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# **Social Security Issues And Elements of Reform**

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**Social Security Issues  
and Elements of Reform**

by

**Nguyen X. Nguyen**

The author works in the Office of the Vice President for Human Resources Development and Operations Policy. The views represented in this paper are those of the author and are not to be interpreted as necessarily indicating the position of the Bank or its Executive Board. This paper would not have materialized had it not benefitted from the constant support and guidance of George Psacharopoulos. I am also indebted to many World Bank staff members, in particular, Estelle James, Diane Steele, Johanna Coenen, Chad Leechor, and Jose Sokol for their comments.

## **Abstract**

This paper documents the main problems many social security systems are currently facing, as well as various elements for their reform suggested in the literature.

The current problems are classified into inadequate and inequitable protection, economic and political environments, demographic patterns, labor patterns, administration, other inefficiencies, financial management, and benefits inflation.

The paper suggests various constraints and general principles of reform; and proposes a menu of elements of reform that includes fostering private sector and non-governmental organizations; reducing health care costs, administrative costs, benefit costs; enhancing coverage and financing (financing short-term and long-term benefits); and improving portfolio management.

The suggestions are primarily intended to generate further discussions on this important topic. Moreover, recognizing that unique conditions require corresponding remedies, the list of reform elements enumerated in this paper is meant to be neither exhaustive nor definite. Rather, it is to suggest a menu of reform options, a frame of reference or, simply, a practical starting point for policy makers who, in the final analysis, will devise a plan of action adaptable to the characteristics of the individual economy in question.



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## I. INTRODUCTION

Over one billion people around the world suffer from acute and chronic deprivation every day for various reasons, including the loss of the family's income. The loss could be permanent as in the cases of lasting injury or old-age, or it could be temporary such as unemployment, or short-term disability including maternity. For people in the developing countries, this disruption of income could yield grave consequences, given the existing low standards of living (World Bank, 1986, 1990; Cornia et al., 1987; Dreze and Sen, 1989; UNICEF, 1989). For people in the developed countries, however, the loss, although also common, is relatively less unpleasant (Danziger and Weinberg, 1986; Sawhill, 1988; Atkinson, 1989).

Social security programs account for an important part of that difference. In most developed countries, governments provide or support pensions, unemployment benefits, family income support, education, health services, and facilities for the disabled (Barr, 1987; Atkinson, 1989). The level and extent of coverage may vary across economies, but, in general the society attempts to help the least fortunate.

Public social security systems, common in the developed world and the Latin American and the Caribbean region, are rare in many developing countries, especially those in Africa, the Middle-East, and Asia.<sup>1</sup> Unemployment and pension benefits cover only a small portion of the populace, mainly, the workers in the formal sector (Midgley, 1984; McGreevey, 1990; Mesa-Lago, 1991a). State support for health care is weak, with resources disproportionately directed toward curative rather than preventive care (Halstead et al., 1985; Cadwell, 1986; World Bank, 1993d). State support for education is not much different either, with varying degrees of educational efficiency (Schultz, 1988; Psacharopoulos, 1993; Psacharopoulos and Nguyen, 1991).

Grave incidence of poverty and deprivation, a low degree of development of formal social security systems, resource constraints, inadequate institutions to provide social security benefits, the fragile economic conditions which characterize economies during transition or adjustment, and the powerlessness of the most vulnerable populace make the issue of providing adequate social security in the developing countries both urgent and difficult.<sup>2</sup>

Coverage is, however, only one side of the problem. Many social security systems are burdened with heavy financial difficulties (McGreevey, 1990). In particular, countries with relatively more mature social security systems are facing greater financial challenges (Mesa-Lago, 1991b; Lloyd-Sherlock, 1992). This is particularly burdensome on developing countries already short on resources, or on economies in the midst of adjustment or transformation. Even in most industrialized countries, there is concern that the present social programs cannot be maintained at their current levels but must be reformed.

Social security commands a large proportion of public sector revenues and expenditures in many countries (Grosh, 1990). The sheer size of these systems implies two major consequences for public finance. First, the reserve funds are an attractive source for financing government deficits rather than being invested to further capital accumulation. Second, to the extent that the funds are mismanaged, financial insolvency and crisis will follow. Many countries already find themselves in this muddle, and have resorted to increasing taxes, sometimes to excessive levels. In addition, an aging population, slow economic growth, and benefits inflation are all pushing many systems toward bankruptcy, thereby contributing to the country's fiscal burden and macroeconomic instability.

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<sup>1</sup>In these regions, the old have long been cared for by the extended families, community and other informal arrangements. As will be presented later, with the unavoidable demographic, socio and economic shifts, the challenge these countries face is how to efficiently involve more the formal systems of social insurance and assistance without accelerating the decline of the informal systems.

<sup>2</sup>In brief, social security in the developing countries is limited due to both supply and demand factors. Resource constraints and lack of effective administrative institutions restrict the supply side. Effective demand is limited by the absence of political clout of the populace most in need of coverage.

The need for system reform is, consequently, ever more pressing. The principal objectives of a reform program are twofold: increase coverage and ensure solvency. The elements of reform, however, would depend on the specific conditions of each country. As a general rule of thumb, economies with limited formal social security systems (as found in many countries in Africa, Asia) would focus on strengthening coverage. Those with more mature systems (as found in the developed and the Latin American and the Caribbean regions) would highlight the solvency issue. Many formerly socialist economies in transition, unfortunately, have the daunting task of confronting both problems.

This paper defines social security, identifies the main problems currently faced by many social security systems, and documents various elements of reform suggested in the literature. The suggestions are primarily intended to generate further discussions on this important topic. Moreover, recognizing that unique conditions require corresponding remedies, the list of reform elements enumerated in this paper is meant to be neither exhaustive nor definite. Rather, it is to suggest a menu of reform options, a frame of reference or, simply, a practical starting point for policy makers who, in the final analysis, will devise a plan of action adaptable to the characteristics of the individual economy in question.

## II. DEFINITION OF SOCIAL SECURITY AND SOCIAL SAFETY NET

In its broadest sense, social security is the response, by social means, to an aspiration for security, for confidence that one's quality of life would not be totally eroded by any social or economic eventuality.<sup>3,4</sup> More practically, social security means the protection which society provides for its members against economic and social distress caused by loss or substantial reduction of earnings resulting from illness, maternity, injury, unemployment, old age, and death.<sup>5</sup>

Defining social security by objectives (as done above) is broader than the common definition by instruments whereby social security is described in terms of specific public programs involving social assistance, social insurance and redistribution (Kotlikoff, 1987; Atkinson, 1989).<sup>6,7</sup>

For practical purposes, however, a working definition which identifies the main components of a social security system would be more convenient. A typical social security program provides five types of benefits (Puffert, 1988). These benefits, in order of most common usage, are:

1. Work-injury benefits (earnings replacement and medical expenses).
2. Pensions for old-age, disability, and death of the family's main income earner.

