

Working Paper

Social Security Issues in Reforming and Transition Economies

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and
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March 1995



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ABSTRACT

This paper describes a stages-of-development model according to which, as living standards rise, the responsibility for insuring against risks associated with retirement is laid upon Government in the form of emerging social security systems. Later, political support for the continued expansion of social security systems weakens, and containment becomes the order of the day. Clear signs of such containment were evident in the OECD economies during the 1980s.

However, this model appears not to describe the development of social security in reforming (essentially, Latin American) and transition (essentially, Eastern and Central European) economies, where social security systems have become sources of distortion and imbalance at levels of development much lower than those that prevailed in OECD economies when policy makers first expressed concern and began to implement measures to correct those imbalances. A social security reform agenda is discussed which would shift more risk to the individual, taking reforming and transition economies into relatively unexplored territory. The social costs of economic reform and of transition from command to market economy have been greater than many analysts anticipated, and how reforms will be implemented in the currently difficult atmosphere remains to be seen, as does the long-term viability of reformed social security systems.

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SOCIAL SECURITY ISSUES IN REFORMING AND TRANSITION ECONOMIES¹

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THE GROWTH AND CONTAINMENT OF SOCIAL SECURITY SYSTEMS: A “STAGES-OF-DEVELOPMENT” MODEL

Social security is a device to redistribute risk and reduce its short term costs. Few characteristics of a society (or a culture) are more basic, or reflect more closely its values, than the prevailing pattern of risk-sharing (Douglas 1990). Risk can be redistributed through the insurance market, but it cannot be eliminated: in an equilibrium framework, it must be borne somewhere, with attendant consequences for efficiency and equity (Diamond 1993).

Imperfect competition and market failures may justify and warrant state intervention to provide compulsory social security benefits for reasons often cited:

- (i) Asymmetric or incomplete information can cause adverse selection: the healthy buy annuities, the frail get health policies, and generalized myopia causes many to underinsure for retirement needs (Kotlikoff 1987);
- (ii) external benefits or dis-benefits; *e.g.*, costs imposed by the (uninsured) aged poor or the disabled on society at large in the form of demand for public services;
- (iii) increasing returns to scale; *e.g.*, the advantages of risk pooling; and
- (iv) the problem of public goods; *e.g.*, if persons experience dis-utility as a result of the existence of the destitute elderly, then some households might free-ride on the altruism of other, more soft-hearted, households.²

¹ This paper was written for presentation at the Population Association of America's Annual Meetings held in San Francisco, California, 6-8 April 1995.

² This problem can also be construed as an externality in which the welfare of household *j* is an argument in the utility function of household *i*. Note that we have left moral hazard off the list because this affects public, as well as private, insurance markets. Diamond (1993) argues, however, that Government can at least counter moral hazard more effectively than the private market.

The market for old-age insurance is non-clearing (Barr 1992) because the probability of the event insured against (retirement) is practically unity *and* some of the risks associated with the insurance contract are perfectly co-variant (*e.g.*, inflation or improvements in life expectancy). Because of the combination of the two, there are risks that cannot be laid off and the free market will under-supply insurance. Similar arguments apply to the provision of health insurance.

Since its origins in the compulsory sickness, disability and old-age insurance program instituted in Germany by Bismarck in the 1880s, social security has undergone an expansion in OECD countries to the point that it is the cornerstone of social welfare policy. Parrott's Fundamental Law of Social Security (Parrott 1992) pithily sums up the OECD-country experience: social security spending in any country must invariably rise over time. Hudson (1993) cites research indicating that, between 1930 and 1980 -- the "golden age" of social security -- the proportion of workers covered by old-age insurance in eighteen industrial countries grew from 20% to 80% and the average pension expressed as a percentage of the average wage from 14% to 55%. *Pari passu*, the proportion of aged persons in the active labor force fell and the concept of "retirement" as a definable phase of the life cycle took root. As populations have aged and social security systems have deepened, government provision of health care has also grown apace. Public pensions and health care comprise the bulk of spending in all social security systems; the residual (comprised mostly of unemployment benefits, workman's compensation and family allowances) is secondary.

International experience is summarized in Tables 1 and 2, which present data for 43 countries in 1972 (the earliest year for which data are available), 1980 and 1991; the data are plotted in Figures 1-6. The criterion for inclusion in the sample was simply availability of data for all three years. This eliminates the formerly socialist countries, whose quite distinct development we discuss below. In some countries, such as the U.S., the data underestimate the true extent of social security spending because only central government expenditure is included. We also ignore bias arising from relative price effects; *i.e.*, the possibility that the deflator appropriate for social security expenditure is different than the overall GDP price deflator.

Figures 1 through 3 plot cross-sectional data on social security spending as a percentage of GNP against real GDP per capita (1985 Summers-Heston international purchasing-power-parity dollars).³ The income elasticity of the expenditure share (change in social security expenditure share per percentage point change in GDP per capita) appears to rise with income -- that is, as countries reach higher levels of development, economic growth appears to elicit progressively greater expansion of social security spending. However, this increase may instead be due to population aging. Expressing the social security share and share of the population aged over 65 as percentages (*i.e.*, $0 < \text{SocSecSh} < 100$ and *ditto* for SH65+), least-squares lines for 1972, 1980 and 1991 are

$$\text{SocSecSh} = -36.89 + 9.12 \ln Y - 0.60 (\ln Y)^2 + 1.22 \text{SH65+}$$

$$\begin{array}{ccc} (1.19) & (1.20) & (6.10) \\ R^2 = 0.77 \end{array}$$

$$\text{SocSecSh} = -34.95 + 7.97 \ln Y - 0.47 (\ln Y)^2 + 0.96 \text{SH65+}$$

$$\begin{array}{ccc} (1.14) & (1.04) & (7.38) \\ R^2 = 0.85 \end{array}$$

$$\text{SocSecSh} = -22.35 + 4.96 \ln Y - 0.29 (\ln Y)^2 + 0.87 \text{SH65+}$$

$$\begin{array}{ccc} (0.53) & (0.49) & (4.35) \\ R^2 = 0.69 \end{array}$$

³ GDP data for 1991 in Tables 5 and 6 are actually for 1990 (or most recent estimate).

Table 1. Social security expenditure (% of GNP; central government only). Source: 1992 and 1993 *World Development Reports*, Table 11. Some figures are for years other than those specified.

	1972	1980	1991
Low-income countries			
Nepal	0.1	0.1	0.6
Malawi	1.3	0.4	0.7
Bangladesh	0.9	0.5	0.7
Sierra Leone	0.6	0.9	0.7
India	0.3	0.5	0.7
Kenya	0.8	1.1	0.8
Pakistan	0.5	0.7	0.6
Sri Lanka	5.0	3.2	4.7
Lesotho	1.1	0.2	0.9
Indonesia	0.1	0.3	0.3
Lower-middle income countries			
Philippines	0.6	0.9	0.5
Dom. Rep.	2.1	2.4	3.6
Ecuador	0.1	0.2	0.3
Peru	0.3	0.0	0.1
El Salvador	1.0	0.3	0.2
Syria	1.0	3.3	1.0
Paraguay	2.4	2.5	1.9
Tunisia	2.0	3.1	4.2
Thailand	1.2	0.9	1.0
Turkey	0.7	1.4	0.7
Costa Rica	5.0	1.8	2.5
Panama	3.0	3.7	6.6
Mauritius	2.9	3.5	2.9
Upper-middle income countries			
Botswana	7.3	2.7	5.5
Uruguay	14.0	13.0	13.5
Brazil	10.2	9.3	6.8
Mexico	2.9	2.1	1.5
Korea	1.1	1.4	2.0
Greece	8.4	8.6	0.2
High-income countries			
Israel	3.1	6.3	13.4
New Zealand	7.5	9.1	10.9
Spain	9.7	11.7	7.3
Singapore	0.7	1.3	1.4
UK	8.5	8.6	10.2
Australia	3.8	5.3	5.8
Netherlands	15.6	16.2	17.4
Austria	15.9	14.4	14.2
Canada	7.1	7.1	7.4
U.S.	6.7	7.2	5.5
Germany	11.3	12.0	11.8
Denmark	13.6	14.6	13.0
Finland	6.9	6.9	8.9
Norway	14.0	12.1	13.8
Sweden	12.3	14.3	15.6

Table 2. Social security balance (revenue minus expenditure) (% of GNP; central government only).
 Source: 1992 and 1993 *World Development Reports*, Table 11. Some figures are for years other than those specified.

