STRUCTURAL REFORM

REFORMING THE PENSION SYSTEM IN KOREA

by Randall S. Jones

Korea is in the midst of the most rapid demographic transition of any member country of the Organization for Economic Cooperation and Development (OECD); the share of Korea's population older than age 65 is projected to double from 7 percent to 14 percent between 2000 and 2019 (***Table 1***). In comparison, this transition lasted 24 years in Japan and is projected to last 71 years in the United States. The speed of population aging reflects Korea's transformation during the space of one generation from a poor, agrarian society to an industrialized OECD country, resulting in dramatic changes in fertility rates and life expectancy. Indeed, the fertility rate has fallen from 5.4 in the 1950s to 1.2 today—the largest decline in the OECD area—while the 30-year increase in life expectancy is also the largest. Consequently, within 50 years, Korea's old-age dependency ratio will rise from the third lowest among OECD countries to the third highest (***Figure 1***).

The demographic transition is being accompanied by a shift away from the tradition of children caring for their elderly parents[1] to a reliance on public pensions and safety nets similar to those found in most other advanced countries. The key step in this process was the creation in 1988 of the National Pension Scheme (NPS), a partially funded system. Although the NPS is still in its start-up phase, it is not sustainable under its current framework, and the contribution rates needed to achieve long-term viability would be so high

Table 1: **Speed of Aging in Selected OECD Countries**

Country	Year when share of elderly make up:		Years elapsed
	7 percent of population	14 percent of population	
Korea	2000	2019	19
Japan	1970	1994	24
Poland	1966	2013	47
Finland	1958	1994	36
Greece	1951	1992	41
Portugal	1951	1992	41
Canada	1945	2010	65
United States	1942	2013	71
Germany	1932	1972	40
Switzerland	1930	1982	52
United Kingdom	1929	1976	47
Italy	1927	1988	61
Sweden	1887	1972	85
France	1864	1979	115

Source: *OECD Economic Surveys: Korea* (Paris: OECD, 2001)

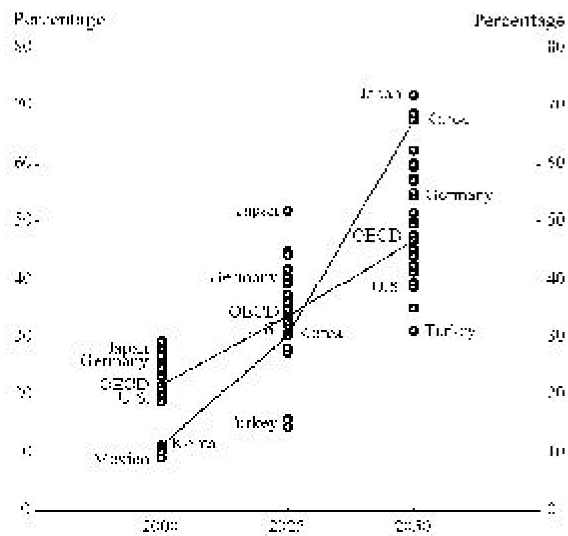
1. The proportion of households with three generations fell from 17 percent in 1970 to 7 percent in 2000.

as to negatively affect Korea's growth potential. Moreover, the system does not have the coverage necessary to prevent poverty among the elderly. This article will explain the weaknesses in the NPS and propose reforms to improve it. It will then discuss additional areas—the corporate pension system, individual savings for old age, and the effective age of retirement—where reforms are needed to cope with population aging.

Problems in the National Pension Scheme

At its inception in 1988, the NPS aimed at a replacement rate of 70 percent (that is, a pension benefit equivalent to 70 percent of the present value of average lifetime earnings) for workers with 40 years of contributions. However, the contribution rate was set at only 3 percent of income. The first reform, which took place in 1998, boosted the contribution rate to 9 percent while cutting the replacement rate to 60 percent. Nevertheless, the overall replacement rate would remain rather generous, at more than 80 percent, for those who also receive a "retirement allowance" from companies. Despite the 1998 reform, the NPS still faces a serious problem of sustainability arising from the imbalance between low contributions and overly generous benefits. Under current parameters, the NPS would begin running deficits in 2036 (***Figure 2***), which would exhaust the National Pension Fund by 2047. Ensuring financial sustainability—defined as maintaining a reserve fund large enough to pay two years of benefits—through 2070 requires raising the contribution rate to 19.85 percent by 2030.[2]

Figure 1: **Old-Age Dependency Ratios, 2000–50**



Source: *Ageing and Employment Policies: Korea* (Paris: OECD, 2004).
Note: Shows the ratio of population aged 65 and over to the population aged 20–64.

