This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Social Security Pension Reform in Europe

Volume Author/Editor: Martin Feldstein and Horst Siebert, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-24108-4

Volume URL: http://www.nber.org/books/feld02-2

Conference Date: March 20-21, 2000

Publication Date: January 2002

Title: Italy: A Never-Ending Pension Reform

Author: Daniele Franco

URL: http://www.nber.org/chapters/c10674

7

# Italy A Never-Ending Pension Reform

Daniele Franco

#### 7.1 Introduction

In recent years the reform of public pension systems has been called for in most western countries. Despite differences in institutional arrangements, most of the underlying reasons are common. The most important considerations are demographic: It is feared that present pay-as-you-go (PAYGO) retirement provisions, many of which originated long ago, are not financially sustainable in rapidly aging societies. It is also argued that today's programs direct too many resources to the elderly, thus preventing adequate income support to the social groups in which poverty is now prevalent.

These problems are especially acute in Italy. Pension spending is proportionally higher than in any other western industrial country (15.7 percent of gross domestic product [GDP] in 1999)<sup>1</sup> and the fertility rate is among the lowest (1.2 children per woman of child-bearing age). The ratio of the elderly to the working-age population is expected to increase from 21 percent in 1990 to about 30 percent in 2010 and 48 percent in 2030; thus it will be among the highest in the world. These problems are compounded

Daniele Franco is director of the public finance division, research department, Banca d'Italia.

The views expressed in this paper are those of the author and do not commit the Banca d'Italia. The author wishes to thank F. Balassone, F. Peracchi, R. M. Marino, S. Zotteri, and the participants at the Berlin conference for helpful comments and suggestions.

<sup>1.</sup> International comparisons of pension expenditure are influenced by differences among the definitions of pension benefits. They are also affected by the structures of national social protection systems. For example, in the case of Italy, pensions have been used extensively to substitute for other benefits. Moreover, the net burden on public-sector finances depends on the tax regime of pensions.

by the high public debt, which requires Italy to run sizeable primary surpluses in order to comply with the Stability and Growth Pact.

The reform of the pension system in Italy is at the core of the effort to ensure fiscal consolidation and long-term fiscal sustainability. It is also an important component of any policy aimed at improving the functioning of the labor market, namely, at increasing the present low participation rate. Because the incidence of pensions on total social spending is very high (70 percent), pension reform is also a precondition for implementing policies that may increase public support for the nonelderly groups of citizens and to finance additional spending on long-term care.

The reform process began in 1992. After decades of myopic policy making, about one-fourth of perspective public-sector pension liabilities was abruptly cancelled. A second major reform was introduced in 1995. These reforms were supplemented by numerous minor changes in legislation. The process is not yet completed. There is a widespread consensus that additional changes should be introduced in the PAYGO pillar. New reforms are also envisaged for the supplementary funded schemes, which are at present rather underdeveloped. Even if a supplementary funded pillar has been considered a necessary component of the reform since 1992, its development has been extremely slow. This lengthy reform process generates uncertainty, limits the microeconomic benefits of the actuarial approach introduced by the 1995 reform, and induces elderly workers to retire from the workforce as soon as they are allowed to for fear of possible cuts in benefits.

This paper examines the reforms implemented so far and considers the problematic aspects of current arrangements. It presents the main policy options under consideration and examines the issue of funding. The paper argues that in spite of the reversal of pension policy in 1992, in terms of expenditure control, there is considerable continuity in the Italian policy-making style. The same incremental and short-sighted approach that determined the extraordinary expansion of pension expenditure up to 1992 continued to work in the following years. The reforms implemented in recent years under the pressure of budgetary constraints largely reflect the demands of some specific groups. They have been introduced without adequate analysis of their implications and include solutions that may prove unsustainable in the long run. This also made the reform process longer and determined lengthy transition periods.

Section 7.2 outlines the main features of the development of the Italian pension system. Section 7.3 and 7.4 examine the reforms implemented in 1992 and 1995, respectively. The role of funded schemes is considered in section 7.5, whereas section 7.6 considers some critical aspects of the framework set up by the recent reforms. Section 7.7 examines the main additional reforms under consideration at present. Section 7.8 presents

some general considerations about the reform process in Italy. Section 7.9 concludes.