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<sup>3</sup>The term "social security" should be clarified because of its ambiguity in usage. In the U.S., it means retirement pensions; in the United Kingdom, it refers to the entire cash benefit system; and in mainland Europe it refers to all cash benefits plus health care in accordance with the usage of the International Labour Organisation (ILO, 1984b). This paper adopts the ILO usage. However, the largest component of most social security systems is pensions.

<sup>4</sup>By restricting to social means, one is mainly concerned with measures which include redistribution, direct intervention, and possibly alterations in market functioning. These measures, however, are not the sole responsibility of the state; they can also be rendered by the community or the family.

<sup>5</sup>In essence, the system is a broad-scale risk sharing arrangement among members of a community (society).

<sup>6</sup>Several objectives of social security include: to prevent deprivation and adversity (Burgess and Stern, 1989), to insure against social risks, to provide a social safety net, to achieve better targeting of limited benefits to those most in need, and to achieve reforms within the context of a more limited role for the state (William McGreevey, May 2, 1990, Office Memorandum, the World Bank).

<sup>7</sup>There are sound arguments for adopting the definition by objectives (Burgess and Stern, 1989). First, many public instruments, so familiar to the developed countries, do not exist in the developing world; therefore, a definition based on these instruments would be too narrow. Second, focusing on public programs would undermine the role of community and family support. Third, even within the sphere of public action, the instruments of the developed economies might not be applicable to the developing economies.

3. Sickness and maternity cash benefits, and medical care.

These are considered social insurance benefits. Social assistance benefits include:

4. Family allowances — benefits for raising children — which are generally available in the industrialized countries, countries in Africa with a French colonial heritage, and much of South America.
5. Partial earnings replacement during short spells of unemployment is common in the industrialized countries but not elsewhere.

In conjunction with providing social security, which is more or less a formal and permanent arrangement, many countries establish temporary proactive employment and income generating activities (transfers, retraining, public works) as part of their social safety nets. These programs are intended to provide relief to the vulnerable populations following major shocks (such as transformation of a centrally planned economy into a market-based economy, major macroeconomic adjustments, natural disasters, etc.). The importance of the social safety net topic deserves a separate, hence, more elaborate treatment.<sup>8</sup> Most of the components of a social safety net, nevertheless, can also be dealt with within the domain of social security.

### III. CURRENT ISSUES

#### 1. Inadequate and Inequitable Protection

Despite remarkable progress in expanding coverage in the past decades, the existing systems still exclude many poor people, not to mention that these systems sometimes serve the more affluent at the expense

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<sup>8</sup>The term "social safety net" has been used in different ways, from describing a comprehensive model to a minimal and temporary system.

The minimal and temporary model has been advanced in response to the plight of the poor affected by structural adjustment (UNICEF, 1987), or by the transition toward a market economy (Development Committee Meeting, 1993). This model calls for maintaining and targeting social services while cutting other government expenditures over the adjustment period. Sectoral policies (such as retraining and income generating activities) to protect the poor and unemployed would be encouraged. Chile, Ghana, and Kenya created job programs to provide work and pay for many poor people who were laid off in the course of adjustment efforts. Specifically, countries are advised to direct nutrition, basic medical care, and primary education programs to the most vulnerable populace.

At the other end, the comprehensive model comprises a set of measures to help protect vulnerable groups such as workers at risk of unemployment, the unemployed, pensioners, single parent families, children, etc. The system would include: 1) income support such as unemployment benefits, family allowances, and pensions; 2) employment services; 3) proactive employment and income generating activities such as training and small business assistance; and 4) funding and provision of health care (Ralph Harbison, April 18, 1990, Office Memorandum, the World Bank; World Bank, 1990; World Bank, 1993b).

In between the two extreme definitions, the term can take many forms. For instance, according to India's Fifth Five-Year Plan (1980), the social safety net, called the Minimum Needs Program, guarantees a core of 12 essential social services which include primary and adult education, rural health, rural water supply and sanitation, rural roads, rural electrification and housing, domestic cooking energy, urban slum improvement, nutrition and food security for poor families, employment and income-generating programs.

Although the term has been used in different ways, there is general agreement about its main components: income support, employment services such as job opening information and job counseling, programs to enhance labor quality such as retraining, direct employment such as public works, and health services (Barr, 1992). This definition overlaps a great deal with the ILO's definition of social security used in this paper.

In fact, the relationship between the usage of the terms "social security" and "social safety net" in this paper is:

Social Security = Pensions + Social Safety Net - Proactive employment and income generating activities.

of the poorest.<sup>9,10</sup>

In Asia, the Middle East and North Africa, and the Sub-Saharan Africa, for instance, substantial gaps in social security coverage remain. For the aged and vulnerable populations, the support of the traditional family and the immediate community remains the principal means for filling in the void of a broader-scale risk pooling arrangement. Industrialization and modernization, which induce migration and weakening of the system of extended family support, has put increasing strain on the traditional system of support.

In India, for example, the formal sector employees (mostly public servants) are covered by sickness, maternity, pension and survivor benefits, and even, subsidized housing. Workers in the unorganized sector, who constitute 90 percent of earners, do not have any social insurance or social assistance (Guhan, 1988). The state-level pensions, designed for the aged below the poverty line, cover probably only one-fifth of that population.

Even in economies with more advanced social security systems, such as those in Latin America, inadequate and inequitable protection remains (McGreevey, 1990; Mesa-Lago, 1991a). In many areas, poor people have limited or no access to social insurance, risk sharing, and health care services.<sup>11,12</sup> Only about two-thirds of the population is eligible for coverage. Health care benefits tend to cover the middle-income groups, and pensions are most available to those with higher income (World Bank, 1993b).

## 2. Economic and Political Environments

Economic and political conditions carry grave consequences on the social security systems. By the end of the 1980s, the world economy was in a recession. The negative impacts on many developing countries were severe, prompting governments to undertake strong measures to alleviate their budgetary difficulties. In addition, profound changes in Central and Eastern Europe and in the former Soviet Union compelled these countries to adapt their existing programs to new circumstances.

The slowdown in economic growth shed doubt about the social security systems being able to sustain long-term financial health and undertake benefit improvements. The recession results in higher numbers of unemployed persons, fewer contributors to the programs, and in increasing stress as formerly employed contributors are drawing benefits from social security. Many economies found their hands tied in the wake of this budget imbalance. They fear that increases in taxes and social security contributions would not only be unpopular, but would also lead to economic distortions such as evasion from taxes, and discouragement from work and saving.

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<sup>9</sup>The payroll tax financing mechanism, in the long run, shifts the tax incidence to consumers (this assumes that labor supply is inelastic), many of whom are poor. Therefore, the system (characterized as partial coverage because it generally covers solely the modern sector workers) results in transferring some resources from the poor to the middle class.

<sup>10</sup>Many current systems fail to cover situations of dependency when marriages break up, or situations which arise independently of marriage (ILO, 1984a). Upon divorce, the woman may no longer share in her husband's pension benefits. Moreover, a non-working woman with dependent children who cohabits with a man may have no rights to benefits.

