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## **Can Latin American Experience Teach Us Something About Privatized Pensions with Individual Accounts?**

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## Abstract

Out of all the regions in the world, Latin America has accumulated the most experience with pension privatization of individual accounts (in the form of defined contribution plans). Chile and seven other countries have privatized their pension systems in different degrees (see, Tapen Sinha, *Pension Reform in Latin America and Its Lessons for International Policymakers*, Kluwer Academic Publishers, 2000). A number of policymakers (especially in conservative think tanks) have hailed privatization as a big success. In a rare move, the policymakers in the U.S. and in other developed countries actually have listened to these so-called success stories with a view toward implementing privatization in their own countries. This paper critically examines if there are lessons that could possibly be learned from the collective experience in Latin America.

## Introduction

Researchers have expressed considerable interest in pension reform in many countries around the world. In the U.S., political debate in the 2000 presidential election had a pension reform plank — even when many pundits predicted that a candidate who touches Social Security dies. President Bush has pushed and cajoled the 107<sup>th</sup> Congress to set up a Bipartisan Commission on Social Security Reform Act (H. R. 14) early in 2001. In June 2001, the commission had its first meeting. In the U.K., substantial interest has been expressed since the Blair government published the document *A New Contract for Welfare: Partnership in Pensions* in late 1998, with plans to revamp SERPS and introduce individual accounts. With the reelection of the party, this process will soon propel forward. In Japan, newly elected Prime Minister Junichiro Koizumi has promised to overhaul its social security system. In his parliamentary speech of May 7, 2001, he proclaimed, "I am determined to base the three pillars of social welfare (pensions) on a spirit of self-help and self-sufficiency."

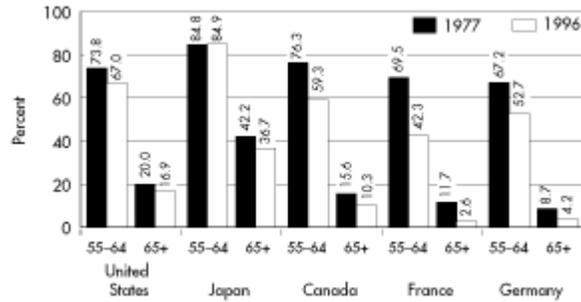
Much of the ammunition used by many proponents of privatization is provided by the experience of privately run pension systems in Latin America, in particular, the two-decade old experiment in Chile. Much of the cold hard facts about these countries get lost in heated debates. We provide a sobering catalog of issues that apply to Latin America but not necessarily to other countries. We trace the political economy of this debate. It shows that research in this area is propelled by people with a stake in the resolution.

## **Gender Issues**

### **Men Versus Women in the Developed World**

Most reform proposals (at least implicitly) assume that affiliates in the privately run pension system will be working full time in some market activity. More than 90 percent of the males under 55 in the developed countries do work full time. The participation rate for males drops somewhat for the 55-64 age group for most countries (except Japan). The participation rate for males drops radically for males over 65 (see Figure 1).

*Figure 1: Male Participation Rate in Five OECD Countries*



Traditionally, the vast majority of women did not work outside home. Even if they did, they stopped working away from home after having children. This model has changed over the years. For example, in Australia, less than 45 percent of women aged 45-54 worked outside of homes in 1980. This percentage steadily increased over the next two decades. It was over 70 percent in 1995 (Source: Australian Bureau of Statistics, online data). For men of the same age group, the number is around 90 percent. In some other countries, such as Sweden, the labor force participation rate has become virtually identical for men and women.

**Table 1: Males aged 55-64 Labor Force Participation Rates in the Developed Countries**

	1960-66	1986-90
Australia	86.1	63.3
Austria	77.5	38.9
Canada	81.9	64.9
Denmark(a)	91.4	67.8
Finland	85.5	45.4
France	78.7	45.8
Germany	81.5	78.4
Greece	81.5	65.7
Ireland	90	91
Italy	70.4	52.6
Japan	87.8	86.5
Luxembourg	66.4	34.1
Netherlands	87.7	45.7
New Zealand	83.4	56.8
Portugal	86.1	66.9
Spain	91.9	61.7
Sweden	87.5	75.4
Switzerland(a)	92.7	88.7
United Kingdom	91.3	67.9
United States	83.6	67.1

### **Men Versus Women in the Developing Countries**

The story is vastly different for the developing world. Although there has been some drop in the male participation rates in the labor force over 25 years, the vast majority continues to work. The reason is simple: For most workers in most of these countries, the cover of social security does not exist. For most of these countries, retirement benefit is available for less than half the workers. In some cases (such as Guatemala), the retirement benefits are available for less than 10 percent of males over 60.

**Table 2: Males aged 55-64 Labor Force Participation Rates in Latin American Countries**

	1960-66	1986-90
Argentina	65.3	68.4
Chile	80.6	71.8
Ecuador	96.5	88.5
El Salvador	94.6	85.4
Guatemala	92.9	92.5
Mexico	96.2	74.1
Peru	94.2	72.2
Uruguay	63.6	64.8
Venezuela	91.6	82.9

Source: ILO Surveys

### Mexican Example

We take an in-depth look at a developing country: Mexico (Table 3). Labor participation rate for women is low at all age groups—including women over 60. However, for males, the participation rate continues to be around half, even at the age of 70-79. This reflects the fact that most men do not have the option of retirement income.

