Conferencia Interamericana de Seguridad Social

Centro Interamericano de Estudios de Seguridad Social

VOL. 1 NUM. 1 SECOND SEMESTER 2005

Well-being and Social Policy

UNIVERSIDAD IBEROAMERICANA
CIUDAD DE MÉXICO

WELL-BEING AND SOCIAL POLICY
VOL 1, NUM. 1, pp. 95-110

THE POLITICAL ECONOMY OF SOCIAL SECURITY REFORMS IN THE AMERICAS

Eduardo Rodríguez-Oreggia
Research Institute on Sustainable Development and Social Equity,
Universidad Iberoamericana
eduardo.rodriguez@uia.mx

Abstract

This paper analyses the factors affecting the decision to apply a reform (parametric and structural) in the Americas, which may hold a specific set of conditions, i.e. a sui generis political system and a high degree of economic openness, among others. Economic freedom is relevant in the case of structural reforms, while results for the share of older population are not conclusive. It may be that governments seek efficiency, while older members of society still do not have the channels to effectively influence policies and also those benefited by the social security are the few.

Key words: social protection, pensions, aging, labor market, Latin America.
Classification: I30, G53, J18, D72.

Introduction

The social security systems all around the world are facing hard times and action is needed in order to ensure the sustainability of such institutions. However, as James and Brooks (2001) have pointed, several possible policies that are economically sound have been discarded for political reasons, leading to make considerations on the political economy of social security reforms.

The Americas offer fertile ground for the analysis of the political economy of social security reforms as they have a mixture of governments ranging widely in terms of democracy and economic liberalization, not to mention macroeconomic performance. But mainly what they share is the most varied experience with pension approach (World Bank, 2004).

In the Americas, the experience has gone that far as not only implementing structural reforms, understood as the total or partial privatization of the PAYGO scheme, aimed at improving the efficiency of the systems. There is also experience in the implementation of parametric (or administrative) reforms, which seek to rationalize the system through more revenue and lower costs. These reforms are linked to changes in the system in order to solve some financial troubles or improve equity, through coverage, or eligibility, contributions and administrative schemes, or a combination of these.

This paper will try to contribute to the understanding some of the factors that may affect the decision taken by countries in the Americas of undertaking a structural or a parametric reform. The analysis tries to connect previous conditions in a country and the probability of carrying out a structural or a parametric reform. Other works have studied the environment surrounding a pension reform and the probability that it will occur at the world level (for example, Brooks, 2002; James and Brooks, 2001; Wang and Davis, 2003), while others have focused on the political situation behind such reforms, especially in Latin America (Ayala, 1995; Gray, Pérez and Yañez, 1999; Huber and Stephens, 2000; Mesa-Lago and Müller, 2002; Ortiz *et al*, 1999).

The outline of the paper is as follows. In section one is presented how some variables are evolving in the Americas that may be putting pressure on the social security schemes to implement reforms. Section two draws some ideas from the political economy of social security reforms. Section three presents the estimation on the probability of reforms in the Americas, depending on a set of factors. Finally Section four outlines some considerations on the findings.

1. The Americas Context for Social Security Reform

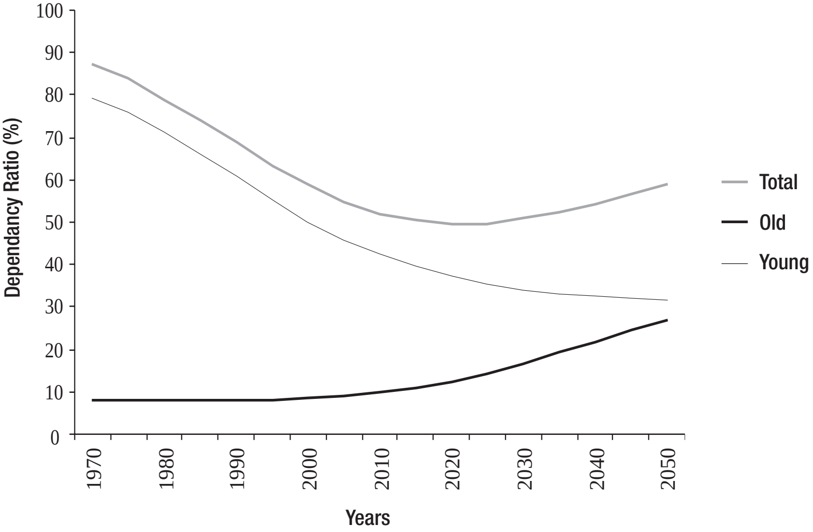
The main motivation behind any reform is to guarantee the financial sustainability of the social security system, especially in the area of pensions, as the operating continuity, widening of coverage, etc, depend on the financial health of the scheme. This is also closely related to the demographic path that has taken shape during the last decades.

Life expectancy in the Americas has increased over recent years: those born in 1970 had a life expectancy of 61.2 years, while those born in 2000 have on average 71.2 years. The ratio of old (65 years and over) to young (zero to 14 years) in 1970, or what is known as the dependency rate of the old, was 9.8, increasing in 2000 to 17 and it is forecasted to be 40.6 in 2025 and 85.1 in 2050. Figure 1 shows the evolution of the total dependency rate (old plus young to productive ages), achieving a minimum in 2025 and increasing thereafter as a consequence of the increase in older population, i.e. the population of productive age will be relatively lower and thus they will increasingly bear the burden of the social security costs. On the other hand, many benefits have been considered as generous, in terms of age of retirement or monetary benefits.