<sup>11</sup>In 1985, for the two poorest groups in Brazil, which accounted for 41 percent of the population, only 18 percent of the heads of households were social security affiliates. These two groups only received 3 percent of the social security benefits and 18 percent of benefits paid out by all social programs (McGreevey, 1990; and World Bank, 1993c).

<sup>12</sup>Health care services offered to rural workers and their families in Brazil, Ecuador, and Mexico, which began in the 1970s, are the exceptions (Mesa-Lago, 1991). Few programs provide services to workers in the growing informal sector (World Bank, 1993c).

In brief, the financial viability of social security institutions in many developing countries is being challenged. Real revenues have declined due to the drop in real wages, open unemployment, expansion of the informal sector, evasion and delay of payment, and growth of public debt. On the other hand, expenditures rose because of accelerating medical costs, increased salaries and benefits, and growing welfare and unemployment outlays.

In the 1980s, almost every Latin American country suffered economic crisis (Lee, 1992). For many, the 1980s is a lost decade.<sup>13</sup> In Panama, the social security funds turned negative, creating a large portion of the budget deficit in the early 1980s. The deficit was 12 percent of GDP by 1989, a contrasting situation to 1982, when social security savings financed nearly one-fifth of public capital spending. In Uruguay, in 1982, the social security system, responsible for 67 percent of the public deficit which reached 18 percent of GDP, was a major factor leading to the country's macroeconomic collapse later that year.

The situation is particularly alarming in the formally socialist economies in the midst of macroeconomic imbalances during the transition. The universal social security approaches (financed mostly by transfers from state-owned enterprises, SOEs) are quickly becoming inappropriate in a market-oriented environment. On the one hand, revenues are short due to increasing bankruptcy and privatization of the SOEs. On the other hand, the systems have to cope with mass unemployment, sharp increases in the cost of living, moral hazard (increased recourse to early retirement and disability benefits), and the lack of administrative capacity to provide assistance to the needy (many programs are run by state-owned enterprises).

### 3. Demographic Patterns

The aging population, driven by declining birth rates and rising life-expectancy, is an unavoidable pressure to social security. Pension is the area most affected by demographic shifts. In the developed countries, the number of persons aged 65 or older will increase far faster than other age groups in proportion to total population (OECD, 1988). In the European Economic Community, one half of the members are experiencing zero or negative population growth. In many developing countries as well, life expectancy at birth is now about 75 years.

In addition, workers (at least in the developed countries at the present) seem to retire earlier (Bureau of the Census, 1989). Three reasons have been suggested to explain this trend: 1) a lowering of the retirement age, 2) technological progress that gives younger workers a comparative advantage, and 3) pension policies that make it economically feasible to retire early.

In the long run, an aging population, will not only tilt the benefit-contribution balance, it will increase overall expenditures because per capita public social spending is much higher for the elderly than for the young. For example, in the OECD countries, per capita public spending is two to four times higher for the elderly than for the young (Maguire, 1987). This is particularly evident for health care (ILO, 1987).

### 4. Labor Patterns

High unemployment is projected to persist, especially in the industrial countries.<sup>14</sup> Unemployment tends to increase outlays for social security while reducing its revenue base.

Most developed countries have some form of early pension program intended to encourage laid-off workers to retire early in order to make room for the younger ones. This job replacement effect has been

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<sup>13</sup>In Mexico, for example, industrial real wages in the beginning of the 1990s are only 60 percent of what they were ten years ago.

<sup>14</sup>The OECD projected that the average OECD unemployment rate will remain above 8 percent for a while (OECD Observer, 1988).

lower than anticipated because of the lack of skills in the younger workers that did not have the benefit of steady employment (Haanes-Olsen, 1989). This group, called the "new poor," is an emerging troublesome trend in the developed countries. They are likely to be net users of rather than net contributors to social security. Another cause of high unemployment (particularly in Western Europe) is the lack of labor mobility partly due to unions and business regulations.<sup>15</sup>

In many formerly socialist economies, early retirement is posing a threat to the financial viability of pension systems.

The situation in developing countries, although different in nature, is also grave. Rapid population growth in the past decades imposes an increasing demand for jobs; some additional 38 million persons will seek employment in developing countries throughout the 1990s every year. Since formal employment creation, in many countries, is expected to fall short of the rise in the labor force, the resulting open unemployment, underemployment, and employment in the informal sector will severely limit efforts to broaden social security coverage in these countries.

## 5. Administration

Inadequate and inefficient administration, in addition to financial constraint and an unsubstantial cash economy, has hindered the broadening of social security coverage in the developing countries. Consequently, the focus, understandably, has been to improve management techniques, data processing, financing, and funds investment.

Administrative costs are high for many countries. In half of the Latin American countries, for instance, they range from 10 percent to 32 percent of total expenditures (McGreevey, 1990; Mesa-Lago, 1991a).<sup>16</sup>

## 6. Other Inefficiencies

Other inefficiencies include: excessive personnel, personnel with lack of administrative experience, high remuneration,<sup>17</sup> overlapping administrative institutions, poor information and accounting, complex legal system, incentives to retire early, and inefficient health care management and provision. The last two deserve some elaboration.

The benefit structure of retirement nurtures some major inefficiencies. First, pension schemes in many countries encourage early retirement (often when the worker is at his/her highest productive years) by providing rich benefits (sometimes 100 percent replacement rate) for time of service regardless of age.<sup>18</sup> Second, high pension benefits usually go to the high income groups even though contributions are capped and fall short of benefit expenses.

The provision of health care is both inefficient and inequitable in many cases. Many countries have dual systems of health care, resulting in duplication of services and bias toward high cost medicine. Many social security systems focus mostly on high-cost medicine which benefits only a few while leaving the provision of basic health services to the poorly financed ministries of health. In addition, cost sharing arrangements with the Ministry of Health to provide services to non-contributing people have been costly

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<sup>15</sup>With the possible exception of the Nordic countries of Denmark, Iceland, Finland, Norway, and Sweden which have a common labor market, in some European countries, a number of jobs are not available to nonunion workers. Many countries have regulations that restrict business operation (such as regulated business hours).

<sup>16</sup>This compares to three to four percent in the institutes in the U.S. and Canada.

<sup>17</sup>In Panama, for example, salaries, the main component of expenditures, account for more than 21 percent of total outlays.

<sup>18</sup>For example, Brazil offered retirement benefits based on time of service regardless of age. Consequently, some workers retire before age 45 (McGreevey, 1990).

to many social security funds.<sup>19</sup>

The social security system does not have a strong built-in mechanism for health care cost containment. There are no effective restraints on demand for health care services, and minimal incentives for providers to moderate their supply of services.

## 7. Financial Management

The financing mechanism of many social security systems contributes to their revenue shortfalls. In Latin America for instance, the insured do not finance more than one-third of benefit costs, leaving the rest to the employers and the state (investment yields are minimal as will be explained later). Employers' evasion and payment delays are widespread; in some countries, they range from 23 to 60 percent. The state becomes the principal debtor.<sup>20</sup>

Adding to the problem, pension funds are used to finance the budget deficit (by being invested in public sector debts yielding low or even negative returns). These funds are also invested in projects with questionable rates of return.<sup>21</sup> This practice, coupled with high inflation, erodes the capital base of the funds.<sup>22</sup> It is fair to recognize that the absence of efficiently functioning financial markets presents a severe constraint on better investment decisions. Pension funds are also used to cross-subsidize health care and other non-contributory systems (for instance, child allowances).

