Parametric reforms

The alternative approach for pension reform was the parametric one, based on the maintenance of all basic features of traditional pension schemes and adapting legislation in order to tighten eligibility conditions, increasing the contribution efforts or reducing the replacement rates of benefits. Usually a combination of those policies takes place in order to face financial and coverage problems. Reformers considered this soft approach as a realistic solution since transition costs are nonexistent and solidarity, in many cases, remains a social value for most societies.

Parametric initiatives as eligibility or benefit formulae are also inherent to paradigmatic reforms initiatives, while these changes are necessary to adapt them to the evolution of exogenous facts such as demographic changes, macroeconomic oscillations and labour market realities. In that sense, those who pioneered paradigmatic reforms as per Chile and Argentina adopted parametric measures in their recent reforms. Other countries such as Costa Rica, Panama and Ecuador also introduced major parametric changes.³

Chart 1 provides some basic and very synthetic information based on major reforms for countries in the Americas and the Caribbean. It is important to highlight that the chart excludes countries that deserve closer attention further in the paper and others that did not present major pension reforms or were without available data.

³ Information according to SSA International Update, various issues, see references.

Chart 1. Fundamental changes in the parameters of the very last major pension reform in selected countries in the American hemisphere and the Caribbean

Country	Year	Type	Management	Eligibility	Age limit	Contribution	Formula	Benefits
Bahamas	1999	Parametric		Postpone				
Barbados	2006	Parametric			Flexibilization	Raised 4 pp	Stimulate contribution	
Belize	2003	Parametric	Combat fraud					
British Islands	2001	Parametric				Raise maximum insurable		Enhance access
Canada	1998	Parametric	Reorganize attributions with Provinces	Raised from 3 to 5 years			Increased to last 5 years	Limit survivorship
Cayman Islands	2003	Parametric	Centralization					
Colombia	2007	Paradigmatic	Disclosure an competition		Raised from 60 to 62	Provident fund (high earnings)		Minimum benefit
Cuba	2009	Parametric			Raised from 60 to 65		From 15 to 30 years	Stimulates retirement postponement
Dominican Republic	2001	Paradigmatic	Mandatory pension plans – disclosure			Tax exempted		Tax exempted
El Salvador	2007	Paradigmatic	Maximum Fee of 1.5% of income			Reduces 0.3 pp employees share		
Jamaica	2003	Parametric	Regulation and disclosure					Defined contribution (private schemes)
Mexico	2008	Paradigmatic	Regulation – inhibit transfers					
Peru	2003	Paradigmatic						From DB to DC
Puerto Rico	1997	Paradigmatic						
Suriname	1999	New scheme				60 and older poor or civil servant		

Source: ISSA – International Social Security Administration.

Based on chart 1 it is possible to confirm that recent years could be characterized as a period of intense reforms in most pension systems. It is interesting to underline that most paradigmatic reforms focused on management, since institutional framework and regulatory capacities were scarce in most countries that followed that path. This is not to say that other countries did not face problems, but it shows that many of the promises of paradigmatic reforms could not be addressed in those economic and social conditions.

Moreover, countries that were not focused on here like Venezuela or Paraguay also promoted changes, but those reforms were not major reforms and tended to be geared toward incremental issues. It is possible that after a long period, those approaches could represent a new framework. Nevertheless, according to ISSA's definitions, institutional, managerial or administrative changes are always characterized as major reforms. After showing the methodological approach, it is time to present specific examples.

The reforms of Costa Rica's system to ensure actuarial viability in 2005 consisted of:

- raising the combined contribution rate from employees, employers, and the government from 7.5 per cent of earnings to 10.5 per cent over a 30-year period;
- changing the basis for calculating the benefit from 48 monthly contributions to average earnings over the last 20 years, adjusted for inflation;
- increasing the number of monthly contributions from 240 to 300 months for eligibility; and
- establishing a separate disability benefit—50 per cent of the full benefit—for workers aged 48 and older with at least 5 years of contributions. Previously, 10 years of contributions were required.