**Table 3: Labor Force Participation Rate (in percent)**

Age	Men	Women
60-64	74	25
65-69	64	22
70-74	58	15
75-79	49	10
80+	26	5
Total	59	18

Source: INEGI, Encuesta Nacional de Empleo, 1995

Table 4 shows that among the men and women over sixty (and working), work long hours. More than one-half of them work more than 35 hours a week.

**Table 4: Distribution of Hours of Work for People 60 and Over (%)**

<i>Working</i>	<i>Men</i>	<i>Women</i>
Less than 15 hours	5	14
Between 15 and 24	8	14
Between 25 and 34	8	13
Between 35 and 39	7	8
Between 40 and 48	39	31
Between 49 and 56	14	8
More than 56 hours	17	9
Not known	2	3

Note: Percentages are calculated only for people who work  
Source: INEGI, Encuesta Nacional de Empleo, 1995

What kind of work do these people do? Table 5 gives us some idea. For all male workers, salaried workers account for 49 percent. Self-employed males account for 27 percent. However, when we consider men over 60, the proportion sharply reverses. The reason is simple: it is extremely difficult for men over 60 to find a paying job, working for somebody else. The only way many of them find employment is being self-employed. The story is even starker for women.

**Table 5: Types of Work all Workers and People Over 60**

<i>Type</i>	<i>All Men</i>	<i>Men 60+</i>	<i>All Women</i>	<i>Women 60+</i>
Employer	6	11	1	6
Self Employed	27	59	22	57
Salaried	49	25	54	13
Piece Work	8	3	4	2
No Pay	11	2	18	22

Source: INEGI, Encuesta Nacional de Empleo, 1995

## A Global Perspective

Table 6 looks at the labor force participation rate (not just older males and females) in a global scale. The important point here is that we cannot make any general comment about the participation rate based on the level of development. China looks like the United States, and sub-Saharan Africa looks like the European Union, in terms of participation rates of men and women in the labor force, with vastly different levels of development.

*Table 6: Percentage of Men and Women in Labor Force*

<i>Percentage in Labor Force</i>		
Region	Men	Women
Northern Africa	77	23
Sub-Saharan Africa	81	53
China	89	79
India	82	35
Bangladesh	90	57
Pakistan	87	13
Iran	82	10
Indonesia	85	51
Other Southeast Asia	85	51
Turkey	79	28
Brazil	86	56
Mexico	87	41
Other Latin	82	49
European Union	77	56
United States	84	71

Source: International Labor Organization Yearbook 1999

## Analyzing the Informal Sector

One classic feature of Latin America is the presence of the informal sector (Figure 3). This problem exists in all developing countries.

Two important problems arise out of underdeveloped capital markets and the presence of informal sector in the economy. A consequence of underdeveloped capital market is that the rates of return received by the affiliates of privatized system in underdeveloped countries is vastly different

from the rates of return of the funds themselves. The presence of informal sector means that a large part of the labor market is never paying any payroll tax, making the tax base smaller. Unhindered movement between the formal and the informal sectors imply that it is difficult formalize the informal sector.

All Latin American countries have very large informal sectors. In 1990, 18 percent of Chile's GDP, 22 percent of Argentina's, 35 percent of Colombia's, 58 percent of Peru's, and 66 percent of Bolivia's came from the informal sector (Loayza (1996)). In terms of employment, the informal sector is even bigger.

Thus, with the Chilean model, the benefits really do not spread to the entire population. The system only benefits the formal sector. Some economists have argued that the informal sector is shrinking as a direct result of the privatization of the public pension scheme (Schmidt-Hebbel, 1997). This conclusion is without any foundation. From Figure 1, we see no evidence of shrinking informal sector in any of the economies with reformed pension plans (even in Chile). If anything, the size of the informal sector is getting bigger in many of them.

### **Example: Mexico**

The majority of an economically active population (which happens to be in the informal sector) is excluded from coverage in Mexico. Figure 2 gives a sector breakdown of employment during the 1990s in Mexico. The following are notable features of this figure:

The employment in the informal sector continues to be more important than the employment in the formal sector. The informal sector consists of independent workers, domestic workers and workers in small enterprises.

There is no trend towards a reduction in the size of the informal sector.

Public sector employment is falling. A (small) reduction in employment in the formal sector is a large reflection of the change in public sector employment.

The single largest group of workers comprises "independent" workers (around 30 percent of employment).

Government remains the second largest employer (around 25 percent of employment).

Small businesses have just about exceeded the level of employment in the government sector (with more than 25 percent of employment).

Large businesses account for around 20 percent of employment.

Table 7 gives an idea of the problem if we would want to formalize the Mexican economy. Around 43 percent of workers in the labor force work without any fixed locale. Around 18 percent work from homes. Thus, to get them to pay taxes (of whatever kind) would be an extremely difficult problem.