It is true that there is a high correlation between a country's income and its social security spending, but it is also true that high income is only achieved after long periods of economic growth, and that if there is stagnation in the evolution of the per capita GDP there will also be a stagnation in the financing of the social security system, bringing problems in meeting the already generated obligations. As shown in Figure 2, the evolution of the GDP has been very uneven in Latin America and the Caribbean, which experienced higher growth during the 1970s, while it fell in the 1980s before recovering in the 1990s, but in general the net result has been stagnation. The persistent economic crises have led to a reduction in state participation in the economy and the consequent budget adjustments, meaning a risk for the social security in the medium and long term.

This macroeconomic environment has hit the labour market, which has experienced stagnation in real wages and the creation of job opportunities. The 1980s were particularly beset by crises and the growth of the informal sector, which escapes the normal mechanisms of social security contribution. Figure 3 shows the evolution of real wages in Latin America and the Caribbean.

Figure 1
Dependency Ratios in Latin America and the Caribbean



Source: Data from ECLA (1998).

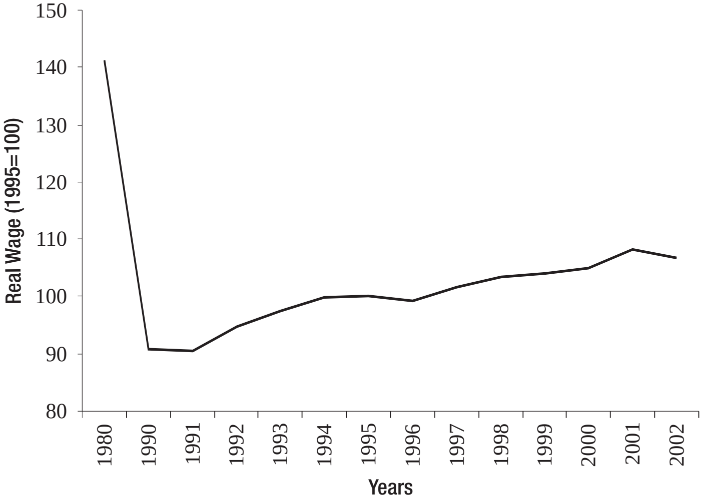
Figure 2
Rate of GDP Growth in Latin America and the Caribbean

Source: Data from the IMF (various years).

On the one hand, the deterioration in wages reflects a decline in labour productivity, and in the economy as a whole. On the other hand, it also echoes the *de facto* freezing of wages that has been applied since the mid-1980s as a measure to reduce inflation and boost competitiveness in several of the countries in the Americas. This labour market structure exerts an influence on the social security contributions and revenues. It also has some influence on the payroll taxation, as shown by Razin, Sadka and Swagel (2002), aging of the population and increases in the return to schooling affect the generosity of the welfare state, as there will be an increase in the support for higher taxes together with more transfers to the older.

All these issues certainly affect the timing for a social security reform. However, there are also other issues to be reviewed. An important issue in the analysis of reforms is the distribution of the gains among some groups (the older and younger members of society, for example). This leads to a review of such aspects as lobbying and political pressure from some groups, as well as the coordination and implementation of reform into what is considered the political economy of reforms

Figure 3
Evolution of Real Wages in Latin America



Source: Data from ECLAC (2004).

2. Political Economy of Social Security Reforms

In a study of the reasons why reforms may be delayed or even cancelled, Alesina and Drazen (1991) point out that this may happen due to a war of attrition among the involved groups, as some groups try to transfer the costs on to others. Thus, the more polarized a society may be and the more unequal the costs and gains from reform, the more time it will take to implement. Furthermore, a priori, a political system is biased on its preference towards the status quo, even when this is inefficient and individuals are risk neutral (Fernández and Rodrick, 1991).

On the other hand, the differences in costs between groups in the reform, the more time and money they will be willing to spend on lobbying. According to Fernández and Rodick (1991), the distribution of costs and gains among groups can lead governments to lose battles in the implementation of reforms, as these are distributed within the society, with the winner groups being seeing as the politically strong, thus preventing the acceptance of the reform, However, the bias towards the status quo will also occur if, a priori, there is not an adequate identification of winners and losers. Usually, adjustment costs of any kind have fallen on the labour market, which leads to diminishing real wages, contracting demand and an anchor to growth (World Bank, 1994).

Countries in which political institutions to some extent hinder opposition from interest groups from registering an affect on public policy decision-making would implement a reform faster. One example is the paralysis of activities in France in May 2003, as public workers opposed the reform to the pension system, which was also considered to be too expensive and too generous (New York Times, 2003; The Economist, 2003a), the government spent millions of dollars on a campaign to inform and convince workers of the benefits of reforming before the system collapses. This also leads to issues of credibility; Alesina and Drazen (1991) emphasize the importance of credibility in gaining acceptance for and implementing reforms, as this is relevant for diverse social groups, i.e. to what extent the reform is considered to be logical, even if a priori there is no certainty of success. On the other hand, it should be borne in mind that credibility is also understood as the level of commitment of the public decision-makers, as it is not known *a priori* to what extent they will carry through their decisions.