The main provisions of Law 51 of Panama from mid 2005 to equilibrate financial imbalances of social security were:

- The retirement age for men will remain at 62 and for women at age 57; workers could retire up to 2 years earlier with a reduced pension;
- number of monthly contributions to become eligible for a pension will increase from 180 to 240 between 2007 and 2013;
- the contribution rates for old-age, survivors, and disability programs will rise between 2008 and 2013 from 6.75 per cent to 9.25 per cent for employees and from 2.75 per cent to 4.25 per cent for employers;
- workers who choose to have an individual account will have their contributions split between two pillars: contributions on earnings up to 500 per month will go to the first pillar, based on PAYG schemes and public management and those over 500 may opt to redirect this related income to individual account;
- individual account benefits will be paid as programmed withdrawals calculated to guarantee income according to the worker's expected lifespan. Workers with low account balances will receive a lump-sum distribution; and
- between 2007 and 2060, the government will contribute 7.2 billion to help reduce the system's deficit.

In March 2009, Ecuador's National Assembly passed a number of amendments to its Social Security Law, which became effective as of April 1 of that year. Ecuadorian authorities focused on changes to enhance the value of benefits and preserve better life conditions, especially among the elderly. Specifically, the key changes aimed to:

- Introduce adjustments of benefits according to inflation over the previous 12 months;
- set up a monthly minimum pension equal to the national minimum wage for workers with 40 years of contributions. For workers with fewer years of contributions, the benefit is a percentage, ranging from 50 per cent of the potential integral benefit;
- establish an income test for workers who collect a pension and remain in the labour force. Those who earn less than 770 per month receive a full pension. For any earnings above 770 per month, the pension is reduced by 40 per cent. Once the worker completely retires, the full pension is restored;
- allow workers to transfer their home mortgages from a domestic financial institution to the Social Security Institute (IESS).

In sum, most parametric reforms were concerned about improving pension systems in order to keep actuarial requirements closer to a balanced situation or to adopt measures to ensure protection of benefits and their value. The limit, usually, is that those reforms do not deal with low densities of contribution due to informality, precariousness of labour markets and poverty.

3. Re-reforms: facing traditional challenges?

Many countries that adopted paradigmatic reforms are facing severe problems. Based on this picture many countries stopped a paradigmatic reform proposal process in order to try and avoid the problems observed in countries like Argentina and Chile.

In the aftermath of the Argentine pension collapse, for example, Nicaragua decided to postpone its long-planned pension savings account program. In July 2004 after it was deemed socially and financially unsustainable by Ministry of Economy, which said that the reform would have generated a deficit of 458 million from 2005 through 2009. Montiel argued that only one in seven workers would have benefited from the new system. Privatizing the social security system had originally been one of the conditions that Nicaragua had agreed upon in 2000 in its effort to enter the IMF's Heavily Indebted Poor Country programme. The World Bank had contributed 8 million toward the pension reform, while the Inter-American Development Bank had agreed to contribute 10 million, which it later withdrew due to doubts about its fiscal viability. Since 2005, Nicaragua decided not to follow the paradigmatic reform path. In 2010 it is clear that reforms introduced in Nicaragua are very modest, since in the end of 2009 the government decided to raise the payroll tax for employers by 1 per cent. (Matijascic and Kay, 2006).

In the USA, it was proposed in 2005 to introduce a paradigmatic reform. The basic idea was to divide the pension system into two tiers and redirect 4 per cent of payroll to an individual account with funds invested not only in public debt but also in other kinds of financial assets, such as equities and other private bonds. It was assumed that this option could avoid an actuarial deficit in the future and even generate a surplus due to higher rates of return. Additionally, the advocates of the proposal endorsed the idea that such a system could have reduced management fees and deliver excellent results.

Those who did not endorse the proposal suggested that there was no actuarial problem and projections were systematically conservative and catastrophic in their conclusions. According to the advocates of social security, the actuarial situation was sound. Moreover, funding a portion of contributions could generate risks by driving funds to financial markets and creating potential bubbles that could endanger the funds of American workers. The outcome of this debate was a rejection of the proposal by the American Congress.