The government is legally required to review the sustainability of the NPS every five years. In 2003, it proposed a further reduction in the replacement rate from 60 percent to 50 percent in 2008, accompanied by a 1.38 percentage-point rise in the contribution rate every five years beginning in 2010, boosting it to 15.9 percent of wages by 2030.[3] Such a reform is projected to ensure the financial stability of the NPS through 2070 under optimistic economic assumptions. In particular, the projection is based on relatively high rates of real wage growth, at 2 percent during 2030–50,[4] and a real return on investment of 2.5 percent. Under less favorable economic assumptions,[5] the contribution rate would have to increase to 17.2 percent. In addition to pension costs, there will be a substantial rise in health care spending, which in Korea is currently the lowest among OECD countries at 5 percent of GDP. Consequently, health insurance contributions are likely to double to more than 8 percent of

2. This projection by the National Pension Research Institute assumes that the fertility rate is constant at 1.4, somewhat above the current rate of 1.2. Fully funding the NPS would require a contribution rate of 25 percent.

3. Assuming that wage and self-employed income remain at their current level of about 60 percent of gross domestic product (GDP), such a contribution rate would generate revenue equivalent to about 9.5 percent of GDP.

4. In comparison, the average rate of increase in real compensation in the business sector in the OECD area averaged around 1 percent during the 1990s.

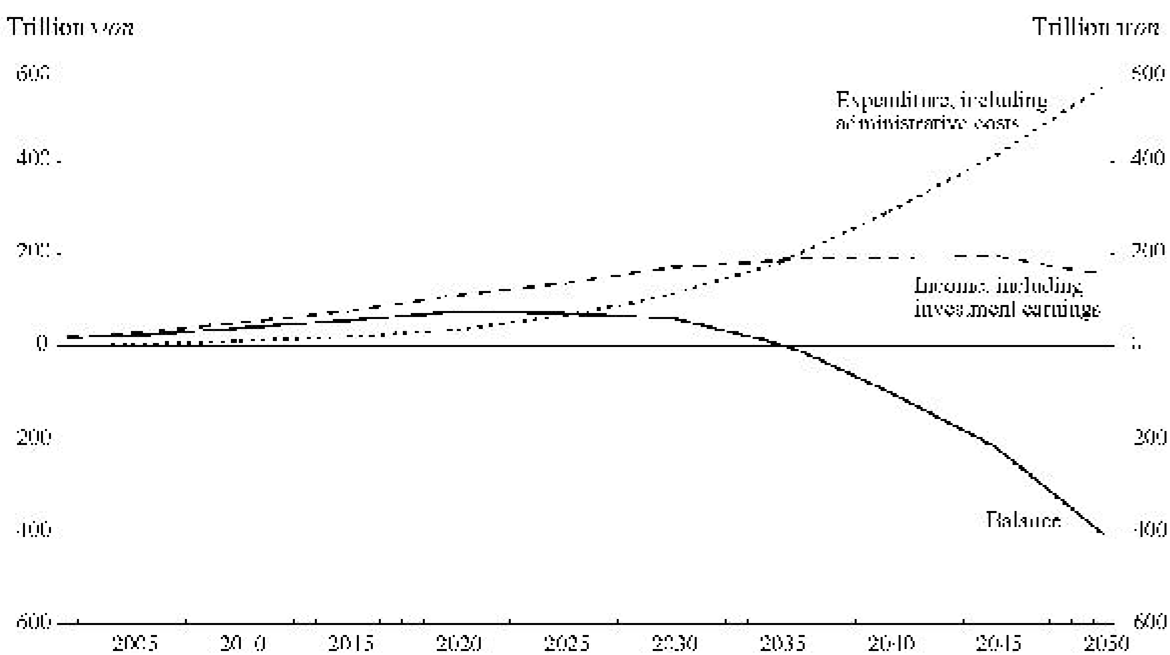
5. Real wage growth slows to 1.5 percent during the period 2030–50, while the real rate of return is 2 percent.

wages by 2030. Combined with contributions for unemployment insurance (around 1.5 percent of wages at present) and workplace injury insurance (at least 0.5 percent), social insurance contributions for employer and employee combined are expected to rise to between 25 percent and 30 percent of wages during the next few decades.