The government not only has a responsibility to convince the population about the need for reform, but also to implement such a reform in a transparent manner in order to gain greater support. However, as noted by Lora and Panizza (2002), there is widespread disagreement about reforms in general term, and especially regarding privatization. For example, these authors highlight that in a survey carried out in 2001 in various Latin American countries, 63% of respondents believed that privatization had not brought benefits for the countries, while 45% disagreed with the free market principles and thought that the state should be in charge of production activities. These results, according to interviewees themselves, are because there is a high level of corruption in the reform process. It should be noted that such results are sensitive to changes in the economic context, with the outlook becoming more pessimistic in the last few years. Some privatization processes have been brought down after violent riots initiated by an opposing population in Bolivia and Peru (The Economist, 2003b).

The existence of strong public opposition leads to considerations of the speed in the implementation of a reform, as implementation could be effected gradually or in a on-off reform (shock), the optimal sequence depending on economic and political criteria.[1] It may be argued that if *ex ante* there is no clear identification of winners and losers, such a reform may meet with strong opposition if applied as shock, while a gradual reform may carry the intention to divide the opposition, ending with more political support (Wei, 1997). If there is a strong opposition from

[1] The World Bank (1994) has summarized the debate on gradual and shock reforms. A gradual reform should be understood as one adopted over a period longer than two years. In an economy with rigid prices and wages, a gradual reform allows for an optimal adjustment, while a shock reform may increase a firm's costs and lead to higher unemployment. If the reform is aimed at increasing welfare, then a better option may be to implement it more rapidly, thus bringing the benefits as soon as possible. On the other hand, a gradual reform may allow for mid-term corrections, its adaptation to political conditions, the dismantling of bureaucratic obstacles and the creation of new institutions. A shock reform, however, may bring a higher level of acceptance, as it may prevent interest groups from organizing their opposition. If reforms are not trustworthy or there are deficiencies in the macroeconomic conditions, it may happen that the adjustment timing may be too slow and it may be more convenient to speed it up.

the beginning, then it may be more appropriate to apply the reform in one fell swoop; however, even if this may bring the benefits more rapidly, this kind of implementation imposes high costs on some population groups.

The older may be a decisive influential group when deciding the implementation of a social security reform. According to Mulligan and Sala-i-Martin (1999) the old are more successful in lobbying as they are low productive in the jobs, then they have more time to devote to the political sector and then this group may be influential in banning reforms in the social security systems to their benefits. However, those authors also recognize that such a model raises the empirical questions of to what extent the older are politically active. When looking at Latin America, the Roper Center for Public Opinion Research's survey data on democracy gives some insights (see Ai-Camp, 2001), as when asked about political participation the percentage of the older participating is lower than the younger and much lower than those in the middle age group; the same trend is shown when asked on agreement about citizen's passivity as obstacle to democracy. When asked about voting, the higher rates are obtained for the older, but for the statement that they do not use to vote. It seems that the political participation of the older and their impact through voting may not be in Latin America as punching as in other regions of the world.

As the adjustment cost from reforms is cause for concern, there may be some compensation mechanisms to help the affected groups, such as exceptions, cash transfers and reductions in taxes, establishing a trade-off between reforms in various sectors, etc (Edwards and Lederman, 1998). In Argentina, the government had a large majority in Congress at the time of the reform, which allowed it to impose the fully funded system, however it implemented a mixed system that allowed for the absorption of the transition costs and the granting of higher guaranteed benefits and reductions in the retirement age for women, thus broadening the political support and downsizing the opposition (Ayala, 1995). Other examples of these mechanisms applied to social security reforms can be found in James and Brooks (2001).

In general, the reforms implemented in the economic systems of Latin America during the 1980s and 1990s offer a rich experience from which we can extract some lessons for social security reforms (Lora and Panizza, 2002). First, structural reforms are a necessary but not sufficient condition to improve the welfare of lower income groups, and it is not enough to raise growth to levels accomplished by developing countries. Second, not all pro-market reforms are successful, given that there may be macro instability and inefficient regulation.[2] Third, institutions play an important role; functional and transparent institutions strengthen policy effectiveness, as has been highlighted by the World Bank (2002). Fourth, there is no single recipe, as each proposal should be evaluated in the local conditions. Fifth, structural reforms should not only be evaluated in terms of economic growth, but also in terms of equity and social issues as mentioned earlier. Thus, there is a need to broaden the agenda of reform in order to link pro-market reforms with social policies, to achieve a reduction in poverty, exclusion and inequality.

In the next section we will try to determine those factors which may be decisive when considering undertaking a reform in social security systems. The factors considered are those from the political economy of reforms and the macroeconomic environment which also may play a decisive role inputting pressure for a change in the social security system.

[2] For example, administrative costs have affected the rate of return leading to a structure with negative redistribution, requiring then an accompanying reform guaranteeing efficient regulation. Whitehouse (2000) shows that in the cases of Argentina and Mexico the commissions charged by pension's funds are high even at the world level.