In Bolivia, President Evo Morales presented a pension reform bill to Parliament at the end of July 2009 that overhauls the current individual accounts system established in 1997. The proposed law establishes a guaranteed minimum pension for workers aged 60 or older with at least 10 years of contributions. The proposal includes provisions to:

- lower the normal retirement age from 65 to 60;
- transfer pension fund management from the two existing private companies to a new government agency (workers would continue to pay 0.5 per cent of earnings to cover administration costs);
- require employers to contribute between 1 per cent and 1.5 per cent of their employees' salaries (currently, employers do not contribute to employees' individual accounts);
- finance the solidarity fund - which supplements the pensions for low earners—with an additional 1 per cent of earnings contributions from workers earning more than 20 times the monthly minimum wage (currently BOB11,550 or USD1,677) and an additional 10 per cent for those earning more than 60 times the monthly minimum wage (currently BOB34,650 or USD5,031); and
- allow retirement at any age if a worker's individual account would yield a pension equal to at least 60 per cent of the worker's average salary over the previous 5 years (current law requires 70 per cent).

Uruguay implemented most provisions of a new flexible retirement law in March 2009, therefore providing more workers access to a public pension. Specifically, the key changes:

- Allow workers aged 65 with 25 years of service to receive an advanced age pension. Workers over age 65 need fewer years of service; for example, workers aged 66 need 23 years and workers aged 70 need 15 years. Previously, an advanced age pension was provided only to workers aged 70 with 15 years of service.
- Modify the benefit formula for the advanced age pension to 50 per cent of the average of a worker's last three years of wages plus 1 per cent for each additional year, up to a maximum of 14 per cent. The old formula was based on the highest of average earnings over the last 10 or 20 years.
- Provide women with one year of credit toward their retirement for each child (natural or adopted), up to a maximum of five. This measure will increase women's pensions because they generally spend more time raising children and often have shorter work histories than men.
- Eliminate the requirement for a disability benefit of 6 months of service immediately prior to the onset of a disability. Workers aged 26 or older still need 2 years of service while those under age 26 need 6 months.
- Create a special unemployment benefit for workers aged 58 or older with at least 28 years of service who have been unemployed for at least one year. The benefit is equal to 40 per cent of the worker's average earnings in the 6 months prior to becoming unemployed and ceases when the worker becomes eligible for a retirement benefit.
- After July 1 the number of years required for an old-age benefit was reduced from 35 to 30. The minimum retirement age will remain at age 60.

The institutional changes that have been implemented in Chile since 2008 deserve special attention. These changes involve the following measures:

- On July, 2008, the Chilean government introduced the Solidarity Pension System. This new first pillar expands coverage and provides both a non-contributory and a top-up benefit. The PBS (*pensión básica solidaria*) is a means-tested benefit paid to those individuals aged 65 or older who are not eligible for any other pension. The PBS

- initially covers 40 per cent of the poorest individuals in Chile; coverage will be extended gradually so that by 2012 60 per cent will be covered;
- a top-up (old-age and disability) benefit (APS) (*aporte previsional solidario*) is paid to those individuals who have contributed to an individual account and whose self-financed monthly benefit in 2008 is between CLP50,000 (101) and CLP150,000 (302). The benefit will be gradually increased through 2012; and
 - beginning October 2008, Chilean employers may offer voluntary pension savings plans, (APVC), as a supplement to their mandatory individual accounts. Tax incentives for other types of voluntary retirement savings accounts are geared toward higher income workers.

The Argentine Congress passed a law on November 2008 that eliminates the current system of individual retirement accounts and transfers the assets to a PAYG Integrated Argentine Social Security System – (SIPA). SIPA also incorporates the preexisting PAYG earnings-related program. Moreover, since 2007 government reforms:

- raised accrual rate from 0.85 per cent of base salary per year to 1.5 per cent;
- authorized early retirement (PAYG pension continue to have no automatic indexation);
- established that new workers are enrolled by default into the PAYG scheme and not in an AFJP (*Administradora de Fondos de Jubilaciones y Pensiones*) as before, unless affiliates explicitly wanted to join one;
- eliminated the role of insurance companies to provide disability and survivor pensions and from AFJP to collect those contributions; and
- established that individual contributions for AFJP administrative costs should be 1 per cent of taxable income at the most.

It is too premature to evaluate if the number of contributors or beneficiaries rose. However, positive effects on benefit coverage, poverty and welfare are predictable. This is because in most countries there was an increase in the benefit value and because higher subsidies have been focused on those affiliated with reduced income and high job turn-over. This is especially true for formal and informal labour markets.