	1972	1980	1991
Low-income countries			
Nepal	-0.1	-0.1	-0.6
Malawi	-1.3	-0.4	-0.7
Bangladesh	-0.9	-0.5	-0.7
Sierra Leone	-0.6	-0.9	-0.7
India	-0.3	-0.5	-0.7
Kenya	-0.8	-1.1	-0.8
Pakistan	-0.5	-0.7	-0.6
Sri Lanka	-5.0	-3.2	-4.7
Lesotho	-1.1	-0.2	-0.9
Indonesia	-0.1	-0.3	-0.3
Lower-middle income countries			
Philippines	-0.6	-0.9	-0.5
Dom. Rep.	-1.4	-1.9	-3.0
Ecuador	-0.1	-0.2	-0.3
Peru	-0.3	0.0	-0.1
El Salvador	-1.0	-0.3	-0.2
Syria	-1.0	-3.3	-1.0
Paraguay	-1.2	-0.8	-0.8
Tunisia	-0.4	-0.1	-0.5
Thailand	-1.2	-0.8	-0.8
Turkey	-0.7	-1.4	-0.7
Costa Rica	-2.9	3.6	4.5
Panama	1.9	2.3	0.4
Mauritius	-2.9	-3.5	-1.9
Upper-middle income countries			
Botswana	-7.3	-2.7	-5.5
Uruguay	-6.7	-7.6	-6.0
Brazil	-1.0	0.1	0.5
Mexico	-1.0	0.1	0.5
Korea	-1.0	-1.1	-1.2
Greece	-2.2	-0.9	10.1
High-income countries			
Israel	-3.1	-1.1	-11.2
New Zealand	-7.5	-9.1	-10.9
Spain	-2.1	-0.2	4.5
Singapore	-0.7	-1.3	-1.4
UK	-3.4	-4.1	-4.1
Australia	-3.8	-5.3	-5.8
Netherlands	0.3	1.6	0.4
Austria	-7.0	-2.2	-1.2
Canada	-5.3	-5.1	-4.5
U.S.	-2.6	-1.6	1.5
Germany	0.4	3.6	3.8
Denmark	-11.8	-13.7	-11.5
Finland	-4.8	-3.7	-5.3
Norway	-6.4	-2.7	-2.3
Sweden	-5.3	-2.5	-1.2

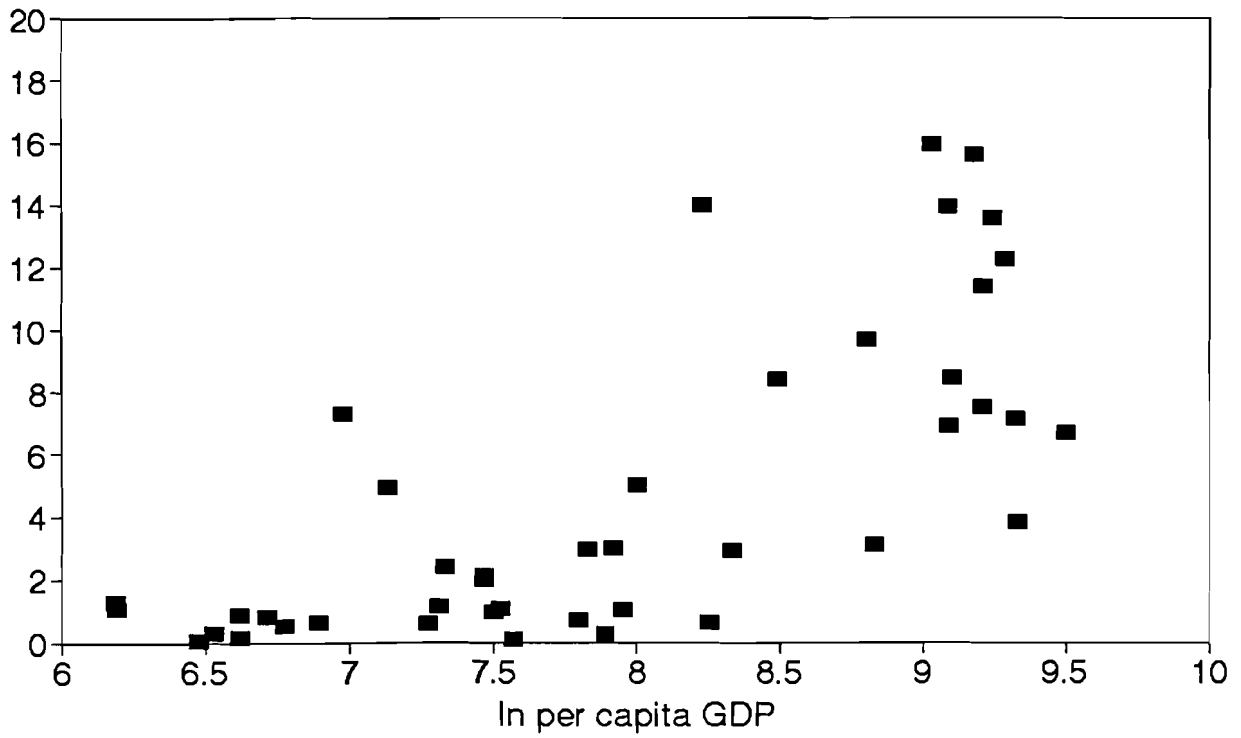


Figure 1. Social security expenditure: GNP, 1972 (%).

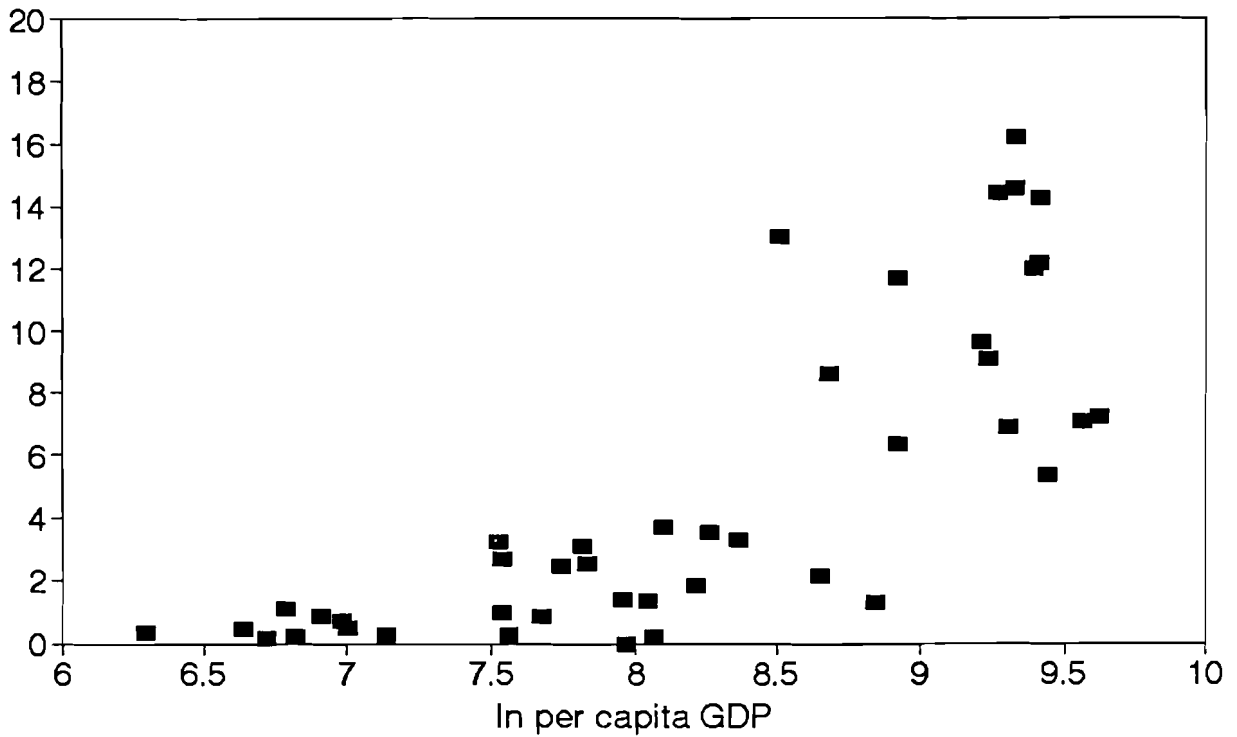


Figure 2. Social security expenditure: GNP, 1980 (%).

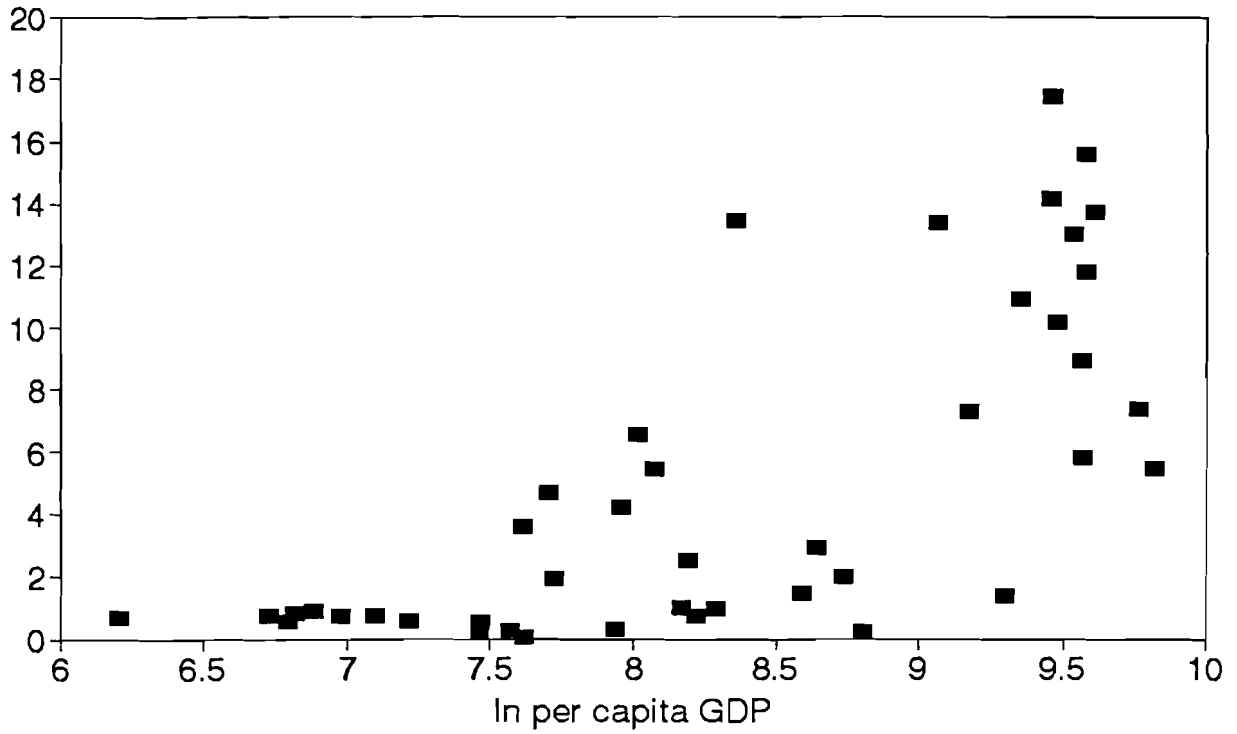


Figure 3. Social security expenditure: GNP, 1991 (%).