# 7.2 History up to the 1980s: Growing Imbalances and Chaotic Distribution

The history of the Italian pension system is in many ways similar to that of other continental Europe systems.<sup>2</sup> The first pension plans were established for public employees in the second half of the nineteenth century. A voluntary pension scheme for private employees was introduced in 1898 and was made compulsory in 1919. The scheme, which was a funded one, was managed by the National Institute for Social Security (*Istituto Nazionale della Previdenza Sociale*, or INPS). It was financed by a payroll tax and provided old age and disability benefits based on paid contributions. Pensions were calculated on the basis of rules that worked in favor of workers with relatively short contribution records and lower earnings. Survivors' benefits were introduced in 1942.

In the aftermath of World War II the funded schemes were unable to sustain the costs of pension benefits. This was due to the effects of inflation and to the use of pension fund assets to support government finances. Only a small part of assets was invested in shares and real estate (about 5 percent in 1939; see Beltrametti and Soliani 1999). Out of necessity and in haphazard fashion, Italy shifted to the PAYGO system. The transition came to an end in 1952, when new rules were eventually introduced. A guaranteed minimum pension level was also introduced (Franco and Morcaldo 1989).

The resulting regulatory framework remained comparatively stable for a number of years. However, as the system gradually approached its full application there was a considerable increase in the number of pensions. By the end of the 1950s a period of far-reaching and frequent changes began, setting the stage for the rapid expansion of expenditure experienced in the following decades. Public pension coverage was extended to the selfemployed,<sup>3</sup> to work-disabled citizens (in 1966), and to elderly persons with low incomes (in 1969). Also in 1969, pension entitlements for privatesector employees shifted from the old contribution-based formula to an earnings-based one. The change was a decisive step toward guaranteeing

<sup>2.</sup> For a general view of the development of the Italian social security system see National Council for Economic and Labor Issues (CNEL; 1963), Fausto (1978), Ferrera (1984), and Ascoli (1984); for the pension system see National Institute for Social Security (INPS; 1970), Castellino (1976), Morcaldo (1977), and Pizzuti (1990).

<sup>3.</sup> Special schemes (managed by INPS) were introduced for self-employed farmers in 1957, for artisans in 1959, and for other self-employed businesspersons (mainly shopkeepers) in 1966.

pensioners a standard of living correlated with that of active workers. Seniority (long-service) pensions, which can be taken at any age provided that the worker has a minimum contributory period, were established in 1956 for public-sector employees and in 1965 for private-sector employees and self-employed workers.<sup>4</sup> No evaluation of budgetary costs was carried out while these reforms were being introduced; these have been estimated altogether to involve a net transfer to living generations of about 80 percent of GDP (Castellino 1996).

The innovations of the 1970s were less sweeping, affecting mainly the indexation mechanisms, which had been introduced in 1969 and put into force in 1971. On account of the unequal protection afforded by the various indexing systems, the effects of the decade's high inflation on purchasing power varied form one class of pensioners to another. The recipients of higher benefits were hardly hit<sup>5</sup>; the failure to adjust the ceiling on pensionable earnings (introduced in 1968) generated additional disadvantages for high-income workers.

During the 1960s and the first half of the 1970s the social assistance functions of the pension system were extended. Pensions were used to provide income support to individuals working in agriculture, to those in the country's poorer regions, and to elderly workers with short contributory periods. Pension expenditure helped in easing social conflicts, first when the farming and the South were unable to keep up with the growth in industry and in the northern regions (see Becchi Collidà 1979; Fausto 1983), and later when the slowdown in economic growth exacerbated conflicts over income distribution. This enlargement of the welfare aspect was achieved partly through the introduction of new entitlements (welfare benefits for persons over the age of sixty-five who lacked adequate means of support, and for the disabled) and partly through the abuse of existing ones (such as, e.g., social security disability pensions<sup>6</sup>). However, the improper use of disability pensions, which also came to serve as a substitute for adequate unemployment benefits (Regonini 1984), produced uncontrolled redistributive effects, especially because of (1) the possibility of drawing multiple pensions or cumulating pensions and earned income, (2) the lack of strict eligibility requirements for benefits, and (3) the lack of

4. For public-sector male and female workers the required period was set at twenty-five and twenty years, respectively. In 1973 the period was reduced to twenty and fifteen years. For private-sector workers it was set at thirty-five years.

5. These effects were primarily due to the indexation mechanism involving lump-sum increases, rather than proportional increases, for private-sector employee pensions above the minimum level and for public-sector pensions. Each pensioner received the same increase in nominal terms, whatever the level of the pension (see Morcaldo 1977).