3. Estimating the Probability of Reform

In this section we shall seek to identify some of the conditions under which countries in the Americas have carried out social security reforms. One important issue is that previous works have studied at the world level those countries that have carried out reforms. In this paper, we focus on countries in the Americas, and the results attained in other works may not necessarily apply here, as this region has been characterized not only by the strict application of so-called "neoliberal" policies, but also by its recurrent crises and *sui generis* political systems (Huber and Stephens, 2000). In addition, we not only focus on the structural reforms, but we also consider relevant the analysis of the parametric reforms in pensions and health, that have been ignored in other works (Brooks, 2002; James and Brooks, 2001; Wang and Davis, 2003) and that to some extent have an impact on the financial viability of the systems.

3.1 Model and Variables

Regressions use as dependent a binary variable that takes the value of one if the country has carried out a reform and zero otherwise. We shall use two types of analysis; the first corresponds to the analysis of a parametric reform and the second to structural reform in pensions (total or partial).

We carry out a probit model (see Greene, 2003), which describes the effects of the components on the dependent variables. The dependent variable is:

$$y = \begin{cases} 1 \text{ if the country undertakes a reform} \\ 0 \text{ otherwise} \end{cases}$$

Then, the models is:

$$Pr(reform=1)=\beta x+\varepsilon$$

Where x is matrix of country's previous characteristics, β is a vector of coefficients and ε is the error term. The variables to be included in the matrix x are described below. Appendix 1 displays the basic statistics of the set of variables, as well as their sources.

Independent variables are:

Savings. This variable is defined as the national savings as a percentage of the GDP. This variable is included because, especially in the case of pensions, there are reasons to believe that a reform will bring more savings, although in the long-term, thus lower rates of savings will provide motivations for a reform, with a negative coefficient expected. In terms of a parametric reform we would also expect that a lower level of savings would lead to a greater probability of reform, as the scarce resources could be used in a more efficient manner.

Older. This is the percentage of the population aged 65 years and over. Given the aging of population and the benefits from the social security system, this group may play an important role in the collective decision-making process and also exert an influence when voting. The expected sign is negative if we follow Mulligan and Sala-i-Martin (1999), as the greater the number of older people the greater the resistance of a group that could feel that their benefits are endangered. This group is considered to be politically active, although if they lack the channels through which to exert influence they could not exert a real opposition to the implementation of new policies. Moreover, in practice the sign of this variable is not determined, as given that in Latin America the older are not so politically active, their opposition to reform not necessarily may be reflected in policy making.

Income. This is a measure of the log of the real per capita GDP. The question here is to what extent income determines the implementation of structural or parametric reforms, for example, high-income countries are those that have implemented less structural reforms.

Security. This is the percentage of the GDP spent on social security and welfare. *A priori*, lower spending would lead to a higher probability of implementing any type of reform that would allow a better use of resources.

Politics. This is an index of the level of political freedom as constructed by Freedom House and it comprises comparative issues of elections and civilian freedom. A lower index signals greater political freedom. Therefore, a higher index may indicate a lower probability of reform, although a counterexample is the fact that in some countries with a semi or completely dictatorial government some reforms were carried out.

Economy. This variable is introduced in order to distinguish between economic and political freedom (Barro, 1997). This variable is the index of economic freedom as developed by the Fraser Institute (Gwartney *et al*, 2002). A higher index means greater economic freedom, understood in the sense of a liberal economy, i.e. less state intervention. It may be suggested that a more liberal government would seek greater efficiency outcomes and thus it would try to adopt reforms towards such goals.

Deficit. This measures the deficit or surplus in the government's budget as a percentage of its GDP. A surplus would allow the government to support a system in a given condition, but a deficit would limit the government in its public policies and push it to take action towards a reform.

We have three set of estimations. In the first set we determine the probability of a parametric reform being undertaken, with a dependent variable taking the value of 1 if a country adopted a reform in a specific year. Data were gathered from Trends in Social Security, edited by ISSA, which has been reporting reforms implemented since 1991. For this reason the calculation was made using a probit model with panel data from 1991 to 2002.

In the second set, we calculate the probability of a structural reform being undertaken, understood as a partial or total switch to a fully funded system, using first aggregated data for the 1990s and the beginning of the 2000s with a probit model. This base excluded Chile as the system was reformed there in 1981. After this, in the third set we make a dynamic analysis using a probit with panel data, including Chile, for which the dependent variable takes the value of 1 if the country reforms or already has a system different to the PAYGO, the analysis becoming then the probability of the country having a fully funded system. Regressions are presented including some dummies for groups of countries (regional effects: central and south America)[3] and also a time trend.

[3] Grouping countries in regions provides with better results for estimations, as using fixed effects may provide with imprecise estimates given the little variation in time series of the variables included.

3.2 Results

Parametric Reforms

Table 1 displays the results of the probit with panel data for parametric reforms, using lagged values in the independent variables. Basic statistics and sources are shown in Appendix 1.

Saving is negative and significant in most of the cases, which confirms the hypothesis that countries with higher levels of savings, on average, have a lower tendency to implement a parametric reform. This does not stand when excluding Canada, the United States and the Caribbean in the regressions.

Older is significant and positive. The sign is the opposite to that expected following Mulligan and Sala-i-Martin (1999), thus the higher share of an older population the higher the probability of reform. Income is positive and significant, establishing a link between it and a higher probability of a parametric reform; however, this variable is correlated with Older (0.72) and Savings (0.33), and thus we exclude it from some regressions.