Nevertheless, many of the provisions focused on tightening eligibility conditions by raising the number of contributions required increasing income by raising the payroll taxes. Those measures certainly create extra barriers since the labour markets in the region are precarious and income is quite low.

Brazil provides something of a showcase example, since its figures are very close to the typical LAC's ones. All benefits granted for workers belonging to families with income deprivation (BPC) and rural individuals working in family basis farms represent an important proportion of social security workers eligible to pension, as shown by table 4.

Table 4. Long term distribution as a percentage of benefits paid by the private sector pension regime in Brazil – 1980-2006

Benefit	1980-84	1985-89	1990-94	1995-99	2000-04	2005-06
Length of contribution	13.1	11.5	14.6	23.0	10.3	13.4
Age (urban)	7.1	10.9	10.0	7.9	10.2	7.0
Age (rural)	19.8	17.5	38.2	16.3	21.8	11.5
Disability	20.6	17.3	8.6	10.8	13.4	19.6
Survivors	25.8	30.0	22.5	22.5	23.4	26.9
BPC – Assistencial old-age	6.5	6.7	2.7	5.7	11.8	10.8
BPC – Assistencial disability	7.2	6.1	3.5	13.8	9.2	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Social Insurance. Yearbook and monthly bulletins

Based on the figures in table 4, more than 33.1 per cent of all benefit entitlements were granted for those who were unable to make at least 13 years of contributions (adding rural and BPC pensions). From 2000 to 2004, those benefits represented more than 40 per cent of all entitlements. Additionally, in 2005-06, only 13.4 per cent of benefits were paid for those who had continuous contribution records (length of contribution). Benefits granted by age also reflect problems with the life cycle of workers since they require records equivalent to 13 years, which is insufficient to guarantee the individual sustainability in terms of income. In other words, those difficulties should represent a higher fiscal burden.

The problem involved with low densities of contribution (the number of contributions within a predetermined period) illustrated with Brazilian figures was similar among other countries in the region. All those data presented to measure the coverage reflect the same problem. Arza (2008 p. 2701) argues that only 8 per cent of pension affiliates in Argentina will be able to contribute regularly during 30 years. Even Chile admitted recently, on the *Consejo* (2006) that more than 60 per cent of the elderly would not be eligible to a minimum pension since their contributions were inferior by as much as 20 years. Additionally for many of those who contributed for 20 years, the individual fund would be insufficient to pay the floor benefit. Table 5 illustrates the Chilean scenario.

Table 5. Average density of contribution in Chile – 2002

Indicators	Contributors		Affiliated	
	Man	Women	Men	Women
Mean contributive months per year	7,0	7,3	5,3	4,5
Mean contributive months at retirement	321,5	298,8	241,6	186,1
Replacement rate before taxes (%)	56	39	40	23

Source: Labour Ministry of Chile. CENDA (2004).

Table 6 also illustrates these phenomena for Argentina including information for various workers of private sector according to their age.

Table 6. Average density of contribution for Argentinean private sector workers according to age and gender – percentage

Years old	Men		Women	
	1994	2001	1994	2001
25	8.1	44.5	5.3	41.5
35	49.5	48.9	49.2	44.0
45	57.5	47.4	57.0	46.7
55	63.1	42.1	65.6	47.8
65	61.6	29.4	76.2	23.2
Total	54.0	39.6	57.8	37.5

Source: DNPSS – National Department of Social Security. Bertranou and Sanchez (2003 pg. 24-25).

According to table 7 the average density of contribution is not only reduced, due to the high levels of informality and precariousness of labour markets that prevailed during 1980's and 1990's in Argentina. Although the situation in Argentina was particularly troubled, those trends seem to be valid for most countries in the region and this scenario requires alternative proposals to deal with social protection. Clearly, market friendly solutions and classical Bismarckian models present limits to deal with those challenges.

In sum, neither the paradigmatic nor the parametric approach of social security reform lead to a system with higher coverage, as shown by Matijascic and Kay (2006). The problem was the assumption based on a profile of a labour market dominated by salaried work and long lasting labour contracts. The pragmatic solutions were developed in societies that privileged systems based on the tax-financed universal approach, since they reduced deprivation in family's income.