*Table 7: Place of Work in Mexican Labor Market*

<i>Type of Work</i>	<i>Number</i>	<i>%</i>
Without working locale	16,944,413	43.37
From door to door	942,972	2.41
In a vehicle	998,460	2.56
In home	7,142,781	18.28
Semi-fixed stand or market	474,485	1.21
Other	7,385,7151	8.90
With locale	22,124,682	56.63
Small	6,654,326	17.03
Medium and large	15,309,078	39.18
Other	151,266	0.39
Not specified	10,012	0.03
TOTAL	39,069,095	100.0

Source: INEGI, Encuesta Nacional de Empleo, 1999

When most discussions take place about privatization of social security in Mexico (and other developing countries in a similar position), the discussion almost always ignores the coverage. As Table 8 clearly illustrates, only about a third of the work force has social security benefits. Thus, any change in the social security system will by definition leave out a vast majority of workers in Mexico. The vast majority already is in an extremely privatized system—they are on their own!

*Table 8: Working Conditions in Mexico*

<i>Types</i>	<i>Number</i>	<i>%</i>
Without benefits	24,917,705	63.99
Only social security	430,959	1.11
Social security and others	12,243,132	31.44
Others without social security	1,338,198	3.44
Not specified	9,043	0.02
TOTAL	38,939,037	100.00

Source: INEGI, Encuesta Nacional de Empleo, 1999

## **Gender Issues in Retirement under Individual Accounts System**

Since Chile is the only country with enough experience under an individual account system, we will restrict our discussion here only on the Chilean system.

The first gender issue to recognize is that even in 1994 (ILO Survey, 1995), less than 33 percent of women were in the labor force in Chile. Of them, at least 40 percent worked for the informal sector (Arenas de Mesa and Montecinos, 1999). Therefore, a large majority of women already are excluded from our discussion.

The second issue is that under the new system, a person is qualified to get the minimum pension only after working for more than 20 years in the labor force. Only women with postsecondary educations tend to accumulate more than 20 years of work (Cox-Edwards, 1999, Figure 1).

Minimum pension in Chile under the new regime has a problem. It is not indexed to inflation. Thus, over time, the value of the minimum pension erodes. Thus, even when a person (and here, it is more likely to be a woman) is qualified to get the minimum pension, the value of this pension diminishes over time.

Suppose we concentrate on the contributors that qualify under the new system. What kind of wage replacements do they get? Since the new system is at the mercy of the rate of return the fund generates, we have to compare different scenarios of assumed (real) interest rates. Below we reproduce different scenarios for men and women with different levels of education. The first fact is

that the replacement rates are consistently lower for women. This is not surprising given that women have the right to retire at 60, whereas men cannot retire until 65.

*Table 9a: Male Wage Replacement Rate (retiring at 65)*

<i>Return</i>	<i>Incomplete Primary</i>	<i>Incomplete Secondary</i>	<i>Secondary</i>	<i>Post Sec</i>
3%	0.74	0.72	0.67	0.58
5%	1.54	1.44	1.31	1.11

Source: Cox-Edwards (1999)

*Table 9b: Female Wage Replacement Rate (retiring at 60)*

<i>Return</i>	<i>Incomplete Primary</i>	<i>Incomplete Secondary</i>	<i>Secondary</i>	<i>Post Sec</i>
3%	0.49	0.43	0.39	0.43
5%	1.04	0.91	0.77	0.74

Source: Cox-Edwards (1999)

Cox-Edwards (1999) compares the old system and the new system in Chile and comes to the following conclusions:

The new system generates higher pensions for working men and women under the assumption that the system has a rate of return of 5 percent.

If the rate of return is 3 percent, the new system still generates higher pensions for men, but it results in lower pensions for working women than the old system.

Widows are expected to obtain higher pensions under the new system independently of rates of return. The reason is that survivor's pensions, which are driven by the size of accumulated funds, turn out to be a larger fraction of reference salaries than in the old system.

Working women, married to a contributor, are expected to obtain much higher incomes in old age than under the old system.

## Privately Run Pension and Development of Capital Markets

There is a vast amount of literature on the development of financial markets and economic growth (see, Sinha, 2000 for a review). There is less of a consensus on whether a developed set of capital markets is a prerequisite for privatized social security.

Sequencing social security reform is an important aspect of the process. Financial markets, banks, and insurance companies all play a role in developing social security reform processes. Without regulatory reform in the financial markets (bond market and stock market), the money generated in the pension reform does not flow into productive investment (Morandé, 1996).

Vittas (1995) argued eloquently on this issue: "One of the most difficult issues facing any type of reform is how to sequence particular reform measures. Clearly, the answer must differ from country to country and must take into account of local circumstances, not least of which is the political feasibility of particular measures. Economists and specialist advisers often pay lip service to such country-specific factors and then proceed to propose an optimal path of reform that disregards the constraints of local factors." (p. 11)

One of the supposed roles of privatization of pensions is to develop capital markets. The argument goes that privatization of pensions will facilitate capital market development in a number of ways:

Development of the stock market for domestic capital

Development of bond markets

Development of hedging instruments

Development of long-term instruments, such as inflation indexed long bonds and contingent annuities

On the face of it, they are all plausible. However, the way privatized pensions are actually structured in most cases, these developments are dubious. Stock markets for domestic capital can develop only when the domestic pension funds are allowed to invest in them. With the exception of Chile and Bolivia, all

other markets have severe restrictions on investment regimes of the pension funds. Therefore, the purported link is absent in most cases.