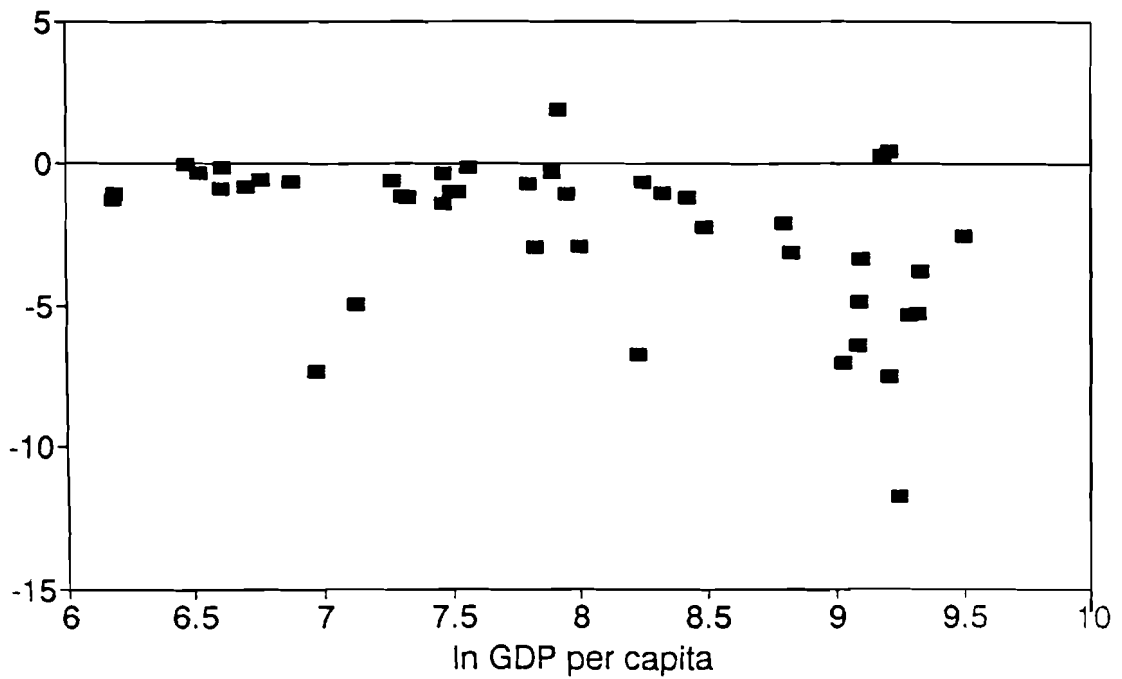


Figure 4. Social security balance: GNP, 1972 (%).

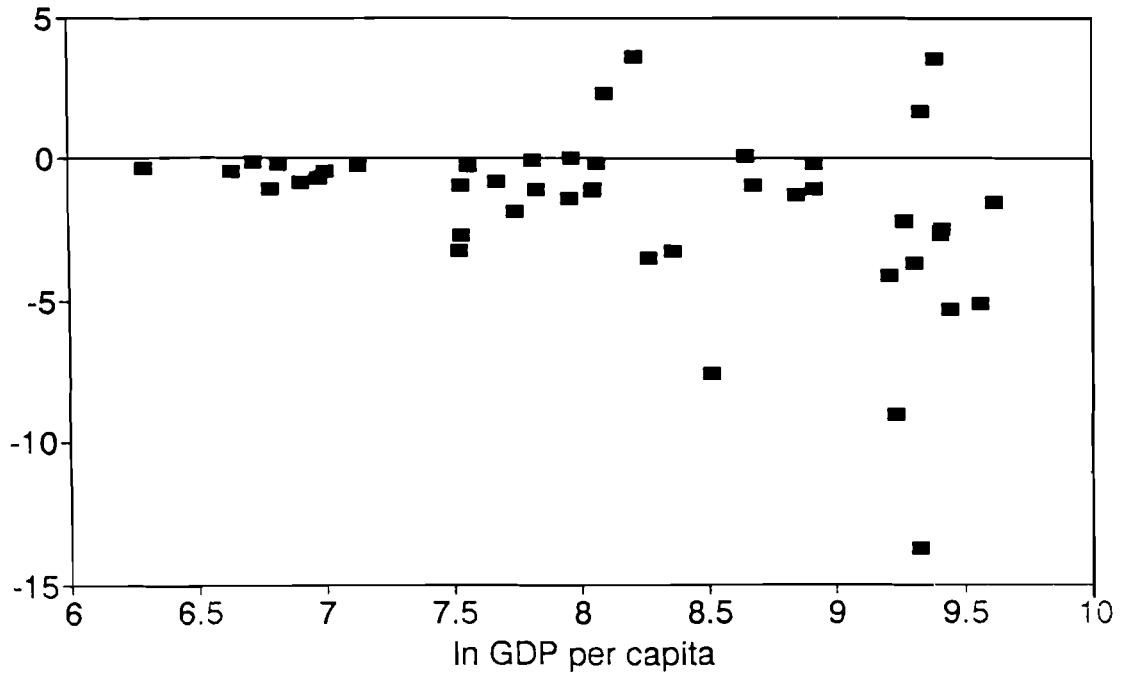


Figure 5. Social security balance: GNP, 1980 (%).

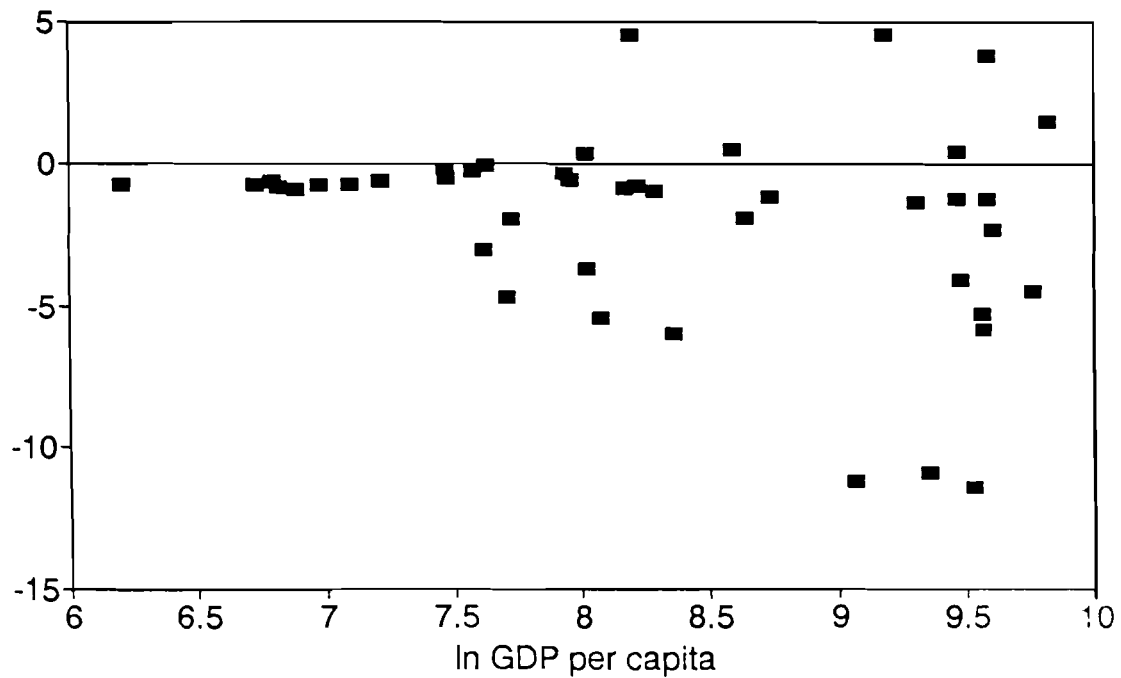


Figure 6. Social security balance: GNP, 1991 (%).

where Y is per capita GDP, $N=43$ in each case, and t -statistics are given in parentheses. What emerges most strongly is a roughly unitary elasticity of social security spending with respect to the share of the population aged over 65. In view of the role of outliers, heteroscedasticity, the multicollinearity of age structure and per capita income, the simultaneous-equations bias which results from failure to disentangle demand for social security spending from the supply of funds, *etc.*, coefficients on both income and age may be biased. If these parameters are to be believed, however, by the time a country reaches the level of development of one of the lower-income OECD countries, like Greece or Portugal (per capita GDP = \$5,000; *i.e.*, $\ln Y$ on the order of 8), the income elasticity of the expenditure share is already negative: expenditure per capita may continue to rise, but more slowly than per capita GDP.