The remainder of the variables are not significant: these being Security, Politics, Economy, and Deficit. Although these tend to be correlated with Income, they do not become significant if this is excluded from the calculations. Thus, neither economic nor political freedom has a determining effect on the implementation of parametric reforms, in the absence of a strong and organized opposition. The fact that the Politics variable is not significant and Older is positive and significant, may suggest that the older population do not necessarily have a major influence through lobbying mechanisms.

Table 1
Probit of a Parametric Reform

	(1)	(2)	(3)	(4)	(5)1/	(6)2/
Constant	-2.9945***3/	-2.7353***	-3.5651***	-1.2557***	-1.1068***	-0.9840***
	(0.9098)	(0.9373)	(1.1192)	(0.2800)	(0.3009)	(0.3613)
Savings	-0.0262**4/	-0.0269**	-0.0244**	-0.0171	-0.0163	-0.0205*
	(0.0127)	(0.012)	(0.0129)	(0.0117)	(0.0116)	(0.0148)
Older	0.0808*5/	0.1017**	0.0965**	0.1502***	0.1162***	0.1187***
	(0.0472)	(0.0518)	(0.0496)	(0.0337)	(0.0421)	(0.0516)
Income	0.2858*	0.2601**	0.3065**			
	(0.1418)	(0.1421)	(0.1496)			
Security		-0.0255				
		(0.0284)				
Politics			0.0960			
			(0.0718)			
Economy			0.0095			
			(0.0868)			
Deficit			0.0170			
			(0.0309)			
$\chi^2>0$	0.00	0.00	0.00	0.00	0.01	0.03
N	396	396	396	396	372	216

Note: 1/ Excluding Canada and the United States; 2/ Excluding Canada, the United States and the Caribbean. 3/ significant at 1%; 4/ significant at 5%; 5/ significant at 10%. Standard errors in parentheses. Equal correlation panel data with 33 countries, 12 years (1991–2002).

Structural Reforms

Table 2 displays results obtained regarding the probability of a structural reform being implemented in the area of pensions. This analysis covers the 1990s and the beginning of the 2000s.

The variables Income and Deficit are not significant. The variable Security is significant and negative, which means that the higher the spending in this area, the lower the probability of such a reform being undertaken. The same applies to Savings. The results for the variable Older are positive, although only significant when Canada and the United States are excluded from the calculations. However, in this case it is difficult to establish a relationship between these variables when excluding some dummies for regional effects introduced in such regressions. An important point to note is that this table does not include the variables Politics and Economy. This is because they are not statistically significant, nor do they add explicative power to the model.

Table 3 shows the analysis applied to the dynamic model with panel data, where the dependent variable is 1 if the country applies a structural reform in a given year and/or it has a system different to the PAYGO. The only country with a fully funded system before 1991 was Chile, the others applied reforms after that date.

The variable Income is significant, but there are doubts about its contribution as it constantly changes its sign (in additional regressions not shown in the tables), the same occurs with Savings and Politics, which are not significant. The variables maintaining their sign and significance are Older (most of the times), Deficit and Economy. The Security variable is negative, which indicates that the higher the spending on social security and welfare the lower the probability of a reform being adopted, except when Income is excluded from the set of variables.

Deficit (which measures deficit or superavit) is significant and negative, which suggests that the less the financial pressure on a government's budget the lower the probability of a reform being implemented. Older once again has a positive sign, while Politics are not relevant, but Economy is relevant. This may suggest that structural reforms are more likely in countries with a larger share of older population, although this group does not seem to have a mechanism through which exert some kind of influence on negotiations, and neither it does have a higher political participation. On the other hand, reforms can be interpreted as an attempt at efficiency seeking on the part of the governments, as economic freedom has a positive effect here, i.e. governments in the continent, have to some extent imposed their "neoliberal" agenda, while certain affected groups do not necessarily have the mechanism of the typical interest groups, as is the case with the older population.

This is the opposite of findings at the world level, where a higher share of older population and political freedom exerts a negative influence on the application of reforms, although with inconsistent results (i.e. Wang and Davis, 2003). How should we explain our findings? There are two issues that may be relevant. The first was discussed in previous sections about the low political participation of older groups. Since the made suggestion by Mulligan and Sala-i-Martin (1999) that the older may be a strong opposition group to social security reforms, although it will depend on the political participation. Since the political participation by the older is low, then they may lack the channels through which influence public policy-making.

The second is the low coverage of the older by social security systems linked to formal jobs as shown in Figure 4. These systems are only available to those workers in the formal sector, and only a fraction of them contribute.