At present, Korea has the second-lowest tax burden among OECD countries. A single person earning the average wage of a production worker, for example, paid 15 percent of gross earnings[6] in taxes and social security contributions in 2004, well below the OECD average of 36 percent. Similarly, the marginal rate of 25 percent for such a worker was only about half of the OECD average of 45 percent. The relatively low tax burden has a positive impact on Korea's economic growth by encouraging work and saving. However, a sharp increase to the tax burden to around 25 percent of gross earnings for social insurance contributions alone during the coming decades would likely have negative consequences on economic growth.

In addition to the question of long-run sustainability, the relatively limited coverage of the NPS remains a concern. Expansion of the legally mandated coverage of the NPS and enhanced compliance has boosted the number of persons paying contributions nearly threefold, from 4.4 million in 1988 to 12.4 million in 2004. Nevertheless, that amounts to only 55 percent of the labor force. In addition, there appears to be significant underreporting of income by the self-employed: in 2003 employees paid 71 percent more on average than individually insured persons. Given that the NPS benefit formula contains a redistributive element, accuracy in income reporting is essential to ensure a fair division of the costs and benefits between salaried workers and the self-employed. More-

Figure 2: **Long-Term Projections for Korea's National Pension Scheme**



Source: National Pension Research Institute

6. This figure is the sum of personal income tax payments and social security contributions by employees and employers divided by gross wages plus employers' social security contributions; see *The Tax/Benefit Position of Employees* (Paris: OECD, 2004).

over, the relatively low coverage and underreporting of income by the self-employed raises the risk that the NPS will not be able to prevent poverty among older persons.

The rate of relative poverty is already significantly higher for households headed by someone over the age of 60, reflecting the breakdown of traditional means of income support before the social safety net is sufficiently well developed. In 2003, old-age pension benefits paid by the NPS amounted to only 0.2 percent of GDP. Family support remains the key source of income for the elderly although its importance has been declining. However, such transfers are not always sufficient to move the elderly out of poverty. A social assistance program—Livelihood Protection—provides aid to persons of all ages, subject to strict eligibility conditions based on income, assets, and the ability of the extended family to help. Consequently, only approximately 8 percent of the elderly receive this benefit.

In addition to the NPS, there are three public occupational pension schemes: for civil servants (since 1960), the military (1963), and private-school teachers (1975). Together, these schemes cover approximately 4 percent of the workforce. As with the NPS, there is a structural imbalance between high benefits that provide a replacement rate of around 76 percent and low contribution rates. Consequently, the schemes rely on assistance from the government budget. Pension portability is possible among the three occupational schemes, but not between the occupational schemes and the NPS; this limits labor mobility.

Fixing the National Pension Scheme

The government's 2003 reform proposal remains blocked in the National Assembly. Immediate steps to raise the pension contribution rate and lower benefit levels would be a positive step. However, a systemic reform of the pension system is needed to address the problem of inadequate coverage by the NPS and ensure the long-run sustainability of the NPS as well as limit the rise in the contribution rate by increasing reliance on private-sector savings. One option is a two-tier system:

1. **Tax-financed universal pension.** Such a pension would resolve the problem of the inadequate coverage of the NPS as well as eliminate poverty among the elderly. The amount of the universal pension would depend on the availability of fiscal resources. For example, a universal pension with a 20 percent replacement rate would cost 2 percent of GDP in 2005, rising to around 7.5 percent by mid-century. However, the net cost could be reduced by cutting the benefit to wealthy persons and taxing the benefit.
2. **Income-related pension.** This pension would provide a replacement rate of another 20 percent. A contribution rate of approximately 7 percent of wages and self-employed income—about 4 percent of GDP—would be sufficient to ensure the sustainability of a partially funded pension of this scale.

The combined cost of such a two-tier system would thus be around 11 percent or 12 percent of GDP by 2050, somewhat more than the 9.5 percent under the 2003 reform proposal. However, under the latter approach, there would still be the additional expense of providing social assistance to the elderly with low incomes, which may be substantial given the limited coverage of the NPS. Moreover, as noted above, the cost of the universal pension under the two-tier system can be reduced by cutting benefits paid to high-income persons. In sum, the overall cost of the two-tier option appears to be roughly comparable with the 2003 reform proposal.