A heuristic, stages-of-development explanation of the growth of social security spending might run as follows. A requirement for the development of formal social insurance systems is widespread acceptance of the illusion that workers' contributions, usually wage-based taxes, are proportional to eventual benefits. When a country is poor, the state's ability to engage in social security expenditure is constrained by its limited ability to levy payroll and income taxes. When a country passes through the middle stages of development, the supply constraint is loosened as the fiscal mix shifts towards the direct taxes that lend themselves to the financing of social insurance.⁴ Simultaneously, demand for social security spending increases for a number of reasons. Household demand for leisure in the form of years of retirement rises with income, as does demand for insurance against disability or sickness.⁵ When the old-age dependency ratio rises as a result of the epidemiological and demographic transition, these demands are made effective at the aggregate level. Individuation and the decline of the extended family weaken traditional household-based care-giving mechanisms⁶ and increased migration and urbanization weaken community-based systems. The result, on both the supply- and demand sides, is an increase in social security spending.

While social security spending expands rapidly on average, it is evident from the wide scatter of points on the right-hand side of Figures 1 through 3 that policy makers, and the societies they represent, have considerable room to choose the desired level of state intervention.⁷ Down an accommodative path lies a Northern European centralized social welfare state; down the restrictive path lies a system closer to that prevailing in the United States, in which programs are decentralized and there is more stringent means-testing of benefits. Which path is preferable is, of course, a complex question, and different countries have and will continue to make widely differing choices. The strictly fiscal tradeoffs may be fairly easy to generalize across countries, but the income-leisure tradeoff (the costs of high payroll taxes versus the benefits of early retirement), the desired distribution of income (both cross-sectionally and inter-generationally), attitudes towards risk and the value attached to intra-family transfers are anything but internationally comparable.⁸

⁴ Lindauer and Velenchik (1992) refer to supply-side explanations of developing-country government expenditure as the "Please effect," following Please (1967).

⁵ Clark and Anker (1992) present cross-sectional evidence that the labor force participation rate of older workers drops sharply with level of per capita GDP, even after controlling for the greater availability of social security pensions at higher income levels.

⁶ As does, of course, the growth of the social security system itself. Cox and Jimenez (1992) estimate that the Peruvian social security system "crowds out" 20% of hypothetical transfers from children to parents.

⁷ For a cross-cultural survey of social security systems, see Dixon and Scheurell (1993).

⁸ A theme which we do not pursue in this paper, apart from this footnote, is that social security regimes can be framed in terms of three differing cultural views: hierarchist, individualist and egalitarian (Thompson *et al.* 1990). Each view can be grounded in a set of values and beliefs which privileges or "dignifies" a particular

It would seem obvious, despite the impression left by Figures 1 through 3, that the growth of social security spending must eventually cease. Judging from Figures 4 through 6, which plot social security balances against GDP per capita, the rapid expansion of social security expenditure as a country enters the middle stages of development is not matched by an equally rapid expansion of social security revenues. To continue the stages-of-development explanation, a public-choice argument would have it that, with the rise of the less-favored class' claim on fiscal resources, its members' incentive to lobby for further re-distribution is weakened; symmetrically, as the fiscal drain on the well-to-do increases, they have more incentive to resist expansion of social spending.⁹ Increases in taxation become onerous because of the deadweight opportunity costs to which they give rise.¹⁰ On both counts, social security systems eventually come under pressure and containment, rather than expansion, becomes the order of the day. With improving health, the necessity of insuring against merely surviving into old age is diminished (Hudson 1993); what becomes relevant is the more limited problem of insuring against the "terminal drop" which precedes death (Wilson 1991).

A recent shift from expansion to containment is clearly illustrated when the data in Figures 1 through 3 are plotted in first-difference form to capture the experience of individual countries. Figures 7 and 8 plot change in social security expenditure per capita (dollars per year) against change in GDP per capita in 1972-80 and 1980-91; the 45-degree line is also drawn. In 1972-80, no country in the sample experienced negative change in either GDP per capita or social security spending per capita and, in half-a-dozen industrial countries, the change in social security expenditure actually exceeded the increment to GDP. In 1980-91, by contrast, a number of countries experienced negative income growth and virtually all of these either held social security spending constant or reduced it somewhat. Of the majority of countries which experienced increases in income per capita, a number either reduced social security spending per capita or held it nearly constant.¹¹

social setting (*i.e.*, a certain ordering of social relations according to which the transactions of life are conducted); each is based on a different view of human nature and each gives rise to a characteristic welfare criterion. The individualist position would prefer a *laissez-faire* approach to retirement savings, combined with a Rawlsian minimum high enough to prevent destitution but low enough to cause discomfort. The hierarchist position would call for forced saving through a centralized pension plan, with benefits being tied to earnings; the egalitarian position would also call for forced saving through a centralized pension plan, but would use benefits to effect a massive re-distribution. The hierarchist position would prefer a fully-funded approach because of the financial discipline which it imposes; the egalitarian position would prefer a Pay-as-You-Go approach because of the practically unlimited opportunities for re-distribution which it offers. To be viable, any social security system must be supported by a tolerably strong coalition of persons subscribing to the three positions.

⁹ Lindert (1993) hypothesizes that the rise of social spending is constrained by the fact that, with improving living standards, the median voter comes to identify his/her interests with those of the well-to-do rather than the poor. This might be called "There but for the grace of God..." in reverse.

¹⁰ The thesis of classical theory, which goes back to Smith, is that as income is increasingly re-distributed from those who produce to those who do not, the former will lose the motivation to work; this was, of course, the major tenet of the Reagan-Thatcher view of social welfare spending. A supporting tenet, which currently enjoys some vogue in the American capital, is that the public provision of welfare leads to the crowding out of private virtue. Evidence regarding the so-called "moral atrophy" hypothesis, drawn mostly from experimental psychology, is mixed (Goodin 1993).

¹¹ For a general discussion of the sea-change in OECD fiscal policy during the 1980s, see Oxley and Martin (1991).

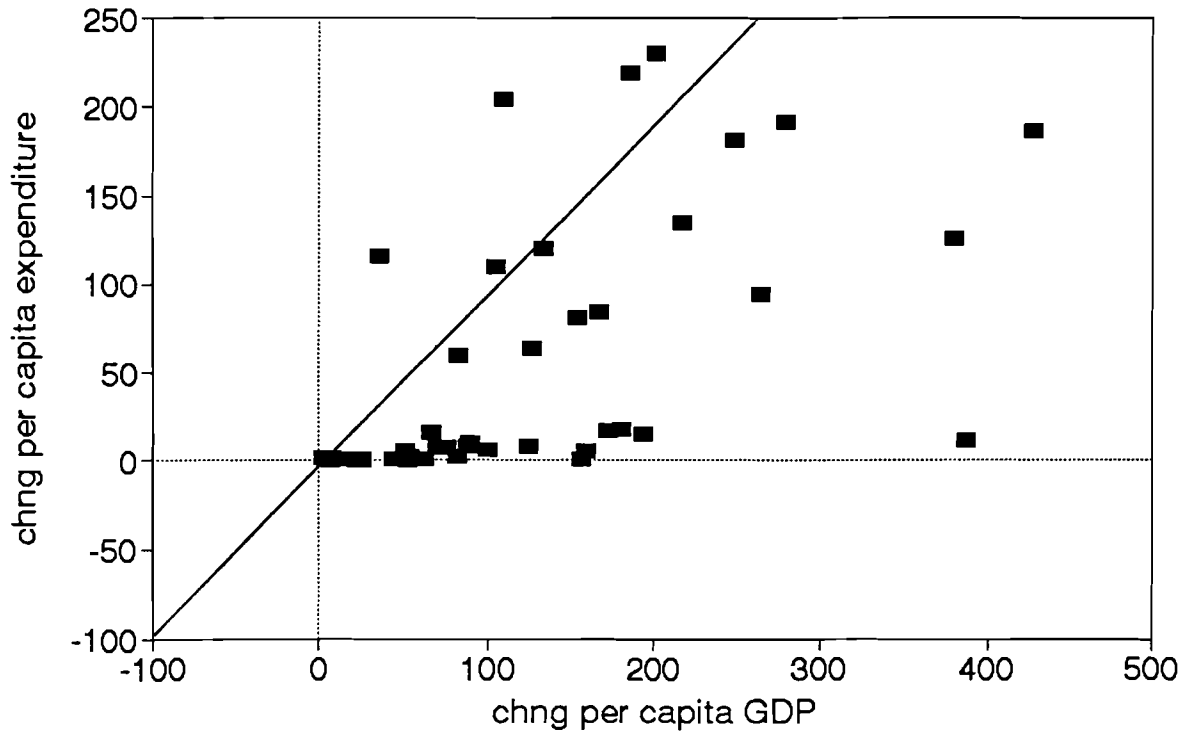


Figure 7. Social security expenditure and GDP, 1972-80 (1985 USD).