The pay-as-you-go method of financing commonly employed in many systems separates contributions from benefits, hence creates incentives to evade contributions. This is especially acute in the Latin American countries. Most of them began with fully funded systems with initial surpluses in the trust funds (Jimenez and Puffert, 1988). The funds eroded over time mainly due to forced holdings of

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<sup>19</sup>In Panama, for instance, this cross subsidization has contributed to the fund's deficit. By the end of the 1980s, despite a mandatory contribution rate of 18 percent of wages, social security accounts for half of the budget deficit which reached 12 percent of GDP (Lee, 1992).

<sup>20</sup>This poses, yet, another inequity in the economy; some resources are taken from the poor (in terms of general taxes) and transferred (via the state's paying the social security deficit) to the insured who are generally urban workers.

<sup>21</sup>In Latin America, pensions funds have been invested in: 1) loans to the governments, often non-negotiable and not indexed to inflation (which are practically forced loans to cover the budget deficits); 2) personal and mortgage loans (generally not indexed) for the insured people; 3) loans to the maternity-sickness programs to develop their infrastructure and to cover their deficits; 4) administrative building and housing projects (with very low returns); and 5) some low-profit commercial projects such as stores with state subsidized prices, cinemas, sports, etc. In the non-Latin Caribbean, most of the funds are invested in government stocks, bonds, or treasury bills (Mesa-Lago, 1991b). Consequently, in eight countries documented by Mesa-Lago, only three countries reaped positive returns in 1980-87: Chile (13.8 percent), Bahamas (2.7 percent), and Barbados (0.7 percent).

Funds are also used to finance government budget deficits in other parts of the world as well (as in the U.S.). In Malaysia, the Employees Provident Fund was required to invest at least 70 percent of its surplus funds in government securities (94 percent in practice in 1975). In Singapore, on the contrary, the Central Provident Fund was used to develop the housing infrastructure.

<sup>22</sup>In Latin America, six factors responsible for low yields are (Mesa-Lago, 1991b): 1) inflation, 2) lack of portfolio diversification and concentration in government and other low yield instruments, 3) investment in short- and medium-term (instead of long-term) instruments, 4) high proportions of reserves in net-current assets (often unpaid state obligations), 5) government intrusion (in Barbados and Jamaica, for instance, the Ministry of Finance controls investment decisions), and 6) age of the program (the more mature the program, the more benefit demands are placed upon it -- refer to Lloyd-Sherlock, 1992). It should be mentioned had the funds been invested in long-term instruments, the capital base would have been depleted even more due to high inflation unless the real yield is higher for the longer-term instruments than it is for the others.

government bonds, inappropriate investments, and overly rich benefits.<sup>23</sup> Consequently, the schemes are now mostly pay-as-you-go (except, to some extent for Chile and, potentially, Argentina, Colombia, and Peru). With increasing expenditures, many systems had to raise taxes or rely on general revenues.<sup>24</sup>

### 8. Benefits Inflation

While the contributing side is being depleted, the benefits side keeps expanding, both in terms of the richness of the benefit package (driven by political motives) and the number of beneficiaries (driven by economic downturn, labor and demographic patterns).<sup>25</sup>

Benefits such as partial disability pensions, early retirement pensions, length-of-service pensions, sick pay, and additional health care benefits have continuously risen in many countries, creating increasing resource strain on social security systems.

In many countries, the dual problem of benefits that are indexed to inflation or wage increase, and revenues that are not indexed, creates tremendous fiscal hardship in an inflationary environment (Mesa-Lago, 1991a; McGreevey, 1990).

## IV. SOME ELEMENTS OF REFORM

The numerous problems with social security have induced many countries to attempt system reform. The reform programs are designed to increase the solvency, efficiency, and equity of the systems, while expanding coverage to the vulnerable population, often within tight budget constraints. In short, the reforms call for cost effectiveness (i.e., reducing expenditures in many cases) while providing wider and better protection.

Addressing social security reform is one of the most politically difficult undertakings. Yet it is required, for many countries, to stabilize the budget deficit and to restore the long-term viability of their social security systems. Moreover, many reforms are to be carried out while the economy is undergoing various austerity policies. The timing, however, does seem to cooperate; the world economy is projected to come out of the slow growth pattern by the middle of this decade, holding out better prospects for the developing countries (World Bank, 1993a).<sup>26</sup>

It should be emphasized that not every social security system is in financial trouble. In fact, the more recent the system, the more likely it is to generate a surplus because benefit outlays have not caught up with revenues (Mesa-Lago, 1991b; Lloyd-Sherlock, 1992). However, the basic structural problems are there (the demographic shifts in particular).<sup>27</sup> Without a constant effort to contain these problems,

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<sup>23</sup>Historically, Argentina, Uruguay, and Brazil began as fully funded pension systems that became pay-as-you-go mainly because of the depletion of their capital reserves.

<sup>24</sup>With the combined tax rates (from workers, employers, and state contributions) in excess of 30 percent in many countries, further recourse to a higher payroll tax may not be desirable. Moreover, tax evasion reduces the tax base, and adds to the revenue shortfalls.

<sup>25</sup>In Panama, the number of beneficiaries to contributors rose by one between 1981 and 1984, and will probably double in two decades. On the other hand, the benefit level is unsustainable; many retirees receive 100 percent replacement of their last salary (Lee, 1993).

<sup>26</sup>The World Bank projected that the prospects for the developing countries hold out the promise of higher growth rates for the remainder of the 1990s. Real GDP per capita, mostly stagnant through the 1980s, is to rise to about 2 percent after 1996 (The World Bank, 1993d). Growth rates vary by region, however, with East Asia and the Pacific leading the pack and Sub-Saharan Africa at the bottom.

<sup>27</sup>An often overlooked structural problem is the shift in the composition of production in a country. It can be shown that if the real rate of interest exceeds significantly the growth rate of real wages, the system does not require a high contribution rate or a high active worklife ratio (ratio of working life to retirement life) (Vittas, 1993).

sooner or later, the system will have to face the challenge of reform discussed in the following.<sup>28</sup>

### 1. Constraints and General Principles of Reform

1. Stabilize the economy and keep it on the growth path. As the economy develops, the formal sector is expanded, producing two beneficial consequences: 1) access to social insurance increases, 2) the tax base, therefore revenue, increases. The rate of economic growth will determine the level of security the society can effectively provide to its citizens.

As a paradox, however, growth sows the seeds of future financial difficulty for a number of reasons. With growth, fertility decreases, life expectancy increases, and the population ages more quickly (assuming constant immigration). Health care and other benefits with high income elasticity of demand will push up outlays. In addition, the real rate of interest tends to fall (as capital is becoming less scarce), the growth rate in real wages tends to accelerate; these factors will make it more difficult to provide a high pension rate unless the contribution rate and the retirement age are raised (Vittas, 1993).