Bond market development is also plausible. Again, the restrictions put on the pension fund investments precludes most *private* bonds. For example, on paper, investment of pension funds in Mexico allows for domestic bond investment up to 30 percent of the portfolio. However, the restrictions put on them makes the actual investment less than 5 percent of the portfolio (see, Sinha, 2001, for details). Restrictions on the use of hedging instruments also severely curtail their development. There is some evidence that indexed bonds and contingent annuity markets are developing in Chile. However, the costs of using those instruments are not coming down any time soon. In other markets, these developments are still far into the future. Hence, at present, it is too early to judge them.

### **Privatization of Pension versus Privately Run Pension**

At the first blush, it might seem that it is a matter of semantics, whether we call a system privately run or privatized. But it is not. To illustrate this point, we will consider one example.

*Table 10: Pay As You Go Scheme*

<i>Generation</i>	<i>G1</i>	<i>G2</i>	<i>G3</i>	<i>G4</i>
Time t1	+\$1	-\$1		
Time t2		+\$1	-\$1	
Time t3			+\$1	-\$1
Time t4				+\$1

Consider the model depicted in Table 10. Each generation lives for two periods (young and old). The initial generation (G1) is old at time t1. They receive \$1 per head by taxing generation G2 at time t1. Similarly, G2 receives \$1 by taxing G3 in t2. G3, in turn, gets \$1 in t3 by taxing G4. This process continues indefinitely.

Let us now consider two systems: Pay as You Go and a Switch to Privatized System. We will consider the outcomes in turn.

Pay as You Go: It is easy to see that each generation (except the generation G1) pays \$1 in one period and gets \$1 in the following period. For example generation G2 pays \$1 in t1 and gets \$1 in t2. Therefore, the rate of return is zero.

Privatized scheme: Let us assume that the investors are only allowed to invest in bonds under a privatized individual account system. Let us suppose that the system starts at t2. Suppose the rate of return on the bond is 5 percent. It might seem that the individuals in generation G3 would now get \$1.05 in period t3 rather than \$1 in the pay as you go regime. Note that the \$1 that is owed to G2 has to be paid from somewhere. Suppose that the government pays G2 by selling bonds in t2. The only way the government can sell the bonds is to offer a market interest rate of 5 percent. In other words, the government owes \$1.05 in t3.

If the government simply wants to keep the principal of the loan at \$1, it has to pay for the interest payment in t3. If this 5 cents ( $\$0.05 = \$1.05 - \$1.00$ ) is to be paid for by taxes, it is likely to tax the younger generation. Thus, the net gain of G3 would be \$1.05 (from bond holding) minus \$0.05 (from tax payment). Thus, once the interest cost (through taxes) is included, G3 does not gain anything from the new privatized system.

Once the government has borrowed that \$1, private accounts do not generate any additional national savings. The \$1 extra in private accounts is exactly offset by \$1 extra borrowed by the government. With no added savings at the national level, there is no additional capital formation and therefore no increased wealth for future generations. In future years, nobody in the society will have more income than they would under a pay-as-you-go-system.

The result can be worse for the retired old. If the taxes are paid (at least in part) by the old, they will be worse off. Instead, if the benefits are cut, the retired generation will be worse off as well.

There is one way of making future generations are better off by privatization. Suppose young people direct their \$1 contribution to privatized individual accounts. The \$1 hole is now "financed" in two parts. The government cuts the benefits of the current old generation by 50 cents and imposes an additional tax of 50 cents to the current young generation. This means no new borrowing is necessary to finance anything else in the future. Future generations will be able to enjoy the 5 percent without offsetting taxes.

Of course, there is no free lunch. The above process will make the current old generation worse off. They will see their benefits dwindle by 50 cents. In addition, even though the current young people will get a 5 percent rate of return on their investment, they will also pay an additional tax of 50 cents.

The essential nature of this argument does not change if we have other forms of financing schemes. For example, if all generations hold diversified portfolios (with bonds and stocks), it does not alter the conclusion. The main insight is that higher rates of return for stocks also have higher risk.

In summary, privatization of accounts by itself does not have any effect on the economy as a whole. Benefits from privatization only comes from raising taxes or cutting benefits (or both), which might then be used to raise national saving.

This way changing the focus of the problem has led some researchers to radically different policy prescriptions. Cutler (1999) says, "Rather than focusing so heavily on whether we should have private accounts or not, the better question to ask is whether we should have a tax increase or cut in government spending that can be used to increase national saving....[T]here is no reason why this additional saving need be done through social security. One could just as easily raise nonsocial security taxes and cut nonsocial security spending and build up the same surplus." [p. 127-128]

### **What has Happened in Latin America**

There are two types of pay-as-you-go systems. One is a simple tax transfer scheme. In this scheme, a government agency is charged with the responsibility of collecting taxes from workers and making transfer payments to the retirees. In the United States, the Social Security Administration is an example of such an agency.

Another pay-as-you-go system is one in which the government uses contributions (taxes) from workers to buy government bonds. The government budget agency then uses the proceeds of the bond sale to pay off bonds it issued earlier. These bond-financed repayments constitute the social security benefits of current retirees: the social security system bought the maturing bonds using past contributions. The returns on the currently issued bonds will constitute the social security benefits of future retirees.