6. It should be noted, in particular, that the possibility of obtaining a disability pension often depended less on a real inability to work than on the inability to earn an income, to be assessed in the light of the socioeconomic conditions of the applicant's province of residence (see Franco and Morcaldo 1990).

requirements linked to effective participation in the labor force. Citizens' efforts to reap disability benefits found the authorities basically receptive. There was no systematic, attentive examination of applications nor any regular use of the instruments available to help beneficiaries find jobs. Several studies assert that disability pensions have long been a tool of political patronage (see Ferrera 1984). Between 1965 and 1975, disability pensions represented 40 percent of the new pensions paid to private-sector employees and 70 percent of those paid to the self-employed.

The 1980s saw the first steps toward rationalizing the rules, prompted by increasing expenditure on retirement provisions, the difficulties of the public finances, and certain glaring inequities in the distributive effects of pension plans. In 1983, means testing was introduced for eligibility to the minimum pension level and to disability pensions, and administrative verification of continued entitlement to welfare old age benefits was initiated. In 1984, the eligibility requirements for disability pensions were tightened: The criterion for eligibility was changed from loss of earning capacity to work disability. The flow of new disability pension was rapidly reduced.<sup>7</sup> In the same year the indexation system was made uniform.<sup>8</sup> The ceiling on pensionable earnings was abolished in 1988. However, lower accrual factors were applied for earnings above the former ceiling.

In 1990 the pension schemes for self-employed farmers, artisans, and other businesspersons were reformed. Although these groups previously could not receive pensions higher than the guaranteed minimum level, under the new rules they were gradually granted pensions proportional to their average earnings over the last ten years of their work, with the same accrual factor (2 percent) applied to employees. The reform increased by about 75 percent the expenditure level expected for the year 2010 (INPS 1989, 1993) and accelerated the increase in the equilibrium contribution rates of the three schemes. For instance, the rate of the artisans' scheme was expected to increase from 12.7 percent in 1992 to 33.7 percent by 2010.

In spite of frequent calls for a general reform of the pension system, no large-scale reform containing expenditure growth was introduced in the 1980s. Prospective expenditure was further increased by the decision to raise the benefits for the self-employed. Frequent changes in the rules con-

<sup>7.</sup> The number of new disability pensions paid by INPS went down from 0.4 million per year in the early 1970s to 0.1 million in the mid-1980s (see Franco and Morcaldo 1990).

<sup>8.</sup> In 1984 the mechanisms of price indexation were standardized. Since that year, coefficients for price indexation have varied with the size of the pension: Up to twice the guaranteed minimum pension, benefits are raised in line with the change in prices; for those between two and three times this minimum level, the increase is equal to 90 percent of the change; for those above three times the minimum level, the increase is equal to 75 percent of the change. From 1984 to 1992, all pensions awarded to employees were also linked to real wage increases (from 1988 to 1992 for the pensions of self-employed workers). Welfare pensions were not adjusted to the dynamics of earnings.

cerning initial pension awards introduced additional disparities: Persons with the same work histories but who had retired in different years often had substantially different benefits. Moreover, as mentioned above, the previous indexation system in a period of high inflation had increased the purchasing power of some pensions and severely reduced that of others. This situation prompted a decision to increase the level of the latter category of pensions. This action substantially contributed to increased expenditure levels and was not unproblematic from an equity point of view.

#### 7.3 The 1992 Reform

The situation changed radically in 1992, when the pension formula and the eligibility conditions were extensively modified under the pressure of the exchange rate crisis and the urgent need to curb the deficit.<sup>9</sup> Before examining the main features of the reform, it is useful to overview briefly the three main factors underlying the reform: the increase in projected outlays, the adverse effects of the pension system on the labor market, and its widespread distributive anomalies and inequities (see Banca d'Italia 1991; Franco and Frasca 1992).

1. Expenditure trends. Pension expenditure increased from 5.0 percent of GDP in 1960 to 7.4 percent in 1970, 10.2 percent in 1980, and 14.9 percent in 1992, far outstripping the growth of the other items of social spending, which increased only from 5.1 to 6.7 percent of GDP between 1960 and 1970 and from 6.7 to 7.3 percent between 1980 and 1992 (fig. 7.1).<sup>10</sup> Only a limited part of the increase in pension expenditure can be imputed to demographic factors, the larger part being accounted for by the extension and the maturation of the system.<sup>11</sup> Expenditure was expected to increase further, approaching 25 percent of GDP by 2030. According to Ministero del Tesoro (the Ministry of Treasury, 1994a), the equilibrium contribution rate for private-sector employees was set to increase from 44 percent in 1995 to 50 percent in 2010 and 60 percent in 2025. The pension formula, the eligibility conditions, and the indexation rules granted rates of return that were considerably higher than the rate of growth of the social security tax base (Ministry of Treasury 1994b; Padoa Schioppa Kostoris 1995).