4. Tax financed pension programs in Latin American countries

LAC pension programs were usually inspired by a peculiar interpretation of the classical Bismarckian model. Since labour markets were always precarious, problems of non-coverage and deprivation among the elderly or disabled were recurrent. Many countries introduced innovations to deal with this issue and results are encouraging if focused on poverty alleviation or eradication. Based on Bertranou, Ginneken and Solorio (2004), some of those programs will be presented below.

The Argentinean Non-Contributory Programme (NCP) has evolved, awarding various types of benefit for different categories: social assistance pensions; veterans; and other pensions awarded by special legislation. These programs developed in a fragmented way within the national government but also within other levels of government. The average benefit stood at ARS 153, equivalent to 57 per cent of the average contributory pension.

For Brazil it is easier to describe the system based on data presented in chart 2. Moreover it is important to insist that those benefits are financed by the Social Security Budget, as determined by the current constitution, and encompasses taxes based on payroll, added value taxes and company profits.

Chart 2. Eligibility for non-contributive benefits

Benefit	Eligibility	Length of contribution	Replacement rate
Retirement for rural familiar farms	Age 60 for men and 55 for women and/or disabled	Insured on a regular basis	One minimum monthly wage
Aid to the aged or disabled (BPC)	Age 65 and/or disabled living in households with per capita revenues inferior to 25% of the minimum wage	Not required	One monthly minimum wage

Source: Laws 8.112/90 and 8.213/91.

The tax-financed pillar of the Chilean system, (PASIS), extended social security coverage to low-income earners. However, the program still faces a waiting list. Targeting improved which can be explained not only by the improvement in the instrument used to identify the potential beneficiaries but also by better control, particularly the municipal level of government. Recent reforms described in the previous section should improve a lot the performance when related to the efficacy.

The Non-contributory Basic Benefit Pension Scheme (RNC), administered by the Social Insurance Fund of Costa Rica, provides economic assistance to citizens who are unable to carry out remunerated employment and are not protected by any of the existing pension schemes. Benefits consist of cash benefits and other social benefits. The latter include membership of the health insurance, participation in training, recreation and other social programs. General tax revenues, employers' contributions and taxes on specific items of products finance RNC.

According to Bertranou, Ginneken and Solorio (2004) these programs presented very important effects to alleviate or reduce poverty as shown by table 7.

Table 7. Effectiveness of tax-financed and social assistance pensions (TFPs) in reducing the incidence of poverty, 1990-2000 (%)

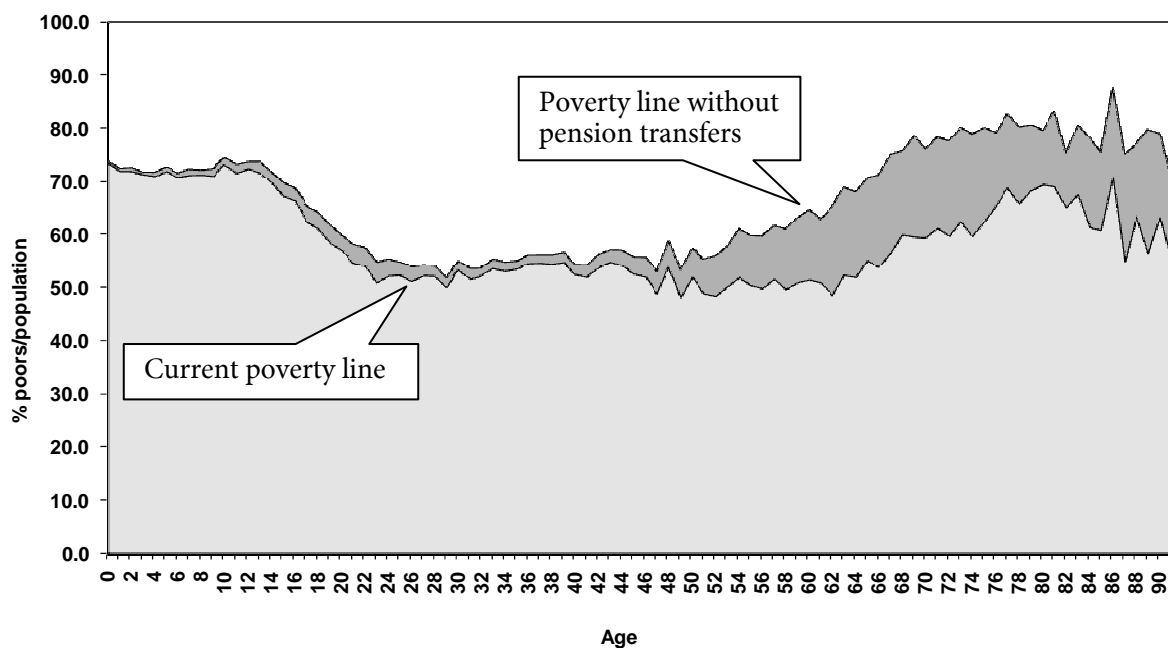
Country	Extreme poverty		Poverty				
	With	Without	Reduction		With	Without	Reduction
Argentina	10.0	30.4	67.1		39.1	56.5	30.8
Brazil	1.2	26.6	95.5		4.6	6.5	29.2
Costa Rica	32.0	40.7	21.4		18.7	24.7	24.3
Chile 1990	32.0	40.7	21.4		18.7	24.7	24.3
Chile 2000	3.7	12.0	69.0		13.0	16.1	18.7