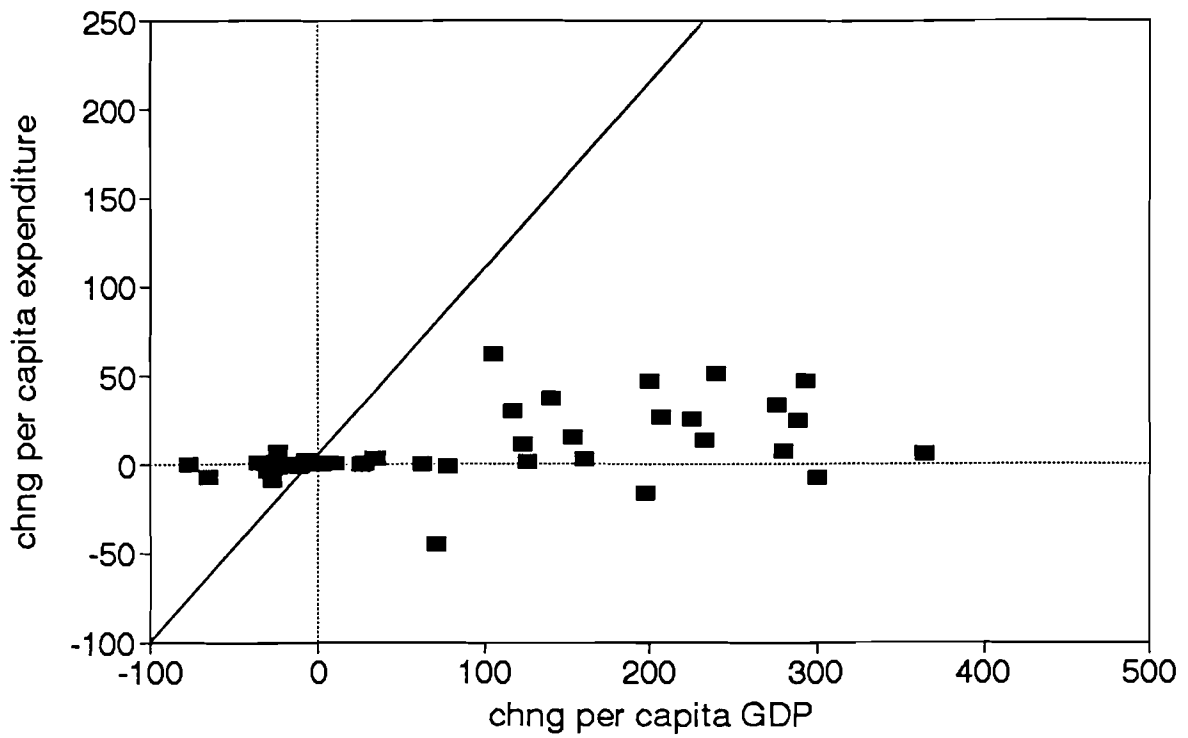


Figure 8. Social security expenditure and GDP, 1980-91 (1985 USD).

The shift can be statistically illustrated as follows. According to an obvious decomposition model, average annual absolute change in per capita social security expenditure (dSocSec/Pop) in 1972-80 and 1980-91 was:

$$\text{dSocSec/Pop} = 13.942 - 0.185 \text{ dY} - 105.637 \text{ dSH65+} + 0.056 \text{ Y dSH65+} + 0.039 \text{ SH65+ dY}$$

$$\begin{matrix} & (-2.20) & & (-1.07) & & (4.31) & & (4.33) \end{matrix}$$

$$R^2 = 0.85$$

$$\text{dSocSec/Pop} = 1.751 - 0.168 \text{ dY} - 30.613 \text{ dSH65+} + 0.001 \text{ Y dSH65+} + 0.009 \text{ SH65+ dY}$$

$$\begin{matrix} & (-3.43) & & (-0.51) & & (0.17) & & (2.25) \end{matrix}$$

$$R^2 = 0.33$$

where other variables are as previously defined, d is the difference operator, N=43 again and t-statistics are in parentheses. Applying parameter estimates to sample averages, we may decompose the sample average annual change in social security expenditure in the two time periods as follows:

$$1972-80: \quad 54.5 = 13.942 - 23.389 - 8.028 + 34.364 + 37.676$$

$$1980-91: \quad 8.6 = 1.751 - 1.574 - 1.806 + 0.714 + 9.562$$

In the 1970s, increases in per capita social security expenditure were observed in countries which experienced either an increase in the share of the population aged over 65 or growth in real income per capita. In the 1980s, expenditure per capita grew only in countries which both (i) experienced economic growth and (ii) were characterized by an already-old age distribution. If terms are combined, the result is as follows:

<u>Source of growth</u>	<u>1972-80</u>	<u>1980-91</u>
autonomous (constant term)	13.952	1.751
due to income, holding age distribution constant	14.282	7.988
due to age distribution, holding income constant	26.336	-1.092
Total	54.570	8.647

In the 1970s demand for social security was accommodated, economic expansion or no; in the 1980s, social security expenditure had to compete on more even footing with alternative uses of resources. There may thus be mechanisms of self-correction that work against excessive reliance on social security.

This suggestion is far more optimistic about the future than the scenario implicit in an international cross section linking *public* pension and health spending to population aging (See Figure 9). These data led the World Bank authors to write in bold-face type, "Spending on health and pensions increases exponentially as the population ages" (World Bank 1994, p. 44). For the low- and middle-income economies with which the World Bank works, analysts must certainly hope there are adjustment mechanisms that would prevent runaway health and pension spending. Putting those mechanisms in place may be one of the key challenges to effective management of the next phase of economic development.

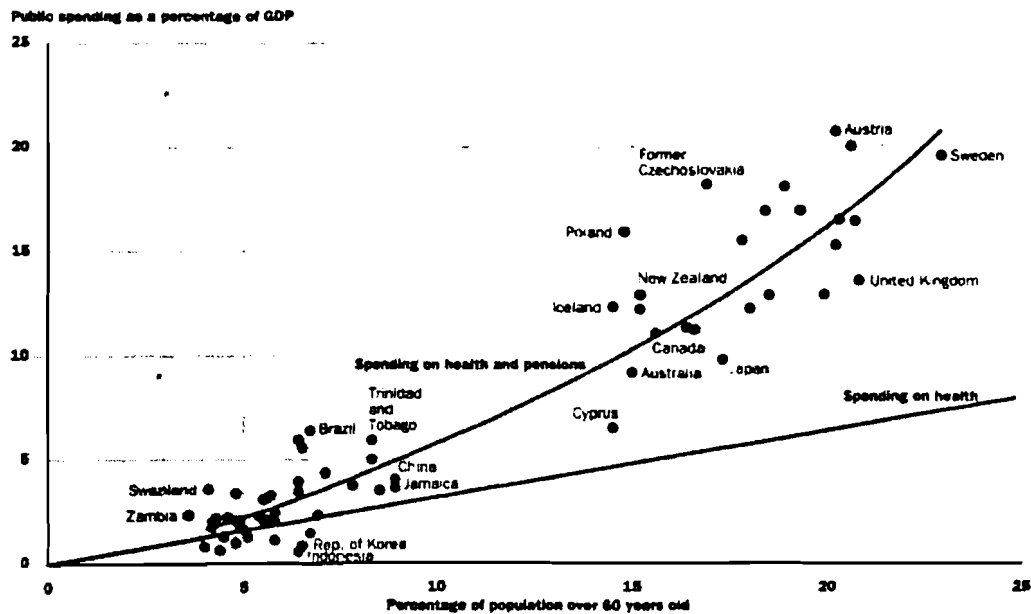


Figure 9. Public pension spending and population age structure. Source: World Bank 1994, Figure 1.10.

For many of the command economies in transition from socialism, a grave problem is that benefit promises are already in place for most of the population, yet resources, which were never abundant, are even scarcer now because the shift to a market economy has been costly in terms of declining output. These cases require separate discussion and treatment.

TRANSITION AND REFORM ECONOMIES

The stages-of-development model sketched above is heuristically useful, but it fails to explain why social security systems in a number of countries appear to be breaking down well before they reach maturity. Social security systems in many of the reforming (essentially, Latin American) and virtually all of the transition (essentially, Eastern and Central European) economies have become major sources of micro-economic distortion and macro-economic imbalance. As a result, policy makers are being urged, and are increasingly choosing, to follow a reform path which places greater responsibility for risk on individuals' shoulders.

The development of social security in the transition economies took its lead from the Former Soviet Union, where a social security system based on state-owned enterprises emerged during the thirties; this model was adopted by all countries of the socialist bloc, including China, and grew rapidly during the heyday of central planning in the 1950s and 1960s. Since open unemployment was unknown, coverage was universal; wages were low, but workers were compensated by eligibility for benefits provided by the state through the enterprise (in the USSR; this was less in evidence elsewhere in the Eastern Bloc); access to benefits was, of course, a key instrument of coercion. As a result, all the countries of the socialist bloc have inherited social security systems which are far more comprehensive

than would be predicted on the basis of their per capita income alone. Early retirement,¹² widespread eligibility for extended sick-leave and disability pensions (none of which necessarily involved actually leaving the work force, or even the enterprise) and a high replacement ratio were implicitly part of the social contract.¹³ “Tax policy” consisted of claiming the surpluses of those state-owned enterprises that operated at a profit (Jenkins 1992); “anti-poverty policy” consisted of humanitarian assistance to those at the margin of society (Milanovic 1994).

Development of social security in Latin America was driven in large part by rent-seeking.¹⁴ Politically influential groups and the “labor aristocracy” were able to lay claim to fiscal resources through the expansion of social security systems.¹⁵ Whether the prime mover was the militancy of special interest groups or the state’s eagerness to garner support appears to have varied from country to country (Mesa-Lago 1978). Social security deficits in the region have been financed out of general revenue, which is regressive since all persons pay taxes and yet only formal-sector workers are eligible for benefits. Alternatively, payroll taxes have been passed along to consumers in the form of cost-plus pricing (Mesa-Lago 1991); this is regressive since, when social security systems are in their early stages, the average consumer is poorer than the average social security beneficiary.

Issues

Table 3 summarizes the situation in selected reforming and transition countries where social security issues have figured prominently in policy dialogue with the World Bank. The following issues emerge repeatedly, although obviously not in every country:

¹² Eligibility for early retirement was typically based on membership of a hazardous or stressful occupation. In some countries, such as Romania, the list of occupations eligible for early retirement steadily grew; eventually to the point of including, for example, office workers, as a form of disguised (and highly regressive) wage increases. In the case of occupations which actually *are* hazardous, the early retirement benefit poses a severe problem of moral hazard, since it discourages both employers and employees from addressing the conditions which give rise to the hazard.