The government budget agency will pay these returns by issuing new bonds to the social security agency, the agency will buy them using the contributions of future workers, and so on. We will call the scheme a bond transfer program. Under this scheme, if the social security agency wishes to pay benefits that are larger than the bond returns then it will have to ask the government budget agency for funds it can use to make supplemental transfers to retirees.

The budget agency will obtain these funds by selling more new bonds each year than it needs to obtain the funds necessary to pay off its maturing bonds. On the other hand, suppose the social security agency plans on paying benefits that are smaller than the bond returns. Then it can ask the government to levy taxes on retired people that are equal to the difference between the bond returns and the desired benefits. The budget agency can use this tax revenue to reduce the quantity of new bonds it needs to issue to finance current social security benefits.

In economic terms, there is no fundamental difference between a tax transfer pay-as-you-go social security scheme and a bond transfer, pay-as-you-go social security scheme. In a bond-transfer scheme, the bond issue posits an illusion of asset-creation. But, the sole purpose of the bonds is to engineer a transfer payment to the retirees. In a practical sense, benefits of the current retirees come from the contributions of current workers.

To understand the equivalence, it is important to remember that a government bond is simply a promise by the government to make a payment in the future. A government promise to make a payment, to pay off a bond is not fundamentally different from a government promise to make a payment for social security benefits.

If the government requires you to buy bonds and promises you future payments to retire the bonds, then it is not doing anything essentially different from requiring you to pay taxes and promising you a future transfer payment.

In many countries (such as Mexico), a transition from tax transfer to bond transfer has been made. This process, by itself, does not mean a full funding. While a switch of this type may have some economic benefits, these benefits are likely to be considerably smaller than the benefits produced by a genuine switch to a fully funded social security system.

How do we distinguish between the pay-as-you-go system and fully funded systems when both are bond-based?

One source of confusion in distinguishing pay-as-you-go systems from fully funded systems is the fact that it is possible, under either system, for social security contributions to be used to purchase financial assets including government bonds. Under a bond transfer scheme, contributions are used to purchase financial assets, but these assets are government bonds. Under a fully funded system, social security contributions are always used to purchase assets, some of which may also be government bonds.

When both types of systems purchase government bonds, an important distinction between them involves the question of why the government bonds are being issued—for what purpose the proceeds of the bond sales are being used.

Under a pay-as-you-go system, when bonds are purchased with current social security contributions, the sale proceeds are used to refinance bonds that were originally issued to pay social security benefits. The existence of the social security system provides the only reason the government needs to issue the new bonds, and it provided the only reason the government needed to issue the old bonds.

In contrast, under a fully funded system, the government bonds that the social security system purchases were issued for some other purpose. For example, the bonds could have been issued to finance a current government project or to refinance bonds that were originally issued to finance a past project. The government does not use the proceeds of these bond sales to refinance bonds that were issued to pay social security benefits, and the bonds would have been issued even in the absence of a social security system.

The distinction is important. The key feature that distinguishes a pay-as-you-go from a fully funded system is the source of the current retired people's benefits: part of the current workers income vs. the return on the current retirees' own assets.

What has happened in Latin America? In many countries, governments are running a bond financed scheme rather than a tax financed scheme to honor the debt of the existing retirees who were promised benefits under the old pay-as-you-go scheme. In Chile, government ran huge budget surplus (to the tune of 5 percent of GDP) to finance the pre-existing retirees. This is exactly the kind of process Cutler (above) mentions. In some cases, the past promise to pay the existing retirees does not amount to much money because the number of beneficiaries is small and inflation has greatly diminished their claim in real terms. The bottom line: In the context of pension, if it looks like privatization, and if it quacks like privatization, it may *still* not be privatization.

### Management Fees

*Table 11: Administrative Costs of Public Systems as a Percentage of Expenditure*

<i>Latin America</i>		<i>OECD</i>	
Argentina	2.3	Australia	1.22
Bolivia	21.39	Canada	2.8
Chile	8	France	4.18
Colombia	81.8	Germany	2.86
El Salvador	33.4	Italy	2.2
Mexico	23.55	Japan	1.79
Peru	130.98	Spain	2.81
Uruguay	6.51	Switzerland	3.04
		United Kingdom	3.1
		United States	3.28

Source: Mitchell (1996)

Table 11 above provides estimates of the cost of running the system of public pension plans (that is, a pay-as-you-go system) in different countries during the 1980s. It contrasts the systems in the developed countries against the countries of Latin America undertaking the reforms. The exact figures are not very important here. We simply note that the cost in Latin America was five to 100 times higher! In this sense, whatever we might argue against the high cost of running the new system of individual accounts, it is still likely to be less expensive than the earlier publicly run regime in Latin America.

*Table 12: Comparison of Charges on Pension Funds in Latin America*

<i>Country</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>
Argentina	7.5	3.45	0.91	2.54	33.87	2.66
Bolivia	10	3	2	1	10.00	0.53
Chile	10	2.94	0.64	2.3	23.00	2.08
Colombia	10	3.49	1.87	1.62	16.20	1.63
El Salvador	4.5	3.5	1.15	1.98	44.00	
Mexico	6.5	4.42	2.5	1.92	29.54	1.37
Peru	8	3.72	1.38	2.34	29.25	2.35
Uruguay	7.5	2.62	0.57	2.05	27.33	2.06

Sources: Queisser (1998, Tables 2.1 and 4.4) and Valdes-Prieto (1999a, Cuadro 1)

- Notes:
- A = contribution as a percentage of wages
  - B = total charges (including commissions and insurance premium) in percentage of wages
  - C = insurance premium in percentage of wages
  - D = commission (B minus C)
  - E = commission as a percentage of contribution (D divided by A in percent)
  - F = commission reported in Valdes-Prieto (1999a, Cuadro 1)

Note: El Salvador figures are my own calculations. It should be noted that contribution is set to increase to 10 percent of wages.