The two-tier option offers some advantages. First, it would eliminate the moral hazard attached to the Livelihood Protection system by removing the incentive to reduce income below the threshold in order to receive social assistance. Second, given the stigma attached to receiving public assistance and the asset and family criteria needed to qualify, a universal pension would be more effective in reducing poverty among the elderly.

The two reform options have different implications for the extent of prefunding of pension obligations. Under the two-tier approach, the use of general taxation for the universal pension means a reduced role for the NPS and less accumulation of assets in the National Pension Fund. The fund reached 15.5 percent of GDP by 2003 and is projected to double to approximately 35 percent by 2015. Prefunding of the

NPS to ensure a long-term balance could boost the fund to more than 100 percent by 2040. Clearly, significant risks are associated with a large concentration of national wealth in a single institution. At present, 15 trillion *won* (10 percent of the fund) is invested in equities, making the NPS the largest shareholder in four major companies. The amount invested in equities is expected to double to 32 trillion *won* by 2009, which would raise the fund's share to 5 percent of the total value of listed companies in the stock market. Concern exists that these substantial holdings could lead to government interference in corporate decision making. Whatever pension reform option is chosen, it is important to ensure a governance framework that prevents political influence on the companies in which the fund invests.

The two-tier public pension system proposed above would provide a replacement rate of about 40 percent. It would thus be necessary to supplement retirement income through a corporate pension system and individual savings.

Set Up an Effective Corporate Pension System Bolstered by Individual Savings

Firms are required by law to pay a lump sum of at least one month of wages for each year worked to each departing employee although, in practice, many large enterprises agree to pay about double that amount. However, this retirement allowance system has serious deficiencies as a means of promoting savings for old age. First, its coverage is limited to regular workers at companies with at least five workers. Consequently, only about one-quarter of employees receives the allowance. Second, severance payments are insecure. Few firms make full external provisions for these obligations, preferring to use the funds internally for working capital and leaving individuals vulnerable to the financial performance of firms.[7] Third, the allowance is poorly suited to play the role of a retirement savings vehicle given the high rate of job turnover. Indeed, the share of employees with tenure of less than one year is 34 percent in Korea; in the United States, a country with relatively high turnover, this number is 22 percent. Consequently, the allowance has lost its link to retirement income, as most workers receive such lump sums numerous times during their working lives. Moreover, the allowances can be paid early for workers facing major expenses, such as housing.

In December 2005, the government launched a corporate pension system with the following provisions:

- Each workplace may establish, based on an agreement between labor and management, a pension plan based on either defined benefits or defined contributions. The pension plan would be in addition to the current system of lump-sum retirement allowances, which are still mandatory for all firms with more than five employees.
- Firms that adopt pension systems must entrust fund management to financial institutions.
- The above two requirements eventually will be applied to all firms, including those with fewer than five employees.

Employees generally insist on keeping the lump-sum retirement allowances, which they consider deferred wage payments. Moreover, after employees leave the firm, they often use their lump sums to start small businesses. Funded company pensions would provide a more secure source of savings than the retirement allowance system, which is generally unfunded and pays workers only if the firm continues to exist. Management, on the other hand, may be reluctant to add a corporate pension system to the existing retirement allowance.

The government should take several steps to encourage the development of an effective corporate pension system and thereby encourage private-sector savings for retirement. First, the tax preferences for the retirement allowance, which allow the lump sum to be taxed over a number of years at low rates, should be gradually removed, thus reducing workers' preference for the traditional system. Second, a corporate pension system based on defined contributions, rather than on defined benefits, should be encour-