Table 2
Probit of a Structural Reform

	(1)	(2)	(3)	(4)	(5)[1/]	(6)[2/]
Constant	-0.1807	-1.1748	0.8433	0.8710	0.6774	2.5500
	(2.8430)	(2.461)	(1.1943)		(1.2647)	(3.7631)
Income	0.1675	0.3491				
	(0.4205)	(0.3309)				
Security	-0.1773**	-0.1436*	0.1797**	-0.1848**	-0.2311**[3/]	-1.0796
	(0.0955)	(0.0793)	(0.0956)	(0.0957)	(0.1089)	(0.7401)
Older	0.1098		0.1501	0.1552	0.3030**	1.8667*
	(0.1593)		(0.1243)	(0.1245)	(0.1632)	(1.1229)
Saving	-0.1090*	-0.1082*	-0.1013*	-0.1036*	-0.1186*[4/]	-0.3273
	(0.0645)	(0.0626)	(0.0609)	(0.0617)	(0.0672)	(0.2295)
Deficit				0.0824		
				(0.0974)		
Log likelihood	-16.58	-16.82	-16.66	-16.15	-15.16	-3.66
N	32	32	32	32	30	17

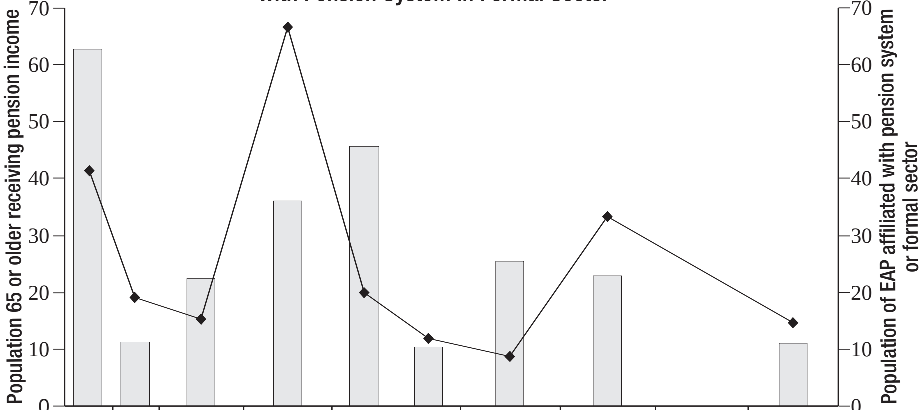
Note:1/ Excluding Canada and the USA; 2/ Excluding Canada, the USA and the Caribbean; 3/ signicant at 5%; 4/ significant at 10%. Standard errors in parentheses. Cross-section (1991–2002) including regional effects.

Table 3
Probit of Having a System Different to PAYGO

	(1)	(2)	(3)	(4)	(5)	(6)[1/]	(7)[2/]
Constant	-3.8826***	-0.1671	-4.0026***	-4.2787***	-4.2871***	-5.1150***	-5.2061***
	(0.9522)	(2.3914)	(0.9256)	(0.9396)	(0.8708)	(1.007)	(1.0904)
Income		-0.5916*					
		(0.3542)					
Savings	-0.01241						
	(0.01578)						
Older	0.1876***	0.4048***[3/]	0.1768**	0.0936	0.0939	0.2082***	0.2361***
	(0.0795)	(0.1378)	(0.0784)	(0.0687)	(0.0663)	(0.0821)	(0.0987)
Security	-0.0973	-0.1541**[4/]	-0.0898				
	(0.0666)	(0.0737)	(0.0655)				
Deficit	-0.0852**	-0.0726*[5/]	-0.0890**	-0.0849**	-0.0848**	-0.0751**	0.1682**
	(0.0420)	(0.0435)	(0.0416)	(0.0422)	(0.0416)	(0.0410)	(0.0789)
Politics				-0.0025			
				(0.0832)			
Economy	0.3856***	0.3375***	0.3801***	0.4239***	0.4247***	0.4618***	0.5038***
	(0.1180)	(0.1208)	(0.1165)	(0.1149)	(0.1143)	(0.1255)	(0.1352)
$\chi^2>0$	0.00	0.00	0.00	0.00	0.00	0.00	0.00
N	396	396	396	396	396	372	216

Note: 1/ Excluding Canada and the United State; 2/ Excluding Canada, the United States and the Caribbean. 3/ significant at 1%; 4/ significant at 5%; 5/ signficant at 10% . Standard errors in parentheses. Equal correlation panel data with 33 countries, 12 years (1991–2002).

Figure 4
Population 65 or Older Receiving Pension Income and Proportion of EAP Affiliated with Pension System in Formal Sector



	Chile 2000	Peru 1999	Colombia 1999	Argentina 2002	Mexico 2001	Bolivia 2000	El Salvador 1998	Costa Rica 2000	Dominican Rep.1997	Nicaragua 1999
Total EAP	62.7	11.2	22.3	36.0	45.7	10.3	25.5	22.9		11.0
Total 65 or older	41.4	19.5	15.2	66.2	20.0	11.9	8.8	33.2	14.6	

Note: There is no data for EAP formal in the Dominican Republic. There is no data for the older in Nicaragua for that time.
Source: Gill, Packard and Yelmo (2004).

Although there are many factors affecting participation in the system, the low coverage rates hints that there may be scepticism about the usefulness of the system (Gill *et al*, 2005). Moreover, as Packard (2002) shows, individuals may prefer other saving schemes to insure against old age poverty, such as investing in the education of their children, and housing, rather than continue contributing to the social security schemes. Furthermore, the evidence shows that the valuation that workers have for the social security benefits, including the pension scheme, is low in Latin America (CISS, 2003). Putting all this evidence together, it seems difficult that the older may be an effective group in Latin America opposing reforms.

5. Conclusions

Reforms to social security not only include the structural aspects (full or partial privatization of pensions) but also the parametric or administrative ones, which to some extent have an effect on the financial viability of the system and affect the workers' valuation of benefits. Reforms must be analyzed within their macro, political and social context, in order to guarantee not only a given level of support, but also that the impact on welfare is greater.