<sup>9.</sup> The role of external constraints in Italian fiscal and labor-market policies is examined in Ferrera and Gualmini (1999).

<sup>10.</sup> According to Rossi and Visco (1995), about 50 percent of the decline in the Italian private-sector saving ratio in the period 1954–93 can be attributed to the extensive development of the pension system.

<sup>11.</sup> Demographic changes accounted for about 20 percent of the increase of the GDP ratio of total pension expenditure, and for about 40 percent of the increase in the GDP ratio of the old age pensions during the 1960–90 period. The eligibility ratio increased by 60 percent, the dependency ratio by 47 percent, and the transfer ratio by 18 percent (Franco 1993a).



**Fig. 7.1 Pension Expenditure and Public Pension Liabilities (percent of GDP)** *Source:* Beltrametti (1996). Estimates refer to the present value of pensions to be paid in the future on the basis of accrued rights to pensioners and existing workers, net of the contributions that the latter will pay under current rules.

2. *Labor market.* The provisions for seniority pensions and the noncumulability of pensions with labor income tended to foster "underground" employment and retirement. The lack of an actuarial correlation between the size of the pension benefit and the age of retirement was an incentive for the earliest possible retirement; in other words, there was a high implicit tax on continuing to work (Brugiavini 1999). This situation was reflected in the low employment rates of older men and women.<sup>12</sup> The lack of a strict correspondence between contributions paid and entitlements accrued also encouraged evasion and avoidance of contributions. The segmentation into several funds, each one operating with its own rules, hampered the mobility of workers both between and within the public and private sectors.

3. Equity considerations. The rate of return on contributions was extremely uneven for several reasons (Gronchi and Aprile 1998). The reference period for calculating pensionable salary (the last paycheck for public employees, the last five earning-years for the private sector) worked in favor of those whose earnings had risen the most rapidly toward the ends of their careers. On the other hand, low pensions were raised to the guaranteed minimum level while high-income workers were attributed lower accrual factors. Public-sector employees and the self-employed had very advantageous rules.13 The standards for the means testing of certain benefits and the rules on cumulability of more than one pension had conflicting effects on income distribution. Because of the structure of the pension formula, other things being equal, the purchasing power of private-sector employees' pensions was inversely proportional to the inflation rate in the year prior to the year of retirement. After the initial award, medium-level and larger pensions lost purchasing power in proportion to inflation, which thus continued to affect the relative value of retirement benefits. Although the increase in outlays was accompanied by a sharp improvement in the economic conditions of the elderly and of pension beneficiaries in general,<sup>14</sup> it also constrained the resources available for other social policies.

12. In 1990, only 32 percent of individuals in the fifty-five to sixty-four age group were employed. In 1995, this percentage was down to 27 percent and was far below the percentages recorded in most other Western countries (see Organization for Economic Cooperation and Development [OECD] 2000; Peracchi 1998a).

13. See the estimates presented in Castellino (1996) and in Peracchi and Rossi (1998). The latter authors estimate that the rates of return on the contributions paid by the self-employed were two to three times higher than those on the contributions paid by private-sector employees.

14. The poverty rate for households headed by individuals older than sixty-five had steadily declined over the 1970s and 1980s. Although households headed by a pensioner remained slightly more likely to be poor—13 percent in 1987 versus 11 percent for other households. The difference between actual income and the poverty line was smaller for the former households (a gap of 19 percent in 1987, versus 28 percent); see Cannari and Franco (1990). These trends continued in the following years; see Cannari and Franco 1997. On the distribution of pension benefits, see Baldacci and Inglese (1999) and Peracchi (1999).

In this situation, expenditure control was closely linked to the reduction of differences in the rules applying to the different groups of workers. For instance, private-sector employees would not have accepted a reduction in entitlements if the special provisions granted to public sector employees had not been limited. The issue of harmonization remained at the core of the policy debate throughout the 1990s, when the debate gradually shifted from harmonization across workers of different sectors to harmonization across different age groups.

The main features of the reform, which aimed at limiting the ratio of public pension expenditure to GDP at its 1992 level, were the following:<sup>15</sup>

1. The age of retirement was raised (over the course of ten years) from fifty-five to sixty for women and from sixty to sixty-five for men in private employment.