Management fees across the countries in Latin American privatized pensions systems are provided in table 12. The actual commission (excluding the insurance premiums) is reported in column D (as reported as a percentage of wages). In column E, the same figures are expressed as a percentage contribution. It shows that commissions are extremely high compared with most public systems.

There seems to be lots of confusion about how commissions are reported by different researchers. Thus, in the same table, column F reports commissions quoted in Valdes-Prieto. These figures do not correspond to the figures in column D. Given that D and F are measuring the same thing, they should be *exactly* the same. Thus, even among researchers, there is much confusion about how commissions should be measured.

## Reporting of Charges

In all of Latin America, companies charge management fees in three different ways:

- Charge on contribution,
- Charge on balance, and
- Charge on rate of return

Charges on contribution apply to contributions made by the individuals. For example, in Mexico, most of the AFOREs charge on the contribution.

Thus, if a person earns 1,000 pesos a month in Mexico, the actual contribution will be 6.5 percent of 1,000 pesos, or 65 pesos. Hence, the charges in some cases will be a straight percentage of 65 pesos. Out of the 17 AFOREs started in 1997, 15 charge on the flow of wages. In fact, eight of them charge only on the wages and nothing else. How much do they actually charge? The charges are always expressed as a percentage of wages. Thus, a company that charges 1.5 percent would charge 15 pesos (1.5 percent of 1,000 pesos). If we express the charges as a percentage of contribution, it will amount to 23 percent (15 pesos out of 65 peso contributed).

In a survey, we found that most people were unaware of how much they actually have to pay in Mexico (see Sinha and Benedict, 1999). This is a very important issue. For example, if we compare the final balance in the account, it is 23 percent less with the management fees than without it.

Some researchers have argued that given that the contributions go in tax-free (that is, when a person contributes 65 pesos, it goes into the system as pre-tax contribution), charges are merely substituting taxes. This view muddles the issue. The government uses taxes, whereas charges (or management fees) go into private hands.

Regardless of the performance of the fund, charges apply. What incentives do these companies have to provide the affiliates with high rates of return? The only recourse for the affiliates is to change funds.

Charges on balance apply to the money in the account as a whole. Charges on balance can be a deceptively small number where, in reality, they amount to a large sum. For example, suppose charges are 1 percent on the balance. Let us suppose a wage growth rate of zero percent, a (real) interest rate of 4 percent, and a working life of 40 years. This 1 percent is equivalent to a 20 percent charge on contribution!

The intuition behind the comparison is the following. Suppose a fund with charges on the balance has a 4 percent rate of return (before the charge). This is approximately equivalent to a 3 percent real rate of return (after charge), assuming one percent charge on the balance. Thus, the accumulated balance after 40 years with and without charges would be approximately equivalent to comparing two funds that pay 3 percent and 4 percent respectively. The magic of compounding generates the 20 percent difference in outcome after 40 years.

Diamond (1999) reports some generic calculations on charges. He finds these calculations so important that he reproduces the entire set of calculated values. He comes to the following striking conclusion (in the context of the United States): "Thus, privately organized accounts are likely to deliver accumulations at retirement that are at least 10-15 percent lower than could be delivered by government-organized accounts, and quite possibly even lower." (Diamond, 1999, p.23)

### **Magic of Reporting**

How charges are reported is extremely important. Consider the example of Chile. When we consider fees as a percentage of salary over time, we see that it is falling after a short initial rise. It was more or less stable over 1990-97. Then, it started to fall again (see Figure 4). Some researchers have taken this evidence on face value to conclude that over time, management fees in Chile are indeed falling.

A completely different picture emerges when we consider fees as a percentage of average contribution (see Figure 5). After a short decline, the fees rose steadily until 1996. They then took a small turn downward. An explanation for why we would expect the management fees to rise is discussed in Sinha and Sharma (2001).

## **Applicability of the Results to Other Countries**

Debates in the developed and other developing countries seem to take one point as given: Privatization of pensions is a fact of life in Latin America. As we argued above, it is not. Second, the experiment in Latin America is an unqualified success. We argued that it is not. Third, given that it has been a success, we can apply the same medicine for all the other countries. We cannot. Why not?

### **Political Consideration**

Suppose we assume that the Chilean experiment has been a success. The condition under which it was implemented (under a dictatorship) does not exist elsewhere. Thus, when we try to repeat the experiment under democratic regimes, the results may be very different. Consequently, the outcome of these experiments elsewhere would be different.