This work has analyzed the probability of a structural and a parametric reform being implemented, given a set of factors. In the case of the parametric reforms, savings and income are determinant in such a probability. An older population is also a determinant but in a positive way, while economic and political freedoms are not significant. In the case of structural reforms, the older population is also positively significant, while the variable for economic freedom is positive and the financial pressure on the budget is also relevant.

These findings regarding the older are not conclusive. This group may not have the adequate channels through which to exert lobbying mechanisms, then the governments may not have been strongly opposed by this group, although they may form alliances with other groups in order to obtain some benefits. For example, in the case of the structural reform in Bolivia, Gray, Pérez and Yañez (1999) report that older pensioners do not have the correct political representation, nor the mechanisms to influence the policy decision-making process, but they allied with the opposition in parliament, which was not the majority, and also with the unions, and thus obtained some compensation, although this was marginal.

It is worth noting that the population aged 65 and over in Latin America and the Caribbean in 1995 accounted for 5% of the total, while the figure for Europe was 15.34%. In those countries with larger shares of older population it is more likely that they can get organized and then influence public decision-making as they represent an attractive pool of voters for politicians. An illustrative case is Uruguay. This country has the highest share of older population, together with Canada and the United States, with levels comparable to the European ones, representing 12.3% in 1995. Here, the process of reform, the implementation of which was planned from 1985, was far from easy, as the pensioners organized various referendums on the government's proposals, winning such referendums, and it was only in 1995 that the project was passed and after many concessions, including the state participation in the management of the new funds, and also leaving specific groups outside the new scheme (Mesa-Lago and Müller, 2002).

It would seem that economic freedom is a determining factor in the application of structural reforms, although the credibility of the politicians involved may also play an important role. For example, in Peru the cabinet did not explain the reform project to the population as they considered this to be a waste of time, and hence suspicion and lack of information seemed to be the main issues against the adoption of the new system, especially on the part of the unions, and in the end it was only adopted with the strong support of the entrepreneurial elite, after Congress was dissolved in a famous self-coup, with the index of political freedom being the worst Peru has ever experienced (Mesa-Lago and Müller, 2002; Ortiz, Eyzaguirre, Palacios y Pollarolo, 1999). Even though the reforms of the 1990s have occurred in an environment of economic freedom, these have been in political structures with a disciplined majority from the governing party, the weakening of the unions and with some concessions being given (Huber and Stephens, 2000). In addition, it may be that Latin American and Caribbean societies are fragmented, inhibiting an adequate level of organization; for example, Dayton-Johnson (2000) shows for Mexico that social heterogeneity and inequality have a negative impact on group performance and cooperation in collective efforts.[4]

As Rodrick (1996) has asked, why there is a need to protect reforms from the people, if they are suppose to be designed to enhance their welfare? Given that some groups receive more benefits than others, public policies may devise compensation mechanisms if there is an earlier identification of winners and losers, which also depends on the credibility of the policy makers, and implies a transparent process whereby useful information flows freely.

[4] According to the National Survey on Political Culture and Civility, carried out by the Homeland Secretariat in Mexico in 2001, 51 per cent of the population find it difficult to organize with others and 85 per cent do not participate in any organization. In contrast, in the Nordic countries, 85 per cent is affiliated to some kind of organization.

References

Ai-Camp, Roderick, ed. *Citizens Views of Democracy in Latin America*. Pittsburgh: University of Pittsburgh Press, 2001.

Alesina, Alberto, and Allan Drazen. "Why are Stabilizations Delayed?". *American Economic Review* 81, no. 5 (1991): 1170-1189.

Ayala, Ulpiano. "Qué se ha Aprendido de las Reforma Pensionales en Argentina, Colombia, Chile y Peru". Office of the Chief Economist Working Paper 330. Inter-American Development Bank (IADB), 1995.

Barro, Robert. *Determinants of Economic Growth: A Cross-Country Empirical Study*. Cambridge, Mass.: The MIT Press, 1997.

Brooks, Sarah M. "Social Protection and Economic Integration: the Politics of Pension Reform in an Era of Capital Mobility". *Comparative Politics Studies* 35, no. 5 (2002): 491-523.

CISS. *The Americas Social Security Report 2002: Financial Problems and Options for a Solution*. Mexico: Inter-American Conference on Social Security (CISS), 2003.

Dayton-Johnson, Jeff. "Determinants of Collective Action on the Local Commons: A Model with Evidence from Mexico. *Journal of Development Economics* 62, no. 1 (2000): 181-208.

ECLAC. *Demographic Bulletin Latin America and Caribbean: Population Estimates and Projections, 1970-2050*. Santiago, Chile: Economic Comission for Latin America and the Caribbean (ECLAC), 1998.

Edwards, Sebastian, and Daniel Lederman. "The Political Economy of Unilateral Trade Liberalization: the Case of Chile". En *Going Alone: the Case for Relaxed Reciprocity*. Edited by Jagdish N. Bhagwati. Washington, D.C., 1998.

Fernández, Raquel, and Dani Rodick. "Resistance to Reform: Status Quo Bias in the Presence of Individual-Specific Uncertainty". *American Economic Review* 81, no. 5 (1991): 1146-1155.