2. The reference period for calculating pensionable earnings was lengthened (over the course of ten years) from five to ten years; for younger workers—those with fewer than fifteen years of contributions in 1992—it was extended to the whole working life; past earnings were to be revalued at a rate equal to the rise in the cost of living plus one percentage point per year.

3. The minimum number of years of contributions giving entitlement to an old age pension was raised (over the course of ten years) from fifteen to twenty.

4. The reference index for pension benefits indexation was changed from wages to prices; government was allowed to introduce discretionary additional adjustments through the budget.

5. The minimum number of years of contributions required for publicsector employees to be entitled to a seniority pension was gradually raised to thirty-five (i.e., to the requirement already in effect for private-sector workers' seniority pensions).

Moreover, in order to restrain public expenditure immediately, the adjustment of pensions to price dynamics was temporarily limited and the disbursement of new seniority pensions was curtailed.<sup>16</sup>

The parametric reform implemented in 1992 substantially changed the outlook for pension expenditure. At least one-fourth of net pension liabilities was cancelled. According to Beltrametti (1994), total outstanding liabilities were reduced from 389 percent to 278 percent of GDP (a 29 per-

<sup>15.</sup> The reform is examined in Franco (1993b and Vitaletti (1993). Baldacci and Tuzi (1999) examine the impact on public expenditure of the reforms implemented in the period 1992–97.

<sup>16.</sup> Additional reforms were introduced in the following years. In particular, they accelerated the gradual increase in retirement age and restricted the special eligibility conditions applying to public-sector employees.

cent cut).<sup>17</sup> Rostagno (1996) estimates that the liabilities of the scheme for private-sector employees were reduced by 27 percent. The cuts were unevenly distributed; Rostagno estimates reductions of 8 percent for pensioners, 42 percent for male workers, 94 percent for female workers, 37 percent for workers with long contributory records, and 42 percent for those with short or discontinuous records.

The reform also began a gradual harmonization of pension rules, and, by relating the pension levels of younger workers to lifetime contributions, it strengthened the link between contributions and benefits. However, it did not tackle the issue of seniority pensions. This substantially reduced the impact on effective retirement age of the increase in the age limit for old age pensions. Moreover, the exclusion of individuals with at least fifteen years of contributions from changes in the pension formula implied a long transition period and an uneven distribution of the reform burden.

By breaking the deadlock of Italian pension policy and immediately restraining expenditure increases, the reform set the conditions for betterplanned and more systematic changes.

#### 7.4 The 1995 Reform

In spite of the 1992 reform, expenditure prospects remained rather worrying. In 1995, both INPS and the Ministry of Treasury released projections that were more worrying than those carried out in the two previous years.<sup>18</sup> These expenditure prospects and the high level of equilibrium contribution rates pointed to the need for a new major reform,<sup>19</sup> which was introduced in 1995.<sup>20</sup>

Although the 1992 reform primarily aimed at cutting pension expenditure, the new reform had a wider range of objectives. It aimed at stabilizing the incidence of pension expenditure on GDP, at reducing distortions in the labor market, and at making the system more fair (see Rostagno 1996).<sup>21</sup> A tighter link of pensions to individual contributions was instru-

17. Beltrametti (1994) takes into consideration different definitions of pension liabilities. The estimates presented in this paper refer to the present value of pensions to be paid in the future on the basis of accrued rights to pensioners and existing workers, net of the contributions that the latter will pay under current rules.

18. INPS projections are reported in Senate of Italy (1995); see also Ministry of Treasury (1995).

19. See Aprile, Fassina, and Pace (1996), Artoni and Zanardi (1996), Banca d'Italia (1995), Castellino (1995), Centro Europa Ricerche (CER, 1994), Istituto Ricerche Sociali (IRS, 1995), Padoa Schioppa Kostoris (1995), Peracchi and Rossi (1998).

20. Further changes were introduced in legislation in the following years. In particular, the 1998 budget measures speeded up the harmonization of the rules governing the different pension systems, raised the age threshold for seniority pensions for some categories of workers, postponed the retirement dates for new seniority pensions due to take effect in 1998, and temporarily reduced the cost-of-living adjustments for larger pensions (Onofri 1998).

21. Most expenditure cuts were achieved through the tightening of the eligibility conditions for seniority and survivors' pensions.

mental in achieving the latter objectives. It was expected that contributions would have been more clearly perceived as deferral of earnings, thereby reducing the distortionary effect of labor income taxation. The reform aimed at equalizing the yields of the contributions paid by all workers of the same sex and the same pension cohort (i.e., those beginning to work and retiring in the same years). It removed the favorable treatment previously granted to workers with short or dynamic careers. Under the new rules, which apply to all categories of workers, the level of the pension wealth of each individual would not be affected by the age of retirement.