¹³ To get an idea of how important “double dipping” was, a formal-sector enterprise survey taken in 1990 revealed that pensioners accounted for 5.7% and 2.6% of employment in Hungary and Bulgaria, respectively (Sziraczki and Windell 1992). Milanovic (personal communication) estimates that double-dipping in the former Soviet Union amounted to 20-25% of all pensioners; *i.e.*, about 8-10% of the employed. As Fox (1993) points out, early retirement was also encouraged by the high return to unpaid work, such as queuing, gardening, home-repairs, *etc.*, under central planning.

¹⁴ Rent-seeking was hardly a negligible factor in the case of the OECD countries, as well. It is easy to forget that the European Welfare State was erected despite the indifference of the Left, not at its instigation (Ashford 1993).

¹⁵ In addition to benefitting elites directly, the development of social security systems conferred indirect benefits. The availability of social security revenues loosens the fiscal constraint on spending in other sectors, as well. In addition to benefitting the best-off workers, social security taxation leads to the adoption of more capital-intensive production methods, thus benefitting capitalists and the skilled workers whose services are complementary to capital. According to dual labor market theory, the tax on formal-sector labor increases the number of workers in the informal sector, worsening the distribution of income both between the formal and informal sectors on average and within the informal sector itself. Probably the most regressive aspect of social security systems in Latin America is that they give beneficiaries access to modern medical services while non-beneficiaries lack even basic preventive health care (McGreevey 1990). The health aspect of social security calls for a paper in itself.

Table 3. Social security problems identified in policy dialogue.

COUNTRY	PROBLEMS IDENTIFIED						
	Financial unsoundness; fiscal burden	Moral hazard; early retirement	Excessive payroll tax	Inequitable benefits; limited coverage	Inadequate protection against poverty	Inadequate rate of return	Inefficient administration; widespread evasion
<u>Latin America</u>							
Argentina*	X		X			X	X
Bolivia				X		X	X
Brazil	X	X	X		X		X
Colombia*	X			X			X
Ecuador	X			X		X	X
Uruguay	X	X	X	X			X
<u>Europe and Central Asia</u>							
Bulgaria	X	X	X		X		X
Hungary	X	X	X		X		
Kyrgyz Republic	X	X			X		X
Romania	X	X			X		X
Russia		X	X		X		
Slovakia	X	X	X				X
Turkey	X	X		X			X
Ukraine	X	X	X	X			

* Pre-reform

Sources (all World Bank Reports):

Argentina:	<u>Public Finance Review: From Insolvency to Growth</u> . Report No. 10827-AR (February, 1993).
Bolivia:	<u>Public Sector Expenditure Review with a Special Emphasis on Social Sectors</u> . Report No. 7746-BO (September 1989)
Brazil:	<u>Social Insurance and Private Pensions</u> . Report No. 12336-BR (December, 1993).
Colombia:	<u>Poverty Assessment Report</u> . Report No. 126730-CO. (June 1994).
Ecuador:	<u>Public Sector Finances: Reforms for Growth in the Era of Declining Oil Output</u> . Report No. 8918-EC (January 1991).
Hungary:	<u>Hungary: Reform of Social Policy and Expenditures</u> . Washington, D.C.: World Bank (1992).
Philippines:	<u>Capital Market Study</u> . Report No. 10053-PH (February, 1992).
Romania:	<u>Romania: human resources and the transition to a market economy</u> . Washington, D.C.: World Bank (1992).
Russia:	<u>Social Protection During Transition and Beyond</u> . Report No. 11748-RU (February 1994).
Slovakia:	<u>Restructuring for Recovery</u> . Report No. 12282-SK (July 1994).
Tunisia:	<u>The Social Protection System</u> . Report No. 11376-TUN (April, 1993).
Ukraine:	<u>Ukraine: The Social Sectors during Transition</u> . Washington, D.C.: World Bank (1993)

- (i) *Financial unsoundness and its fiscal implications.* Declining economic output has precipitated the crisis in many social security systems; some were never on firm actuarial footing. Financially-unsound pension schemes drain government fiscal resources, as in Hungary, and comprise a threat to fiscal balance if benefits are restored to a reasonable level in real terms, as in Russia. Some governments avoid the fiscal implications of unsound social security systems by the simple expedient of renegeing on obligations to the beneficiaries. In Argentina and Brazil for example, courts of justice spend many hours on pension-related complaints.
- (ii) *Micro-economic distortions and loss of international competitiveness.* Taxes are often levied almost entirely against the employer, resulting in a lack of transparency as the linkage between benefits and contributions is no longer perceived by the worker.
- (iii) *Inequitable and regressive incidence of taxes and benefits.* In the transition economies, pension payments are usually exempt from income tax, thus further distorting the labor-leisure choice.
- (iv) *Moral hazard and its implications for labor supply.* A substantial proportion of the population over 55 draw pensions.¹⁶ In Brazil, for example, there is no age test for pensions, and retirement at 45, after 20 years of contribution, is not uncommon. The distortion of the labor-leisure choice is exacerbated in Romania and Bulgaria, where policy makers allow plant managers to reduce payrolls by pensioning off older workers instead of shedding labor outright (Fox 1993). In fairness to policy makers, on the other hand, economic crisis has given rise to a difficult choice between pensioning off older workers so as to hire new graduates, or keeping productive older workers in their jobs while younger workers experience long-term unemployment.
- (v) *Erosion of the real value of pensions by inflation.* This problem, referred to euphemistically in the former Soviet Union as "the ruble overhang," has been exacerbated by price liberalization and the removal of subsidies. Pensions in Armenia and Georgia are worth less than half of one US dollar a month.
- (vi) *Inadequate rate of return on the financial resources administered by social security institutes.* When reserves have accumulated, either in partially-funded systems, such as that of the Philippines, or in immature pay-as-you-go systems, such as that of Tunisia, these have typically served as captive markets for Government treasury securities, low-yielding bond issues earmarked for favored projects, subsidized mortgage loans, and the like. Rates of return have as often as not been negative; in some cases, spectacularly so (World Bank 1994, pp. 794-95).
- (vii) *Administrative inefficiency.* By all measures; e.g., ratio of administrative costs to benefits paid out, social security institutes in developing and transition economies rank poorly in comparison with those in the OECD.

Workers' perception of unfairness and inequity, the frustration experienced as a result of administrative errors and inefficiencies, the inadequate return on contributions and the fact that pensions often fail even to protect against poverty combine to result in widespread evasion, fraud and non-compliance, especially by the self-employed (Alm *et al.* 1991). Most countries lack even the basic tool of fiscal enforcement: a taxpayer identification number system.

¹⁶ Economic transition in Central and Eastern Europe has been accompanied by less open unemployment than was widely feared; the problem is that economically inefficient declines in labor force participation rates have substituted for open unemployment (Boeri 1994).

Recommendations for Reform

There is some reason to believe that social security problems in the OECD economies are being addressed, in the broader context of overall macroeconomic adjustment, along the lines suggested by the stages-of-development model elaborated above. By contrast, absent direct policy action, there exist no grounds for such optimism in the reform and transition economies; perhaps in part because the costs of structural adjustment and transition from a command to a market economy have been greater than many analysts expected. In this section, we discuss directions for social security reform in these countries.

The technical issues involved in social security reform are complex, and powerful incumbents and vested interests threaten any effective reform. Therefore, policy in the area has been characterized by a tendency to adopt short-term solutions with deleterious long-term consequences. To avoid this trap, it is important to distinguish between near-term measures, designed to restore systems to financial viability while protecting vulnerable groups and addressing the most obvious inefficiencies and inequities; and long-term measures, designed to put in place a sustainable social insurance system. In the paragraphs which follow, we focus on the pension aspect of social security systems, keeping in mind that reform must address other issues as well.¹⁷

Near-Term Measures

The options for rescuing a foundering social security system are explicit in the long-run equilibrium condition for a pay-as-you-go pension scheme: the payroll tax t required to maintain actuarial balance is given by

$$t = (\text{pension income} / \text{average wage}) \times (\text{recipients} / \text{contributors})$$

where the first term in parentheses is referred to as the replacement ratio and the second term as the dependency ratio. Raising the payroll tax rate is almost everywhere counter-productive. Reducing fraud and non-compliance is difficult to accomplish short of full-scale reform. Cutting benefits to shore up a financially distressed pension system is often the only feasible solution. Jenkins (1992) summarized the problems succinctly: the retirement age is too low, disability pensions are too easy to obtain, benefits are linked to inflated recent earnings rather than true lifetime earnings, and penalties are not high enough for those who continue to work while receiving a pension. Thus, the steps necessary to stop the hemorrhage of financial resources from the pension system are:

- (i) *Reducing the dependency ratio* by raising the minimum retirement age, enforcing retirement tests for pension eligibility, eliminating problems of moral hazard that reward early retirement, implementing policies that reward older workers who choose to defer retirement, tightening eligibility for disability pensions, *etc.*; and
- (ii) *Reducing the replacement ratio* by modifying the formula used to calculate benefits, lengthening the minimum contributory period, applying income tests to reduce payments to pensioners who choose to remain in the labor force, *etc.*

¹⁷ We also ignore the obvious fact that the proposed reforms will generate a massive volume of savings, with attendant possibilities for the deepening of capital markets. It seems prudent to weigh the pros and cons of reformed social security systems on the merit of their social insurance aspects, not their attractiveness as a source of investment capital.