Freedom House. *Freedom in the World: Annual Survey of Freedom Country Scores*. Washington, D.C.: Freedom House. Available online at www.freedomhouse.org, 2005.

GAO-United States Government Accountability Office. "*Issues in Evaluating Reform Proposals. Statement of Barbara D. Bovbjerg*". Document presented at Comission for Elderly Special Meeting, U.S. Senate, December 2001.

Gill, Indermit S., Truman Packard, and Juan Yermo. *Keeping the Promises of Social Security in the Americas*. Washington, D.C.: World Bank, 2005.

Gray, George, Ernesto Perez, and Ernesto Yañez. "La Economía Política de Reformas Institucionales en Bolivia". IADB Research Network Working Paper R-350. Inter-American Development Bank (IADB), 1999.

Greene, William. *Econometric Analysis*. New Jersey: Prentice-Hall Inc, 2003.

Gwartney, James, and Robert Lawson. *The Fraser Institute*: *Economic Freedom of the World, 2002 Annual Report*. Vancouver, Canada: The Fraser Institute, 2002.

Huber, Evelyne, and John D. Stephens. "The Political Economy of Pension Reform: Latin America in Comparative Perspective". United Nations Research Institute for Social Development Occasional Paper No. 7. Geneve: United Nations, 2000.

IMF. *Government Finance Statistics Yearbook*. Washington, D.C.: International Monetary Fund (IMF), several years.

ISSA. *Trends in Social Security*. Geneve: International Social Security Association (ISSA), several years.

James, Estelle, and Sarah M. Brooks. "The Political Economy of Structural Pension Reform". In *New Ideas About Old Age Security*. Edited by Robert Holzmann and Joseph Stiglitz. Washington, D.C.: World Bank, 2001.

Lora, Eduardo, and Ugo Panizza. "Structural Reforms in Latin America Under Scrutiny". IADB, Research Department Working Paper 470. Inter-American Development Bank (IADB), 2002.

Mesa-Lago, Carmelo, and Katharina Müller. "The Politics of Pension Reform in Latin America". *Journal of Latin American Studies* 34, no. 3 (2002): 687-715.

Mulligan, Casey B., and Xavier Sala-i-Martin. "Social Security in Theory and Practice (II): Efficiency Theories, Narrative Theories, and Implications for Reform". Economics Working Papers 385, Department of Economics and Business, Universitat Pompeu Fabra, 1999.

New York Times. "Huge Strike by Public Workers Paralyzes France". May 14, 2003.

Ortiz, Gabriel, Hugo Eyzaguirre, Rosa M. Palacios, and Pierina Pollarolo. "La Economía Política de las Reformas Institucionales en el Perú: los Casos de Educación, Salud y Pensiones". IADB, Research Network Working Paper R-349. Inter-American Development Bank (IADB), 1999.

Packard, Truman. "Pooling, Saving, and Prevention – Mitigating the Risk of Old Age Poverty in Chile". Policy Research Working Paper 2849. World Bank, 2002.

Razin, Assaf, Efraim Sadka, and Phillip Swagel. "The Wage Gap and Public Support for Social Security". *American Economic Review* 92, no. 2 (2002): 390-395.

Rodrick, Dani. "Understanding Economic Policy Reform". *Journal of Economic Literature* 34, no. 1 (1996): 9-41.

The Economist. "Huge Strike by Public Workers Paralyzes France". May 13, 2003a.

The Economist. "Wanted: A New Regional Agenda for Economic Growth". May 24, 2003b.

Wang, Lu, and Otto A. Davis. "Freedom and Other Variables in the Choice of Public Pension Systems". *Public Choice* 114, no. 3-4 (2003): 361-385.

Wei, Shang-Jin. "Gradualism Versus Big-Bang: Speed and Sustainability of Reforms". *Canadian Journal of Economics* 30, no. 4 (1997): 1234-1247.

Whitehouse, Edward. "Administrative Charges for Funded Pensions: An International Comparison and Assessment". World Bank Social Protection Discussion Paper 16. Washington, D.C.: World Bank, 2000.

World Bank. *World Development Report 1991: The Challenge of Development.* Washington, D.C.: World Bank, 1994.

World Bank. *World Development Report 2002: Building Institutions for Markets.* Washington, D.C.: World Bank, 2002.

Annex

Basic Statistics

	Panel (N=396)			Cross-section (N=32)			Source
	Mean	Median	St. Dev.	Mean	Median	St. Dev.	
Individual account	0.1691	0	0.3575	0.372	0	0.4918	A
Parametric	0.2626	0	0.4406				A
Income	7.96	8.00	0.9891	7.95	8.00	1.01	B
Savings	16.56	17.11	6.97	6.40	7.40	3.50	B
Older	5.75	4.87	2.63	5.73	4.87	2.64	B
Security	6.46	7.40	3.42	16.06	16.30	5.70	B
Politics	2.51	2.30	1.37	2.52	2.51	1.24	C
Economy	5.97	5.92	1.04	5.98	5.96	0.8429	D
Deficit	-0.88	-0.001	3.55	-0.91	-0.001	3.57	B

Sources:
A) ISSA (various years).
B) World Bank (2003).
C) Freedom House (2003).
D) Gwartney, Lawson and Lawson (2002).