Source: Bertranou, Ginneken and Solorio (2004) based on national data.

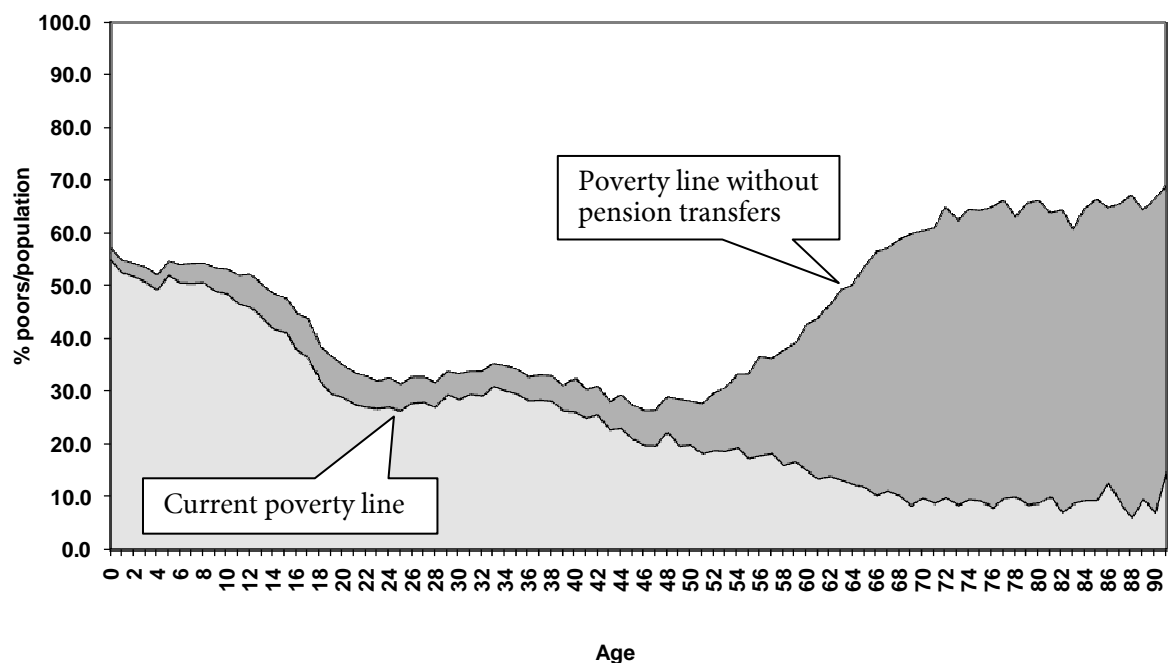
In Brazil, the rise in coverage was driven by new institutional arrangements that permitted many of the working population excluded from the condition of regular contributor to become a pensioner regardless of that requirement. The social pension granted to rural workers and those belonging to deprived families in their old age or disability conditions reduced poverty among individuals, especially among the elderly population in Brazil (Delgado and Cardoso, 2000). Graphs 1 and 2 present those figures for 1998 and 2008⁴.