While both measures are important, as a matter of accounting, the greatest savings in most countries are available from (i).

Both steps are painful for older workers, who must be protected during the reform period. A failed social security system is a social investment gone bad that must be liquidated at a grave loss. Governments must be decisive: aiding but not coddling pensioners; holding the line against unreasonable demands. To take these difficult measures tolerably well, governments can separate the safety-net purpose of social security from its retirement-insurance purpose. Pensioners should be protected against poverty by mobilizing social assistance funds, not by raising pension-benefit levels. Retirement and destitution are different risks from an actuarial point of view; moreover, separating the safety-net component eliminates the risk that pension benefit rates over the entire income range will rise along with the price-indexed minimum pension.¹⁸

Long-Term Reform

The steps above relieve financial pressures in the near term; they cannot alone constitute an effective and sustainable pension system, which might require these elements¹⁹:

- (i) A compulsory pension scheme administered by de-centralized, private, regulated investment firms who compete for workers' savings;
- (ii) A minimal, means-tested, or universal flat pension funded from general revenue to assure against elderly poverty;
- (iii) Private, tax-favored pension plans to encourage saving for retirement and disability.

Countries will differ in their emphases on these elements. Moreover, if social security reform is to serve an anti-poverty goal, then in many countries it will need to include reform in the provision of health care (McGreevey 1993).

A necessary condition for reform is that the administration of social security systems be improved to increase compliance (Reid and Mitchell 1995). During a transition period, older workers will be offered the opportunity to continue to participate in the old pension scheme during the few years they have left until retirement; middle-aged workers will be offered inducements to switch as rapidly as possible from the old to the new system; and younger workers will start off, as it were, with a clean slate. Of course, reform which is overly softened and prolonged can degenerate into no reform at all.²⁰

¹⁸ See Barr (1993) for a discussion which stresses the distinction between the efficiency role of social security, which facilitates individuals' re-distribution of net consumption over the life cycle, and its equity function, which re-distributes income from rich to poor in the current period. A related point is that the labor market should be used to allocate resources, while the social insurance system would be employed to re-distribute income. Under central planning, widespread disguised unemployment ("labor hoarding") confused the two roles (Boeri and Keese 1992).

¹⁹ The three-pillar scheme is discussed in detail in World Bank (1994). For another view of pension reform, see Iyer (1993).

²⁰ For example, "The real problem facing Hungary," writes Newberry (1993, p. 269) in concluding his fiscal survey of that country, "is that the high proportion of voters who are retired or who receive housing subsidies makes desirable expenditure cuts politically difficult." Micklewright and Nagy (1994) find that the Hungarian unemployment benefit system is dominated by "special cases" and "grandfathering" clauses which make current

Experience suggests that low-and-middle-countries should **not** follow in the steps of the OECD countries, who combined the first two pillars of their fledgling social security systems into one, partially-funded public pillar. Governments in developing and transition economies are unlikely to exercise the fiscal discipline required to maintain system soundness. Pension systems in the OECD itself, if not in crisis, are at least suffering from chronic financial malaise; indeed the problems facing OECD pension systems are fundamentally similar to those described above (OECD 1988a, 1988b, 1988c; Heller *et al.* 1986; Hagemann and Nicoletti 1989). It remains to be seen whether the transition to more efficient social security systems in the reforming and transition economies can be managed under the difficult prevailing economic conditions, or whether the resulting systems can garner sufficient political support to remain viable.²¹

Some Examples

Reforming Economies: Examples of Chile and Uruguay

Because of the depth of the crisis of the 1980s, Latin America has led the way in pension system reform (Mesa-Lago 1994). The Chilean reform of the early 1980s has been much studied and its merits debated (*e.g.*, Santamaria 1992; Gillian and Bonilla 1992), because it involved the most radical approach: the dismantling of an unsound pay-as-you-go pension system and its replacement by a decentralized, privately managed fully-funded system. Without going into the points of debate -- whether the reform passes a range of equity tests, whether it has increased national saving and investment, *etc.* -- two salient points emerge from the Chilean reform. The first is that reform is costly: Government is obliged to fund the deficit of the old pension scheme while it is dismantled, to pay off the "recognition bonds" which were issued to induce older workers to enroll in the reformed pension scheme; in addition, Government is responsible for meeting the minimum pension guarantee for retirees with insufficient retirement savings and managing the public service and military pension plans.²² The financial information which would make available a comprehensive study of the reformed Chilean

administrative rules a poor guide to the actual prevailing level and structure of benefits.

²¹ For a perspective from political science on the political economy of reform, see Haggard and Webb (1993), who tend to downplay traditional "interest group" analysis and stress institutional factors and the crucial role of the timing of crisis and reform.

²² Consider the simplest case of a "Big Bang" instantaneous transition from a Pay-as-You-Go, defined-benefit scheme to a fully-funded defined-contribution scheme. Arrau (1990) has identified Governments' three fiscal responsibilities. First, Government must validate the contributions of retirees to the defunct scheme by issuing bonds which are deposited into accounts in the new pension system. This amounts to a one-off fiscal outflow. Because all contributions following the Big Bang are earmarked, coupon (*i.e.*, pension) payments cannot be paid out of workers' payroll contributions; rather, they must be met out of general revenue, which amounts to a second, and continuing, fiscal outflow until the last pensioner who was enrolled in the old system dies off. The two expenditures, one up front and the other spread over a substantial period of time, can be financed either by issuing debt or by raising taxes; in the case of the former, interest payments will comprise a one-third fiscal outflow arising from the change. Arrau goes on to establish the sensible proposition that any one-off capital accumulation arising from the transition -- not from efficiency gains under the new system, but from the transition itself -- must come at the expense of older workers. This is most easily appreciated by noting that the maximum capital accumulation would be the windfall which would be reaped if Government simply reneged on obligations incurred under the old system. The mere fact that reform will involve inter-generational re-distribution should not be allowed to stand in its way, as the existing pension system is also re-distributive. Keyfitz (1985) and Lapkoff (1991) have shown that a Pay-As-You-Go pension scheme can never achieve inter-generational equity, defined as the same rate of return for different generations, in a non-stable population. Large cohorts experience high rates of return; small cohorts experience low rates of return.

pension system is not available, but Mesa-Lago cites research indicating that the deficit of the social security system as a whole is on the order of 5% of GDP. To this should be added the sales and marketing costs of the private funds, which are substantial and act as a deadweight tax on workers' contributions. Second, and most discouragingly, all observers agree that the sweeping pension reform initiated in the late seventies was possible only because the military dictatorship crushed the interest groups -- trade unions, civil servants, *etc.* -- which had previously blocked real reform for decades.²³

If Chile's experience demonstrates the costs of thorough reform, Uruguay represents the dangers of half-hearted reform.²⁴ Pension expenditure expanded inexorably as upper-income retirees claimed increasingly attractive pension benefits and equity problems were addressed by extension of coverage to progressively lower-income households. By the 1970s, the combination of universal coverage, high average benefits, population aging and a deteriorating economic situation brought the system to the brink of bankruptcy, resulting in the social security reform act of 1979. Despite a number of commendable features, especially consolidating the main pension funds under one institution and raising the retirement age to 60 for men and 55 for women, the reform incorporated two fatal mistakes: first, contribution rates were reduced and the system was allowed to draw on general revenue, which loosened fiscal discipline and reduced transparency; second, overly-generous transition provisions resulted, in 1980-81, in a wave of retirements under the favorable terms of the old pension system. While the near-term solvency of the system was restored, trends during the 1980s made it clear that the social security system was structurally unsound. Further reform measures were introduced in 1987, but Parliament rejected the most important of these: raising the retirement age to 65 for males and 55 for females. In 1992, Government again introduced a reform package aimed to force the national health system into self-sufficiency, to introduce personal retirement accounts to be administered by the social security administration and measures to encourage workers to defer retirement, but the package was rejected by Parliament.

Transition Economies: Examples of Russia and Hungary

In Russia, the economic situation is so desperate that effective social security reform is impossible. The independent Pension Fund (PF) is responsible for management of financial resources; the Ministry of Social Protection (MSP) is responsible for calculation and payment of benefits. There are two major types of pensions administered by the Pension Fund: labor pensions, paid on the basis of a contribution record and received by about three-quarters of all pensioners, and social pensions, which are received by those with less than the required five years of contribution.

The system fails to provide adequate protection to households depending on pensions as sole source of income, and has vacillated between pressures to increase pensions in line with inflation and the need for fiscal austerity. The result has been a number of confusing *ad hoc* measures since 1990, with the end result has been that the minimum pension remains less than half the estimated poverty-line subsistence income (Samorodov 1992). When pensions are adjusted upward, it is by an across-the-board percentage rather than by a uniform absolute amount estimated to preserve the real value of the minimum pension. Legislation requires that individuals leave their current employment in order to be eligible for a pension, but it is not enforced.

²³ Mesa-Lago (1986) argues that the first wave of social security reforms in Latin America -- the reforms which are now being reformed -- also occurred during a period (the sixties and seventies) when the power of pressure groups *vis a vis* the state was temporarily weak.

²⁴ See also Puffert and Jimenez (1989) for a discussion of how effective reform in Brazil has been successfully blocked by pressure groups.