### **Demographic Consideration**

In many ex-Soviet Union countries, privatization of pension systems in the manner of Latin American countries is being tried. But the demographics in these countries are very different. In most Latin American countries, the population pyramid has a very thin tip — the proportion of older population is small. Thus, the commitment of the society under the pay-as-you-go system is low. The worker-to-retiree ratio is high. Therefore, it is much easier to tax workers (the rate per worker would be lower). This luxury is absent in ex-Soviet Union countries. Most of these countries have population pyramids with a much fatter tip — much like the more industrialized countries of the West. Thus, what might work for a youthful population structure could face a problem with an older population structure.

### **G7 Learning from Latin America**

There are two huge problems that plague most developing countries: a large informal sector and underdeveloped capital markets. For most developed countries, neither one is a problem. Furthermore, the commitment to the existing retirees made under the pay-as-you-go regime in the developed countries is much higher. Thus, the experience of Latin America tells us precious little on how to reform social security in the developed ones.

## **Political Economy of the Reform Process**

How did the reform process in the developing world come about? How are the processes governed in developed countries?

### **Influence of the International Organizations in Developing Countries**

There is little doubt that the World Bank (along with the International Monetary Fund and Inter-American Development Bank) had an enormous impact on the restructuring and setting up of multi-pillar systems around the world. In particular, it had a big impact on pension reform policy in Latin America. The result can be seen in the proportion of countries that have reformed their pension systems in different regions in the world. For example, Schwarz and Demirgüç-Kunt (1999) provide a map of the world indicating different regions where major and minor reforms in the existing social security were undertaken. The Latin American region shows the biggest rate of change towards privatization (along with Eastern European countries).

Why was the World Bank involved in restructuring the pension systems? According to Holzmann (1999), there were several reasons:

(1) With the World Bank involvement in restructuring the government loan rescheduling, it began to help set policies that are consistent with feasible repayment of loans. Repayment of loans directly affects the government budget. So does the pay-as-you-go social security scheme. Therefore, it was essential to get the government budgets in these countries in order.

(2) The collapse of the Soviet Union left a big vacuum in an entire range of countries in Eastern Europe. The World Bank stepped in to help these governments to rebuild their activities. In most Eastern European countries, the old system of pension payment collapsed. The World Bank involvement came naturally as a part of general restructuring.

Robert J. Myers, the past chief actuary of the Social Security Administration of the United States (in the Record of the Society of Actuaries, 1997), argues that there is coercion on the part of the World Bank. He believes that the coercion to change from a pay-as-you-go to a fully funded system is going to be counterproductive. "I predict that in five to 10 years, many of these countries that are being coerced by the World Bank are going to be in one

horrible mess. I don't think that the World Bank is planning it that way, but I just think it's going to work out that way."

This view was strongly opposed by Dimitri Vittas of the World Bank (in the Record of the Society of Actuaries, 1997). He declared, "In the World Bank, we're not in the business of coercing anyone. We don't have that much power. People exaggerate and even see us as providers of finance. I made the point that we are a marginal lender; we're not the main lender in any of these countries, even the poor countries. We are not in the business of coercing any person. If we were, there would have been far more uniformity in the programs, and there isn't."

### **Influence of American Think Tanks**

Conservative think tanks in the United States exerted a strong influence on the policymakers in Washington (see Belan and Wadden, 2000, for an interesting analysis). Most of this stems from the ideological view about the "freedom of choice."

Conservative think tanks promote the idea that whatever government does, it does badly. In particular, government intervention in how people should retire is a bad idea. They also espouse the position that the so-called continental European concept of Bismarckian pay-as-you-go social security has failed. Moreover, for them, the free market solution of Chile has triumphed. There is a fundamental philosophical difference between two extreme policies: interventionist approach and the "free to choose" approach. Milton Friedman has long championed the free market approach in all economic aspects of life. Friedman (1999) extends it to social security explicitly. His argument is devastatingly simple: "...the fraction of a person's income that is reasonable for him or her to set aside for retirement depends on that person's circumstances and values. It makes no more sense to specify a minimum fraction for all people than to mandate a minimum fraction of income that must be spent on housing or transportation. Our general presumption is that individuals can best judge for themselves how to use their resources."

According to this view, there is no room for government to meddle into the "free to choose" option of retirement. To put Friedman's view into the Three-Pillar Model of the World Bank, we do not need the first or the second pillar. The third pillar is the only socially desirable pillar. Given that it is politically

difficult to suddenly wipe the slate clean and start all over from scratch (for most countries), this is mostly a moot point.

Friedman recognizes that quite clearly: "I have no illusions about the political feasibility of moving to a strictly voluntary system. The tyranny of status quo, and the vested interest that have been created, are too strong." For all practical purposes, we can rule out the Friedman plan. In a notional way, it existed before the emergence of the pay-as-you-go system before the turn of the last century.

In a curious way, most supporters of "privatized" social security shy away from Friedman's position. The basic idea whether funds should be private or public is embroiled in a fundamental debate of individual choice and liberty. If the economic idea of choice is taken to its logical extreme, Friedman's view would prevail.

In the case of social security, private choice along the line of Friedman is ruled out without much discussion. Feldstein (1998) discusses two reasons why participation in the pension schemes (whether the first or the second pillar) should be compulsory: "First, some individuals are too short-sighted to provide for their own retirement. A society that made no provision for helping those who had no resources when they were old to work would leave them to private charity and a standard of living that many in society would regard as unacceptably low.