2. Take into consideration the cultural and social characteristics of each country, because these elements shape behavior, demand and supply conditions of social services.

For example, it is essential to set up social security systems to reinforce and not replace existing institutions such as the extended family and community-based arrangements for old age, sickness, and disability.<sup>29</sup> There are four reasons for this: 1) the infeasibility of providing universal formal social security in most developing countries, 2) stringent fiscal constraints, 3) the need to design effectively targeted formal security mechanisms that reinforce support for households in the rural and informal sectors where traditional support mechanisms are still workable, and 4) the fact that the family and the local community may possess informational advantages in order to deal effectively with the problems of adverse selection and moral hazard.<sup>30</sup>

3. Tailor the social security system to the country's level of economic development and labor market conditions. This implies that excessive payroll taxes should be avoided in order to promote labor participation in the formal sector. Moreover, contributions should be low in low-wage, labor-intensive economies. Benefit levels should also reflect the wealth of the economy, and its relative international competitiveness.

4. Focus the reform on eliminating excess consumption and waste of scarce resources. In general, means-tested transfers should be preferred to open-ended subsidies. However, due to administrative constraints, the developing countries may consider categorical transfers.

5. Pursue an equitable distribution of costs and benefits between present and future generations. An overly rich benefit package would undermine the system's viability (resulting in redistributing toward the

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A country with a recent system is likely to be a developing country characterized by scarcity of capital and abundance of labor. This implies that the real rate of interest is high and wages are low. With time and with development, the balance tilts, inducing wages to rise faster than the rate of interest, hence, exposing the system to more financial risks.

<sup>28</sup>Policy reform, in theory, involves determining welfare augmenting directions relative to the status quo, with respect to a set of policy options, subject to various constraints posed by public supply and excess demands. In the following, the important constraints and general principles are identified and elements for reform are described.

<sup>29</sup>For example, the system should encourage, whenever possible, home-health care rather than institutional care for the aged and disabled.

<sup>30</sup>This implies transferring assistance through these institutions. In turn, it should help with population control by alleviating the need for raising a large family for security reasons in the old age. In addition, other arrangements such as charitable, religious, or other organizations should be supported. For a list of issues facing countries seeking to set up or develop pension funds, consult Davis, 1993.

current generation at the expense of future ones). In particular, public pension programs should be made self-sustaining over long periods of time capable of weathering transient and unavoidable cycles.

6. Recognize that the credibility and accountability of management is critical to any reform. Without public trust and support, the system would most likely be marred by inertia (resistance of privileged groups and the bureaucracy, unwilling politicians) and evasion.

## **2. Private Sector and Non-Governmental Organizations**

7. Encourage the participation of community and non-governmental organizations in the planning and running of local health and social welfare services (for instance, to avert hit-and-run practices, cream skimming, etc.).

8. Support voluntary private insurance and retirement funds. The government does not need to get involved in the financing of these institutions, although it should regulate them.<sup>31</sup> These schemes could be substitutes for, or merely supplements to the public systems.<sup>32</sup>

9. Increase the role of the private sector in providing social and health care services. The resulting competition between private and public providers should increase the efficiency in the delivery of services (a multipillar model supported by this paper would make room for the private sector to compete). For example, private supplementary insurance, on top of the statutory insurance, should be encouraged to provide a higher level of protection.

10. Regulate competition among private insurers in order to provide protection against fraud and to minimize risk avoidance (bias selection or cream skimming) by insurance plans. Other provisions such as funding rules, ownership of surpluses, portability would also increase the attractiveness of private insurance (Davis, 1993).

## **3. Health Care Costs**

Controlling health care costs is critical given that health care spending is often the second (behind pensions) most expensive item of most social security systems. In Latin America, for example, the share of social security spending allocated to health care is over 60 percent for Colombia, Costa Rica, El Salvador, Honduras, Mexico, Dominican Republic, and Venezuela in 1983 (McGreevey, 1990).

11. Redirect resources toward more cost-effective interventions (in most cases, this means emphasizing primary care and moving away from high-tech medicine), improve preventive care, reduce administrative costs, and amplify cost-consciousness in the decision making of both demand and supply agents. These are some of the primary candidates for cost containment.

One option for containing health care costs to the social security institutes, and at the same time, emphasizing preventive care away from curative care, is to support a 2-pillar system. The first pillar would guarantee and provide a minimum benefit package that serves the community as a whole. This package of public health and essential clinical services would include: immunizations, some school-based health services, programs to reduce alcohol and tobacco consumption, AIDS prevention, prenatal and delivery care, family planning services, management of the sick child, treatment of tuberculosis, and case management of sexually transmitted diseases (STDs), etc. (World Bank, 1993d).<sup>33</sup> The provision of this

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<sup>31</sup>The regulation is necessary to correct two major market failures in an insurance market, notably, the adverse selection (also called biased selection) problem and the moral hazard.

<sup>32</sup>The Argentina's Pensions Reform ratified by parliament on 10/01/1993 allows for both options. Chile's reform in the early 1980s did the same to a large extent.

<sup>33</sup>The World Development Report 1993 estimated that the per capita annual cost (in 1990 dollars) of the package is \$7.80 in low-income countries, and \$14.70 in middle-income countries (World Bank, 1993a).

package falls in the realm of public action because it would be inadequate if left to the private sector due to the presence of externalities.

The second pillar provides consumers the option to purchase supplemental coverage, at their private cost, in the private markets. This would encourage the private sector's development in this endeavor, facilitate a multipillar social security system discussed below, and introduce some cost consciousness into the demand for health services.<sup>34</sup>

12. Choose the most suitable form to structure the health care financing and delivery system according to the country's historical and social givens. The objective is to make the system simple and efficient within the constraints of the country.

There are two main polar strategies to organize the health care system: pure competition and regulation. The former is characterized by private insurers and private providers of care, while the latter, by national insurance and public providers. The cost containment effect of these models is still unsettled. Most countries adopt a certain blend of the two models depending on their historical and social conditions.

There are also two polar mechanisms of payment: capitation and fee-for-service. Under capitation, each beneficiary is enrolled in a provider network (composed of physicians, hospital(s), and sometimes, laboratories and pharmacies) that receives a fixed payment every period (monthly or bi-weekly) on behalf of the beneficiary whether or not services are provided. In turn, the network would guarantee the beneficiary of any necessary health care services should the beneficiary become ill. This method of payment is argued to be able to contain costs by giving providers incentives to control utilization.

Under fee-for-service, patients can choose their doctors and hospitals, and payments are made only for services rendered on behalf of the beneficiary. Containing costs under fee-for-service, in the presence of minimum cost-consciousness of both patients and providers, usually requires 2 elements: regulating payment (for example, payment to hospitals based on Diagnostic Related Groups, and to physicians based on a Resource Based Relative Value Scale), and controlling utilization (for example, the Volume Performance Standards or Global Budgets).