7. Following the 1997 crisis, approximately one-quarter of eligible workers reported they had not received this payment.

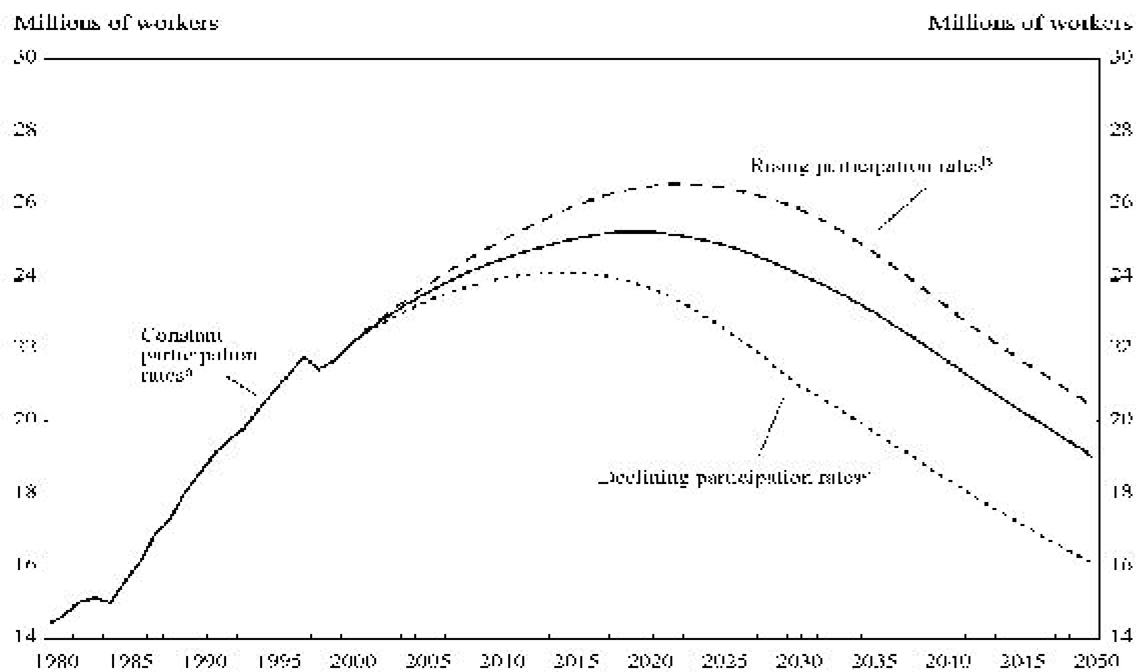
aged in order to promote pension portability and thereby labor mobility.

Individual pension accounts offered by financial institutions since 1994 have been encouraged by generous tax concessions. Beginning in 2001, income placed in such accounts is tax deductible up to an annual ceiling of 2.4 million *won* (9 percent of the average annual wage). A minimum of 10 years of contributions, which are managed by bank trust accounts, insurance companies, and investment trust companies, is required to receive an annuity that cannot be paid before the age of 55. The benefits, which must be paid over a minimum of five years, are taxed at a reduced rate as pension income. Despite the favorable tax treatment, individual pension accounts accorded special tax treatment were rather small, at 3 percent of GDP.[8] The limited role of individual savings is due in part to investors' lack of confidence in the financial institutions responsible for the management of these accounts, which reinforces the need to upgrade financial supervision.

Encourage Older Persons to Participate in the Labor Force and Retire Later

By the middle of the twenty-first century, more than one-third of Korea's population will be over the age of 65 and about half of all workers will be age 50 or older. Meanwhile, the number of persons in the 25–49 age group will fall by about half. If labor participation rates for each age and gender group were to remain at their current levels, the labor force would drop by one-fifth, from 23.8 million in 2005 to 19 million by 2050 (***Figure 3***). The extent of the decline is moderated by the relatively high participation in

Figure 3: **Projections for Korea's Labor Force, with Various Scenarios for Older Workers**



Source: *Ageing and Employment Policies: Korea* (Paris: OECD, 2004)
a. Participation rates for men and women remain at their current levels for each age group.
b. Participation rates converge by 2030 to the maximum value in the OECD for each age group over 50 years of age and for both genders while the rates for younger workers remain at their current levels.
c. Participation rates converge by 2030 to the average value in the OECD for each age group over 50 years of age and for both genders while the rates for younger workers remain at their current levels.

8. *OECD Economic Surveys: Korea* (Paris: OECD, 2003).

Korea's workforce of persons above the age of 50. If the participation rate for that age group were to fall to the OECD average, Korea's labor force in 2050 would decline by one-third from its current level, to only 16 million. Conversely, boosting the participation rate of older persons would significantly moderate the drop in the number of workers, thereby easing the burden of population aging. The sensitivity of the size of the labor force to the participation rate of older workers demonstrates the importance of policies to encourage those older than age 50 to remain economically active.