"Second, the alternative of a means tested program for the aged might encourage some lower income individuals to make no provision for their old age deliberately; knowing that they would receive the means-tested amount. For individuals with low enough income, that combination might provide higher lifetime utility than saving during their working years. A mandatory system of individual saving would prevent poverty in old age while avoiding the temptation to 'game' the system that way."

Feldstein (1998) does not have any problem with the "coercive" nature of compulsory saving, but in the same paper, he rules out the possibility of government investing on behalf of the individuals on the ground that it infringes upon individual liberty. There is an economic inconsistency in these two arguments.

Friedman, on the other hand, is very consistent. He objects to Feldstein by the following argument. He asserts, "I find it hard to justify requiring 100 percent of the people to adopt a government-prescribed straightjacket to avoid encouraging a few low income individuals to make no provision for their old age deliberately, knowing that they would receive the means-tested amount. I suspect that, in a voluntary system, many fewer people would qualify for the means-tested amount from imprudence or deliberation than from misfortune."

Some of these ideas have been packaged neatly into the privatization of social security. In 2001, the Republican majority in the Congress set up a bipartisan committee to look into privatization of Social Security in the United States (see the Appendix for the composition of the committee). The committee of 16 members consists of individuals well known for their sympathetic views (at least a majority of them) towards pension privatization. Thus, it is easy to predict what the conclusion the committee is going to reach.

## Conclusions

There are two ways of learning from the experience of others—what to do and what *not* to do. Developed countries contemplating the introduction of individual accounts need to keep following issues in perspective:

First, individual freedom should not be confused with choice of affiliates of pension funds (as opposed to a pay-as-you-go social security system). If workers are forced to contribute to a system (*any* system), it affects their individual freedom.

Second, demographic situations in the developed countries are very different from (most) of the developing countries. The population aging in the developed countries is at a much more advanced state (and generally is aging less rapidly than the developing countries). On the other hand, in the developing countries, the population (in most countries) is much younger (although aging much more rapidly).

Third, the main problem of a social security system in the developing countries is that the majority of the workforce (in most countries) lives outside of a formal market economy. Therefore, they are outside of the scope of *any* social security system (whether pay-as-you-go or a system with individual accounts).

This problem is particularly severe for women in the workforce in most developing countries. They tend to work more often in the informal sector.

Fourth, the political situations in most developed countries do not compare with the political situations in most developing countries. Most developed countries operate under democracies. With higher proportions of retired and older workers, it is difficult to change the existing situation (as they will veto any such change). In many developed countries, there is either no functioning democracy, or the countries face high external pressure beyond their control (e.g., from some international institutions).

Fifth, just because the US stock market has produced higher long-term rates of return, it does not follow that it is the same everywhere else. For example, Goetzmann and Jorion (1999) have shown that the long-term rates of return in the stock markets in the rest of the world is around 3 percent per year (as opposed to 6 percent per year in the United States).

Sixth, even if the stock market produces a better rate of return, it does not follow that the affiliates of the pension fund, even with 100 percent investment in stocks, will get the same rate of return. The reason is, of course, the ubiquitous management fees that can eat up much (if not all) of the gain. This is certainly the case for many countries in Latin America.

Seventh, countries with large, entrenched, pay-as-you-go systems have to honor the past promises made. We have shown that if these promises are honored fully, there is little scope for investment in a macroeconomic sense with a system of individual accounts.

Thus, the so-called revolution in pension privatization in Latin America does not offer many concrete positive lessons (as to what to do), but it does offer negative lessons (as to what *not* to do).

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## **Appendix: Social Security Commission Formed by the Bill HR 16 in the United States.**

The Commission is co-chaired by:

- (1) Retired Democratic Sen. Daniel Patrick Moynihan
- (2) Richard Parsons, co-chief operating officer of AOL Time Warner Inc.

Seven Republicans on the panel are:

- (1) Former Bush campaign aide John Cogan of Stanford University's Hoover Institution
- (2) Robert Deposada, Hispanic Business Roundtable executive director (De Posada was replaced by Mario Rodriguez of the same Hispanic Business Roundtable)
- (3) Former Rep. Bill Frenzel (R-Minn.)
- (4) Gwendolyn King, Social Security commissioner under President Ronald Reagan
- (5) Gerry Parsky, former assistant treasury secretary under President Gerald Ford
- (6) Thomas Saving, director of Texas A&M University's Private Enterprise Research Center and Social Security trustee
- (7) Carolyn L. Weaver, resident scholar of the American Enterprise Institute, a conservative Washington think tank (She also resigned, but her replacement was not known on June 15).

Seven Democratic members are:

- (1) Sam Beard, former aide to Sen. Robert F. Kennedy (D-N.Y.) and founder of Economic Security 2000, a nonprofit Social Security overhaul group
- (2) Estelle James, World Bank consultant
- (3) Robert Johnson, Black Entertainment Television chairman
- (4) Robert Pozen of Fidelity Investments
- (5) Olivia Mitchel of the University of Pennsylvania's Wharton School
- (6) Former Rep. Tim Penny of Minnesota, a co-director of the Humphrey Institute Policy Forum at the University of Minnesota
- (7) Fidel Vargas, Reliant Equity Investors vice president.

Note: The Commission has set up a Web site at <http://www.commtostrengthensocsec.gov/>