⁴ The poverty line considered to address this issue uses the Brazilian national poverty line that represents all income below ¼ of the minimum salary per capita (equivalent to USD2.03 or USD5.08 in PPP method a day) which is far above the MDG – Millennium Development targets for 2015.

Graph 1. *Poverty as a percentage of the age cohort before and after paying pension, 1998*



Graph 2. *Poverty as a percentage of the age cohort before and after paying pension, 2008*



Source: IPEA.

Other experiences deserve attention. In Mexico, the *Oportunidades* Program, that has existed since 1997 (it was called *Progresa* before 2002), does not present figures related to poverty as

shown in table 7, but the outcomes in healthcare, nutrition, school attendance. Some figures might clarify its impact:

- anaemia was reduced from 55 to 44 per cent among the poorest in rural areas;
- cognitive motor abilities of children were improved by 15 per cent;
- maternal mortality was reduced by 25 per cent.
- Progesa covered 300,000 inhabitants in 1997 and 5 million in 2008; and
- scholarship recipients represented 1.9 million in 1998 and 5.2 million in 2008.

Finally, as shown partially in preceding sections, Bolivia substituted *Bonosol*, a program created in 1997 to cover elderly of 65 years or more on a universal basis by the *Renda Dignidad* in may 2008 targeted to those who are 60 years and older and that have contributed for ten years or more. The benefit was equivalent to 96 US dollars.

In sum, social security programs based on tax-financed resources are growing rapidly as shown by ISSA (2009). This approach has a major potential since it deals successfully with persistent informality, labour market precariousness and social heterogeneity by reducing poverty based on fiscal transfers. Targeted cash transfers present encouraging performance, but universal programs seems to be even more effective, when the Brazilian experience is considered as a showcase.

5. Global crisis, opportunities and challenges

As shown by Barr (2007) it was very easy for the supporters of paradigmatic reforms to compare theoretical pension systems models to the universal ones. Many of the problems inherent to institutional framework and managerial capacities only show up after those reforms are undertaken. Many of the problems in pension systems were related to simple dualities universal versus individual models, funded versus unfunded schemes or public versus private management. Usually, historical problems subsist after major reforms if not addressed conveniently. Pure technical solutions cannot overcome social obstacles. While financing, management and benefit coverage should not be neglected, it is important to recognize that most problems are related to labour, the economy and market structures.

It is not possible to rely only on contributory or earnings related schemes in countries that present decades of precarious employment and high levels of informality. To overcome those limits, as shown by McKinnon (2007), social security schemes must involve fiscal transfers to avoid or reduce poverty and non-coverage. This is not to say that earning related schemes should be neglected. Those who can contribute on a regular basis should do it in a compulsory way since universal pensions pay reduced benefits and usually cannot guarantee the wellbeing of individual after retirement.

Moreover, the integration of PAYG or individual accounts in multipillar (or multi-tier) models provides a more comprehensive protection as shown by Pino and Karasyov (2007) and is better adapted to the unpredictable incomes of most individuals.

Ageing and precarious employment also requires dynamic social security systems adapted to those circumstances. Unemployment may require agencies to deal with retraining or extending the working age. In addition, part time jobs added to partial pension can reduce financial pressure on social security as well as respect work capacities of the elderly. Sigg and De-Luigi (2007) and Laroque (2007) provide excellent analysis of those challenges. Moreover, some reforms as those undertaken by some LAC countries may inspire future reformers elsewhere.

Global Crisis, as shown by ISSA (2009) is an age of challenges and opportunities. Challenges are related to the rising demand for benefits in a situation when the financial capacity to collect contributions is reduced due to the poor economic performance that has induced a reduction in the total sum of salaries and to rising unemployment. During the crisis, social security provides income replacement to most of those who cannot find a job and reduces problems that induced the despair synonymous with the great depression of the 1930's. Social security showed its social importance by moderating the effects of the crisis. The challenges are related to the capacity to adapt institutions, sponsor social pacts and increase income distribution in an age of deep changes and significant uncertainty. Social security must be dynamic.

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