#### **4. Administrative Costs**

13. Unify administrative institutions. Many countries have a dual system of government health care which results in duplication of services and inequity because of differential access to funds. In Colombia in 1980, for example, the social security system used 62 percent of all public health spending (the rest was left to the Ministry of Health) on 18 percent of the population. Brazil and Costa Rica have taken steps to abolish the barriers between health care under social security and health care provided by the Ministry of Health. Costa Rica has virtually solved the problem of dual systems by integrating the delivery of health services of its ministry of health with the social security system.

14. Standardize claims processing. Claims processing can be very expensive and inefficient, especially in a system of multi-payers, each using a different claim system. There are two basic steps in this task. First, devise a uniform billing form (this could be done in conjunction with insurance companies and health care providers). Second, in time, introduce it into an electronic data processing environment. The advances of computer technology provide great promises in this endeavor.

15. Other elements for reducing administrative costs include: eliminate redundant personnel, cut back on privileged labor conditions, simplify legal system, improve accounting and managerial efficiency. This includes establishing a system of unique identification for every contributor and/or beneficiary; and computerizing registration and payments.

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<sup>34</sup>This multipillar model could be applied beyond health care benefits. The paper supports this model for all social security benefits.

## 5. Benefit Costs

16. Avoid promising and granting lavish benefits relative to the wealth of the economy. Benefits can be phased-in over a long period which parallels the growth of the economy. Indexation of benefits has merits based on equity grounds, but it may instill further inflation (demand-pull inflation) and harm the financial condition of the system (especially when wages, hence payroll contributions, are not indexed). If indexation is politically necessary, then adjust benefits according to salary increases rather than cost-of-living increases.

17. Support, whenever feasible, a multipillar system which includes: 1) a minimum subsistence package provided by the state, 2) a compulsory fully-funded defined contribution system which could be publicly or privately run, and 3) a voluntary private program to supplement the other two schemes. This system would minimize the burden on the state, while at the same time, encourage the private sector to be involved in the provision of social security benefits (Development Committee Meeting, 1993; World Bank, 1994).

The minimum subsistence benefit package would be designed to assure limited but effective protection against the risks most costly and most prone to the poor. Coupled with wider coverage (possibly financed in part by a tax with a broader tax base than that of the payroll tax), this strategy would gear the social security system toward playing an even more active role in alleviating poverty.

18. Reduce the incentives for early retirement, hence the potential loss of production, by either: 1) raising the minimum retirement age;<sup>35</sup> 2) restricting the length-of-service retirement benefit or, at least, tying it to age (for example, a person may retire after 30 years of service if he is at least 60 years old); or 3) setting the replacement rate conditioned on age and length-of-service. In particular, raise the replacement rate according to increasing ages of retirement, in order to encourage a longer work life.

19. Because of administrative simplicity, and also, of consistency with the proposed multipillar pension, consider a flat benefit structure. Under the public fund, everybody receives the same minimum benefit package regardless of earnings. This system would be progressive given that contributions are wage-based. The better-offs, however, would still be able to afford supplemental coverage.

Under this structure, people may still have incentives to retire early. Therefore, the conditions for retirement that link age with minimum length of service have to be well specified. Another drawback of this system is that it disconnects benefits from contributions, therefore, encourages high income earners to evade and invest in private pensions instead. One way to circumvent this problem is to require a proof of enrollment in the public plan as a prerequisite for buying private insurance.

20. If a flat benefit structure is not politically feasible, retain the earnings-related benefit structure, but set the replacement rate at an economically feasible level. A low replacement rate would, not only reduce the incentives to retire early, but also encourage personal savings (to maintain the same level of income after retirement), and reduce outlays.<sup>36</sup>

In particular, conforming to a multipillar pension system, set the replacement rate such that it would provide a subsistence level to the lowest wage earner. Another option would be to vary the replacement rate by income class, with the highest replacement rate applied to the poorest populace.

21. Make benefits (which include eligibility, benefit levels, and contribution rates) uniform across

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<sup>35</sup>Argentina's Pensions Reform, ratified by parliament on 10/01/1993, would, over the next nine years, raise the retirement age from 60 to 65 for men, and from 55 to 60 for women. This is much different from Brazil which offered retirement benefits for time of service regardless of age. Some workers retired before age 45.

<sup>36</sup>Argentina, Brazil, Panama, Uruguay, and Costa Rica, as some extreme cases, have replacement rates that could reach 80 to 100 percent.

occupations and economic activities. For example in Panama, special pensions for selected public employees — military personnel and teachers — created a large deficit because of low contribution rates and high benefits. In particular, many policy analysts recommend that countries move toward unified systems of disability benefits based on degree rather than on cause of disability.

22. Recognize all kinds of couples who share income in determining rights to social security. Persons, whether married or not, who live together should each have benefits in their own right rather than be treated as dependents (this is particularly applicable to the publicly provided minimum package).

23. Devise and enhance the administrative capacity and the legal framework to support an efficient operation of a multipillar system. This includes simplifying, whenever possible, both the current administrative and legal structure.

## 6. Coverage and Financing

Many countries are facing grave financing constraints posed by their social security system's deficits. On the one hand, raising payroll contributions runs the risk of driving workers to the informal sector and employers to evade. On the other hand, using other revenue sources undermines the principle that one should pay for one's own interest.<sup>37</sup> Moreover, borrowing breeds inflation or macroeconomic instability.

Expanding coverage under these conditions is difficult. Access and financing are entwined because, unless the financing side is stabilized and costs controlled, increasing coverage will only aggravate the financial problem.

24. As a general principle of financing the system, it is crucial to make a distinction between the insurance aspect and the assistance aspect of social security.<sup>38</sup> Social insurance should rely on wage-based contributions (one should pay for one's insurance), while social assistance on general tax revenue.<sup>39</sup>

25. Weigh the disadvantages and advantages of alternative means of financing — general taxation or contribution — against the individual country's condition. Financing by contributions has been contested

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<sup>37</sup>As will be presented in the following, both payroll and general taxes, however, can be used to finance various aspects of social security.

<sup>38</sup>The principal elements of social insurance are (ILO, 1984b):

- . insurance is financed by contributions normally shared by employers and employees, with, perhaps, some form of contribution from the state;
- . contributions are accumulated in funds used to pay the benefits with surplus funds invested to earn further income;
- . participation is mandatory;
- . a person's right to benefit is determined by his/her contribution;
- . work-injury insurance is usually financed in whole by employers.

The main elements of social assistance are:

- . it is financed by the State (i.e., general revenues);
- . benefits are paid as a legal right;
- . benefits are paid based on needs;
- . the level of benefit is determined by bridging the beneficiary's income to a community-set minimum.

<sup>39</sup>According to this Bismarckian model, achieving universal social insurance coverage is not immediately feasible for most developing countries because the tax base is narrow due to the fact that the majority of the labor force is made up of the self-employed, agricultural or unpaid family workers (i.e., the informal sector). Consequently, innovative means of financing have to be found if coverage is to be offered beyond the formal sector. It is interesting to note that the reform in Uruguay was partly based on increases in general consumption taxes.

as being labor-cost-increasing and also as being regressive because of its burden on low wage earners. General tax financing is opposed for its high levels of taxation. The main advantage of contributions is when benefits are earnings-related. Tax financing is more efficient to address universal coverage of flat-rate benefits. The choice is to be made based on the social conditions of each country (further discussion below).