In contrast with most other advanced countries, Korea has seen no long-term decline in participation rates for older workers. Indeed, the rate for men in the 50–64 age group and for both men and women over 65 remains relatively high, even after adjusting for the large share in agriculture. The high and stable level of participation reflects several factors. First, both public and private pensions are at an early stage of development, as noted above. Older persons, therefore, depend to a large degree on earned income as well as transfers from family members to supplement their savings. Second, the labor market appears to be functioning efficiently in the sense that employees, who leave firms at relatively young ages on average, continue to work, though at lower wages more in line with their productivity. Nevertheless, the practice of workers leaving firms at around age 50 is not optimal in a rapidly aging society.

The practice of retiring workers from companies at a relatively young age reflects the importance of seniority—not individual performance—in determining wage levels. To avoid being saddled with a large number of expensive older workers, most firms set a mandatory retirement age that is well below the age of 60 recommended in the Aged Employment Protection Act. A mandatory retirement age also helps firms to adjust their workforces, given the difficulty of dismissing regular employees owing to employment protection laws. As a result, average employment tenure peaks at 11 years in the 45–49 age group in Korea—compared with the 55–64 age group in most other OECD countries—and then drops sharply.

Although some departing employees retire, about three-quarters move into self-employment, which on average is characterized by low productivity and low income. This boosts the proportion of self-employed in the over-50 age group to 57 percent, compared with only 27 percent for those under the age of 50. This pattern also expands the number of small firms in the service sector, where productivity is weak. Indeed, labor productivity in services in Korea is only half of labor productivity in manufacturing; this is the largest gap among OECD countries. Among workers who remain as employees past the age of 50, two-thirds worked in firms with fewer than 100 workers, and only one-third were classified as regular workers in 2002. Overall, 65 percent of workers over the age of 50 are in physically demanding jobs, such as manual work, which tend to be low paid.

The pattern of employees leaving firms at a relatively young age may have an increasingly negative impact on labor participation in the future. As the average education level of older-age cohorts increases over time, workers older than age 50 may become less interested in accepting self-employment and jobs at small companies that offer significantly lower remuneration. It is thus important to encourage continuous employment at firms through greater flexibility in wages within firms. The fact that employee compensation is set through collective bargaining between management and labor limits the scope for government measures to change the wage system.

Nevertheless, several policy measures could be useful. First, requiring firms to set the minimum age for mandatory retirement at an age closer to the pension eligibility age—or forbidding the use of mandatory retirement altogether—would be beneficial. Firms agree to seniority-based wages on the condition that they can force older workers to leave. Without mandatory retirement, firms would insist on wage systems that reflect productivity more closely. One option under discussion is a "peak-wage system," which allows wages to decline after some point in exchange for guaranteed employment to a certain age. Second, the retirement allowance, which is based on an employee's final wage, increases the disincentives to keep older employees. Replacing the allowance with a corporate pension system, as discussed above, would also help encourage the employment of older persons.

In a number of OECD countries, the public pension system encourages early retirement. It is essential, therefore, to avoid introducing incentives for early retirement, which depend on the combined effect of the replacement rate and the change in pension wealth when continuing to work. A high replacement rate encourages withdrawal from the labor force as would a loss in net pension income if the person continues to work. The planned increase in the pension eligibility age from 60 to 65 in 2033 should be implemented to limit incentives to retire early. With life expectancy projected to increase another six years—from 77 in 2005 to 83 in 2050—a further rise in the pension eligibility age could be envisaged.

Conclusions

Ensuring the sustainability of the public pension scheme will require a near doubling of the contribution rate—with a negative impact on growth—or a halving of benefits or some combination of the two. An immediate adjustment in the NPS—lowering benefits and raising contribution rates—is important to improve the scheme's financial viability. More important, Korea still has a window of opportunity for systemic reform of the pension system, given that the first regular pension benefits will not be made until 2008.

The extraordinary speed of population aging in Korea requires systemic reforms to implement a multi-pillar system that increases reliance on private-sector saving. A two-tier publicly financed pillar, including a universal pension financed by general taxes and an income-related benefit funded by contributions, would reduce the extent of poverty among the elderly and overcome the limited coverage of the NPS. The second pillar should be created by the transformation of the retirement allowance into a defined-contribution corporate pension. This should be supplemented by a third pillar of a more effective system of individual pension accounts. Such an approach would limit poverty among the elderly as well as help maintain a sound public financial position.

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