The Pension Fund's operations are financed by a 21 to 32 percent payroll tax levied against the employer and a nominal one percent tax paid by the worker. The PF dates only from 1990 and is in surplus; however, this covers a wide regional imbalance, as all pension benefit payments and contribution collections are decentralized to the oblast level; some oblasts are in surplus and others in deficit. Pension surplus regions are concerned by the accumulation of a surplus at the central level and the fact that they effectively subsidize regions with older population age structures and provide added social assistance at the local level; therefore, there are pressures to decentralize the pension system. Years of employment following retirement are included in calculating pension benefits; as the base salary used in calculating pension benefits changes with inflation, frequent and arduous manual re-calculation of pension benefits is required of staff working in regional offices. Periodic shortages of liquidity and delays associated with the re-calculation of benefits have caused delays in payment. Pension system problems in the other Slavic states of Belarus, Moldova and Ukraine, are perhaps even greater than in Russia.

In Hungary, there have been movements towards reform, but they are still tentative. Hungary inherited a pre-transition universal compulsory social insurance system covering old-age, disability and survivors' pensions, sick pay and maternity and child care allowances, health care and pharmaceuticals, and unemployment compensation; increasing social transfers further are consumer subsidies and housing allowances. The Hungarian Social Insurance Fund (SIF) experienced a sharp financial deterioration in the early 1990s due to the explosion of unemployment claims and the use of early retirement and disability leave as an alternative to unemployment. The latter have risen to as high as 40% of all newly granted pensions. Pension expenditure is on the order of 10% of GDP, well above levels experienced in OECD countries at much higher levels of income. The pensions system still fails to provide an adequate income for pensioners, thus encouraging workers to remain in the labor force after retirement. Since the minimum age at retirement and the standard age at retirement are one and the same, workers have no incentive to remain in the labor force after they reach the minimum age. The 53% payroll tax, which falls almost entirely on the employer, is a major source of distortion in the economy.

Since 1990, a number of corrective measures have been introduced or are under consideration. Among these are raising from 10 to 20 years the minimum contributory period (implemented 1991), steepening the degressivity of the benefit calculation formula (*i.e.*, accelerating the rate at which the percentage of income used to calculate pension earnings declines as income rises), postponing indexation of new benefits (under consideration) and shifting non-contribution-based benefits out of SIF to the central government budget (under consideration). These measures are insufficient, however, to correct the structural instability that will result if current trends, particularly high rates of early retirement, are extrapolated. Additional steps which are required include, most crucially, raising the effective age at retirement, reforming the benefit calculation formula to encourage workers to defer retirement, and instituting an income test to substantially reduce pension payments to retirees who continue to engage in active employment, including pension benefits in the tax base and deducting pension contributions from taxable income.

A BROADER PERSPECTIVE ON PENSION PROBLEMS

Amid the pessimism about financial prospects for social security systems, one needs to recall that few of the world's people have walked very far down the primrose path. Ask, for example, How deeply entrenched in the world's societies and economies are failure-prone social security systems? By failure we mean the inability of social security systems to raise wage-based taxes, or alternative sources of revenues, high enough to pay for already-committed benefits to participants. All the OECD countries have failure-prone systems, although we showed above that they were already moving in the

1980s toward adjustment of their obligations to their abilities to pay. Because of the political pressures of incumbents and vested interests, reform is exceedingly difficult prior to outright failure.

However, these countries, all relatively rich when the world as a whole is considered, are home to but 15% of the world's population (See Table 4). Despite their small share of total population, 38% of all contributors to social security systems live in these richest countries. Perhaps, one might say, they can afford to make mistakes. Moreover, the slowdown in pensions' expansion in the 1980s may warrant a presumption that self correction will play a role in the adjustment of these systems in coming years as it apparently did over the past decade.

The low-income countries, with three-fifths of world population, have less than one-quarter of the pension-system contributors and a far smaller share still of pension recipients. They have barely begun to offer government-mandated social security programs, having done so in most instances only for government employees. China is one very large exception because of the influence of the Soviet model.

For the rest of these countries, there is ample time to develop a sound framework for a strictly-limited public program to reduce disability and other social risks. Guarantees of retirement at a specific age can still be largely eschewed, and programs could focus on the real purposes of assuring against destitution because of termination of work capacity, not because of a wish to choose leisure in an environment influenced by a flawed social contract. Only one worker in ten contributes to social security today in the low-income countries, and their numbers may be sufficiently small to limit political influence that would support unwarranted program expansion.

Table 4. World population and social security coverage by country income groups, ca. 1990.

	Population (millions)	% Distribution	<u>Contributors</u> Labor Force %	% Distribution of Contributors
Low Income Economies				
China	1,162	21.4	23.7	13.4
India	884	16.3	10.5	4.5
Other Low-Income Economies	1,146	21.1	6.4-15	5.6
Lower-Middle Income Economies				
Transition Economies	597	11.0	80	23.4
Market Economies	341	6.3	20	3.3
Upper-Middle Income Economies	478	8.8	40-60	11.7
High-Income Economies	828	15.2	94	38.0
World Total	5,436	100.0	--	100.0

Sources: Population: *World Development Report 1994*, pp. 162-63; contributors as a percentage of total labor force, estimated by the authors on the basis of Table A.4 in *World Bank 1994*, pp. 356-57. Percentage distribution of contributors calculated at mean of contribution/labor force range multiplied by population.

For China, with nearly one-quarter of its labor force contributing to enterprise-based pension and health-care finance systems, reform options are tightly enmeshed with conversion to the socialist market economy. Large current subsidies to state enterprises are gradually to be reduced by hardening the soft-budget constraints. The enterprises will have to shed many of their current social obligations if they are to compete and perform like profit-maximizing firms in neighboring, capitalist countries.

Oddly, China never has developed *institutes* for health and social security, leaving management tasks to each of the enterprises. A key question is whether the lack of articulated social security institutes, which in the Latin America and Caribbean region have become obstacles to reform, will make reform in China easier or more difficult.

The lower-middle-income economies, as identified in the current approach of the *World Bank Economic and Social Indicators*, divide fairly clearly into two classes. Many, such as the Philippines, Peru, Morocco, Ecuador, Colombia, Tunisia, Thailand, Turkey, and Iran, have been market economies for a long time. The population of countries in this group as a whole was 341 million in 1990. Others formed part of the USSR and socialist Eastern Europe, and their population is about 600 million. For the long-time market-linked economies, only one-fifth of their labor force are social security contributors; but for the command economies, an estimated 80% of the labor force are potential claimants on the social security system. With 11% of the world's population, these transitional economies are home to nearly one-quarter of pension-system participants.

As with the transition economies, the upper-middle-income economies, which include South Africa, Brazil, Malaysia, Venezuela, Mexico, Argentina, and Korea among the largest in this group, there is a higher-than-average incidence of participation in public social security programs. These countries, unlike the high-income economies, are still too poor to afford bad mistakes. They will have to be prudent in considering their options for social security. Many of these countries have elaborate social security institutes with large staffs that create substantial administrative costs, often far higher as a share of aggregate benefits than are the costs prevailing in high-income economies. The institutes themselves may resist reform because of the incumbency of the supply-side beneficiaries of existing programs. Social security reform is a priority development issue in virtually all the countries of this group.

CONCLUSION

We have proposed a model according to which, as living standards rise, the responsibility for insuring against risks associated with old age is increasingly laid upon the shoulders of Government. The social security system expands as a result. Evidence from OECD countries in the 1980s suggests, however, that political support for the expansion of social security spending may eventually weaken and that containment then becomes the order of the day.

This model appears not to describe the development of social security in reforming and transition economies, where social security systems have become sources of distortion and imbalance at levels of development much lower than those that prevailed in OECD economies when policy makers first expressed concern and began to implement measures to correct those imbalances. The reform agenda discussed above would shift more risk to the individual, taking reforming and transition economies into relatively unexplored territory. The social costs of economic reform and of transition from command to market economy have been greater than many analysts anticipated, and how reforms will be implemented in the currently difficult atmosphere remains to be seen, as does the long-term viability of reformed social security systems.

This overview may have several key suggestions. For the low-income economies, even including the rural majority in China, both efficiency in development, and protection for the poor, may be best served by *avoiding* the appeal of formal social security systems. Existing systems would be a bad model to extend to the really poor in rural areas, since these systems redistribute income from the poor to the rich. Moreover, informal support mechanisms between and within families would be in danger

of being crowded out by public programs. Eschewing formal systems may also be appropriate for the lower-middle-income market economies for similar reasons.

Existing pension systems in the transition economies may be the largest development challenge in the social sphere. The solution? Get the able elderly (and not-so elderly) off the pension rolls; use the savings generated to assist the truly needy through targeted anti-poverty programs. In Ukraine an estimated one-quarter of recipients of both age-based and disability pensions are also working for wages (World Bank 1993). Over one-quarter of the population are pension recipients. While the transition economies must cushion the social costs of enormous economic adjustments, they must do so without prejudicing the potential for restoration of economic growth. This requires correction of the macro-economic imbalances and micro-economic distortions caused by flawed social security systems.

Some reforming economies support a labor aristocracy with work-related benefits yet do far too little to extend equal opportunities to youth in their deprived rural areas. Some of these economies have been hobbled by underinvestment in education, lack of saving, and maintenance of privilege among an urban minority. Social security institutes have, in some cases, been accomplices in an unfair system of benefits for the already better off. Large disparities in economic growth rates are directly linked to the patterns of consumption and investment that emerge from differences in allocation of resources.

Each group of countries faces a range of reform options and must choose those that are appropriate to the public's trust in government, willingness to save, ability to avoid problems inherent in both public (moral hazard) and private (adverse selection) insurance schemes, and other characteristics that make some options more manageable than others. Whatever the choices, social security reform is likely to remain at or near the top of any agenda of development challenges for some time to come.

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