26. Distinguish the functions of different social security schemes. It is imperative to differentiate a social security system into 2 functions: 1) long-term benefits or long-term social insurance (mainly pensions), and 2) short-term benefits composed of short-term social insurance (mainly health care benefits), and social assistance (mainly unemployment benefits and family allowances).

Such functional distinction has many implications. First, the public may better understand the purpose of each program. Second, accountability for each program is easier. Third, cross-subsidization across functions is discouraged (for instance, pensions should not be used for unemployment assistance in the form of easy early retirement and disability benefits).

27. Employ different models of financing for different social security functions. In particular, finance short-term benefits with a pay-as-you-go system. For long-term benefits, make a two-step transition: 1) move from a pay-as-you-go to a partially-funded system; then, gradually, 2) extend the equilibrium period if possible. The transition is made possible by reducing outlays, increasing revenues, and streamlining the benefit package.

**a. Financing short-term benefits.**

In the case of short-term benefits, the annual cost is expected to be stable in relation to the insured wage bill. Therefore, the method of financing is the pay-as-you-go method (also called the annual assessment system or pure assessment method), under which revenues raised each year balance the expected cost of that year. A margin is usually adopted in order to build up a contingency reserve.

**b. Financing long-term benefits.<sup>40</sup>**

In general, there are two methods of financing long-term benefits (especially pension insurance). The first method is to cover the whole future cost of each year's crop in the year of their reward. The second method relies on the accumulation of capital to provide additional income in the future. The choice of the method or any blend thereof depends, again, on the conditions of individual countries.

The first method, called the "assessment of constituent capitals system," involves raising each year's revenue to balance the capital value of the pensions awarded in that year. For example, if the capital value of a pension is 15 times its annual amount, the contribution needed in a given year would be 15 times the total amount of pensions awarded in that year. While popular in employment injury insurance, this method is not used for pension insurance, most probably because of the high level of annual contribution it requires (ILO, 1984b).

The second method, called capital accumulation system, has been favored in practice. Basically, it arranges that current contribution plus interest on capital reserves will cover current cost at all times. The attractiveness of this method is that it could require low contributions (if the interest on capital reserves is high — this requires a well functioning capital market and efficient portfolio management). There are two versions of this method.

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<sup>40</sup>Financing long-term benefits with the pay-as-you-go method could yield unfortunate consequences. In due course, as an increasing portion of the population becomes eligible for pensions, the annual cost would rise steeply to the point where the required annual wage contribution would be exorbitant. A major restructuring of the financing scheme would be needed.

i. The first version, called the general average premium system, consists of determining at the outset a contribution rate (as a percentage of the insured wage bill) which ensures the financial viability of the system to infinity.<sup>41</sup> This system is also called the full capitalization model or general fixed-premium with full reserves.<sup>42</sup> This version still prescribes high contribution rates which might not be politically feasible for many countries.

ii. The second version, called the scale premium system or partially-funded system, only requires that the financial solvency of the system be guaranteed over a certain "equilibrium period" (10 to 25 years for example) instead of ad infinitum. The contribution rate in relation to the wage bill, consequently, is smaller. As with the above version, this system may only use the interest on capital, never the principal of the accumulated funds itself, for benefit outlays. When current resources (contribution and interest) can no longer cover expenses, the contribution rate is scaled (i.e., raised) to a level sufficient for another equilibrium period.

28. Abolish (if any) low ceiling on employers' contributions. A relatively low ceiling discourages part-time jobs by encouraging firms to prefer overtime to acquiring more workers. In particular, abolish the contribution ceiling for earnings-related benefits (given that this ceiling serves the very rich).

29. Raise revenues for the following purposes:

- to cover the fund deficit, thereby, minimizing the negative impact on the macroeconomy; or
- to build up capital in order to: 1) make a transition from pay-as-you-go to a partially-funded system; or 2) to extend the equilibrium period if the system is already partially-funded; or 3) to make a transition from a partially funded system to a full capitalization system (i.e., to extend the equilibrium period to infinity) if desirable.

This can be achieved through numerous means.

- Raise the contribution rate in those countries that do not have a very high rate. The extent of the increase would take into consideration the potential negative effects such as evasion, payment delays, transfer to the informal sector, substitution of capital for labor, etc.
- Strengthen the inspection and collection activities by enhancing the collection capabilities (sometimes, reducing corruption), prosecuting and imprisoning debtors and corrupted collection officials, setting fines and interest at a higher rate than inflation and commercial bank rates.
- Consider an ad-hoc, and even, temporary tax. A VAT tax might be regressive. Sin taxes are good candidates, so are luxury commodity taxes (again, keeping in mind that broad-based taxes are more suitable for social assistance).

Many analysts propose a profit tax to avoid a possible bias against labor-intensive industries induced by a payroll tax (Lloyd-Sherlock, 1992). Brazil and Argentina have had difficulties implementing such taxes.

- Raise the active worklife ratio by raising the retirement age to accommodate population aging. This

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<sup>41</sup>The fixed-premium is actuarially calculated to finance estimated future pension liabilities based on demographic, economic, and other factors. Because the premium is fixed, there is no transfer of that burden to future generations, and the contributors know in advance what the burden is going to be (defined-contribution). The conditions to ensure viability of this system must be met at all times: 1) benefits and entitlements may not increase without a corresponding increase in revenue; 2) there is neither evasion nor payment delays; 3) funds are invested efficiently and profitably; and 4) actuarial evaluations are done regularly to make any necessary adjustments.

<sup>42</sup>The fully-funded model could, in theory, be either the assessment of constituent capitals system, or the general average premium system (also called the full capitalization system). In practice, it is usually referred to the latter.

is probably one of the most powerful means of revenue generating for many financially distressed pension systems (Vittas, 1993).

Other measures which save administrative costs in the long run, and increase collection at the same time, include:

- Establish a single ID for everybody (social security number or citizenship number, for example), not only for social security, but also for taxes, elections, visits to public health centers, etc.
- Computerize registration, payments, individual account reports, and identify the delinquents.
- Conduct periodic actuarial evaluations of the funds in order to determine whether there is a need to revise the equilibrium period or to raise more revenues. This should restrain the politically driven exercise of introducing new benefits.

## **7. Portfolio Management**

Since social security funds (especially public pension funds) account for a large pool of capital in many resource-scarce economies, their efficient management is important for many reasons. First, for fully and partially funded plans, the higher the expected return, the lower the taxes, and the better the chances that the plans will stay funded. Second, given its share of GDP, a mismanaged system entices harmful consequences to the economy (increasing the budget deficit). Third, a well managed system will help develop an efficient capital market by redirecting savings into profitable undertakings (Mesa-Lago, 1991b).

30. Enhance the portfolio management of pension funds in order to maximize the interest on the accumulated capital. This is critical to the financial viability of systems which rely on the capital accumulation system of financing (such as the fully funded or partially funded systems).

The most important element is probably to suppress general inflation which erodes assets invested in government securities (which is the case for most pension funds) or fixed-income funds. For instance, in Latin America in 1980-87, the countries with the highest average annual real yields in their social security funds had the lowest inflation rates, and vice versa (Mesa-Lago, 1991b).<sup>49</sup> This is yet another reason for social security system reform to be carried out in conjunction with macroeconomic stabilization.

31. Ensure the autonomy of the social insurance agency. The agency should coordinate its investment policies with other public agencies; however, it should be solely responsible for its investment choices. The creation of the Investment Board in Jamaica provides an exemplary step in this direction.

This autonomy is necessary to restrict government intrusion to use pension funds for other purposes such as pressuring institutes to lend to public agencies or to hold government securities with fixed low interest. In Panama, for example, the government failed to pay its cash contribution for public sector workers and interest on the government bonds held by the social security agency.

32. Enhance the financial management skills of personnel in charge of investment. This step is increasingly important as social security institutes break away from government-directed investment policies, and develop their own with the intention to maximize returns (given a tolerable level of risks). This necessitates investing in foreign markets as well, especially in markets which have the tendency to be countercyclical to the performance of the country's economy. International agencies can help train and upgrade the skills of the institutes' personnel.

33. Reduce as much as possible the proportion of total assets which are either fixed or net-current

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<sup>49</sup>One exception was Chile which had the highest positive yield but an inflation rate similar to that of Ecuador and Costa Rica who had negative yields.

assets in order to maximize invested assets. Fixed assets include real estate, hospitals, office buildings, recreational facilities, etc., which, in most cases, are owned and operated by the institutes. Sell fixed assets which are neither essential nor profitable.

34. Diversify the portfolio in order to minimize risks and to compensate low yields with high yields. It has often been the case that government bonds, mortgage loans, rental buildings, and other low-yield instruments have made up a large share of many portfolios. Government securities are particularly risky in countries suffering political instability or upheaval.

35. At the same time, pay more attention to high yield and relatively safe instruments. These include fixed-term deposits (short-term deposits in inflationary situations, and long-term deposits in low-inflationary economies), deposits in hard currency (in hyper-inflation situations), investment in emerging markets, etc.

This, however, does not imply that fund managers should stay away from government sponsored projects. The bottom line is to invest in high yield means. Singapore has successfully used its pension plan to develop its housing infrastructure coordinated by the government.<sup>44</sup> Likewise, even though personal and mortgage loans are to be generally avoided, the fund could be used to develop the secondary market.

## V. SOCIAL SECURITY AND POVERTY REDUCTION

Demographic and social factors necessitate the development of social security systems. Chief among these are the shift in demographic profiles — the aging population; the weakening of the traditional extended family and other community-based social security arrangements due to industrialization and urbanization; and the rise of a large industrial labor force.<sup>45</sup> These trends are expected to amplify the need for social security in the future.

Social security could play an instrumental role in the development process of a country.<sup>46</sup> Foremost, it could be a significant means of raising national saving.<sup>47</sup> In the 1970s, several institutes in the Latin American region enjoyed large surpluses that added several percentage points of GDP to national savings (McGreevey, 1990). Given its size, it is a powerful fiscal instrument that could be used to further economic progress. For example, the fund could be used to develop and strengthen the country's capital market. It could also be used to finance social undertakings with high rates of returns (the public housing project in Singapore for example). By protecting low-income workers and the unemployed, it could improve labor mobility, and hence, the efficient operation of the labor market.<sup>48</sup>

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<sup>44</sup>This contrasts sharply with Panama's use of the fund to promote public housing construction, an act which contributed to the fund's financial trouble. The difference could be that Panama invested in public housing construction, while Singapore allowed members to withdraw their funds to invest in private housing, approved securities, and other purposes such as education (Vittas, 1993).

<sup>45</sup>With increasing industrialization, certain risks could best be met through the application of social insurance principles. The risks (mainly injury, disability, unemployment, old-age, and death) are pooled; premiums or contributions are paid by employees and employers; and benefits are paid as an earned right.

<sup>46</sup>Social security has been criticized for various potential negative effects: 1) bias toward capital-intensive technologies in the modern sector due to the tax on labor, 2) moral hazard (people decide to supply labor less than they would otherwise), 3) crowding out private insurance and interhousehold gifts, and 4) reduced national saving by a pay-as-you-go system, in particular. The empirical validation, however, has been mixed (Atkinson, 1987; Cox and Jimenez, 1990; Arellano, 1985; Break, 1981; Koskela and Viren, 1983; Mackenzie, 1988; Feldstein, 1974, 1982; Barro, 1974). For a more extensive survey of the theoretical and empirical issues, consult Wallich, 1983; Shome and Squire, 1983; or Munnell, 1986.

<sup>47</sup>For instance, in Belgium and the Federal Republic of Germany, social security receipts account for more than 20 percent of GDP in 1977.

<sup>48</sup>To increase the probability that the system could fulfill these potentials, this paper supports a three step

Social security, moreover, could make a significant contribution to poverty alleviation. Poverty reduction has always been a cornerstone of the World Bank's mission. The World Bank's approach to poverty reduction over time has mirrored the evolving development thinking and the conditions of the developing countries. During the 1970s, the foundation for poverty alleviation was strengthened with three building blocs: economic growth, income redistribution, and basic needs. The 1980s highlighted the importance of investment in human resources. Human capital was recognized, not only as the main source of rising income, but also, of equitable distribution. The increasing burdensome external debt coupled with rampant inflation which characterized the large part of the Third World in the same decade added another dimension to the World Bank's approach: stabilization and adjustment. Adjustment, in most cases, however, entails austerity policies which could involve adverse short term consequences to the affected population. Therefore, cushioning the impacts of these adverse effects on the populace is critical to poverty alleviation, as well as to securing the local support for these policies. Social security is considered an obvious vehicle. Consequently, it has become an integral part of structural adjustment programs supported by the World Bank and the IMF.

Social security plays a vital role in supporting the vulnerable populace at a time when, around the world, unemployment is stubbornly high, when many workers are being forced into early retirement, when increasing marriage break-ups are preventing married women with family responsibilities from participating in the labor force, and when the speed of modernization is weakening the traditional means of security based on intra-family and community support. The need for effective social security systems has, therefore, never been greater.

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transition: 1) support a multipillar system, with the government providing the minimum benefit package; 2) finance social assistance with pay-as-you-go, and social insurance with a capitalization method; 3) reform the public-pillar social insurance system, by generating savings and revenues in order to make a transition from a pay-as-you-go system to a partially funded system; and 4) find ways to extend the equilibrium period of the partially funded system, if possible. (If the equilibrium period is extended to infinity, the system has become fully funded. This paper does not make a blanket recommendation of making a transition to a fully funded system because of the resource constraints and demographic patterns faced by many countries --see also Mckensie, 1988.)

The private-pillar system would be financed by provident funds which collect contributions from workers and employers into personal accounts from which workers (or their survivors) can draw in the events of old age, disability, death, or other contingencies.

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