The main features of the 1995 reform are the following:

1. Old age pension are related to the contributions paid over the whole working life (capitalized at a five-year moving average of GDP growth) and to retirement age.<sup>22</sup> Each worker holds a notional social security account. On retirement the pension is determined by multiplying the balance of the account by an age-related conversion coefficient. Coefficients, which make the present value of future benefits equal to capitalized contributions,<sup>23</sup> can be revised every ten years on the basis of changes in life expectancy and a comparison of the rates of growth of GDP and earnings assessed for social security contributions.

2. Workers are allowed to choose a retirement age between fifty-seven and sixty-five years.<sup>24</sup> Pensions are related to the average life expectancy at the age of retirement via the conversion coefficients on the basis of an actuarial discount. Seniority pensions will be gradually abolished.

3. The minimum number of years of contributions required for an old age pension is reduced to five. The guaranteed minimum pension level will be abolished. Welfare pensions for elderly citizens are to be reformed.

The reform, which was probably inspired by the reform process undertaken in Sweden in 1994, envisaged the shift from a defined benefit (DB) to a defined contribution (DC) system in which the notional accumulated contributions are transformed into an annuity at retirement. As noted by Castellino (1996), the actuarial approach underlying the reform represents

22. The formula used to calculate the initial pension award is  $P_i = \beta c W_0 \Sigma_{k=1}^{a-1} (1 + g)^k (1 + w)^{a-k}$ , where  $\beta$  is the conversion coefficient; *c* is the contribution rate;  $W_0$  is the entry wage; *a* is the number of years of contribution; *g* is the average annual rise in the workers' earnings over the entire career; and *w* is the average rate of increase in real GDP. The conversion coefficients, which are determined on the basis of average life expectancy—including the probability of paying benefits to survivors—and of a 1.5 percent rate of return on accumulated contributions, range from 4.7 percent (for those retiring at fifty-seven years of age) and 6.1 percent (for those retiring at sixty-five years of age).

23. Contributions are proportional to earnings. However, the rate at which contributions are imputed to the notional accounts (33 percent for employees and 20 percent for the self-employed) is higher than the rate actually paid by individuals (32 percent and 15 percent, respectively). The latter rates have been increased after 1995.

24. Provided the pension is at least 1.2 times higher than the guaranteed minimum pension level. a structural break in Italian pension policy-making, because in previous decades actuarial considerations had not had any significant role.

Most of the potential benefits and distributive effects of the new DC system could have been achieved by adapting the old DB system (Cichon 1999).<sup>25</sup> Pizzuti (1998) notes that the latter solution would have made changes more visible. The introduction of a new pension formula, which avoided the need to explicitly modify the old parameters, could contribute in making cuts in benefits more acceptable.

In spite of the change in the design of the pension system, the 1995 reform did not significantly affect the long-term expenditure trends determined by the 1992 reform. Rostagno (1996) estimates that the reform increased the liabilities of the private-sector employees' pension scheme by 4 to 9 percent of GDP,<sup>26</sup> depending on the rate of growth of GDP.

Moreover, the implementation of the reform will be extremely gradual. Workers with at least eighteen years of contributions in 1995 will receive a pension computed on the basis of the rules applying before the 1992 reform. Those with fewer than eighteen years of contributions in 1992 will be subject to a *pro rata* regime: The 1995 reform will apply only to the contributions paid after 1995.<sup>27</sup> Only individuals beginning to work after 1995 will receive a pension computed only on the basis of the new rules.

The length of the transition phase and other aspects of the reform may significantly reduce its expected microeconomic benefits (see section 7.6).

#### 7.5 The Role of Supplementary Funds

The role of pension funding has been very limited in Italy since World War II.<sup>28</sup> This situation reflects the impact of the crisis of funds related to the war, the limited development of Italian capital markets, the lack of a favorable tax framework, and, especially, the extensive development of the public pension system and the existence of severance-pay provisions.<sup>29</sup>

<sup>25.</sup> The equalization of yields on contributions and the strengthening of the link between contributions and benefits could have been achieved by applying the same pension formula to all categories and computing pensions on the basis of lifetime earnings (see Pizzuti 1998).

<sup>26.</sup> The higher the GDP growth, the greater the increase in liabilities, because—in contrast to the pre-1995 regime—contributions are adjusted to GDP growth.

<sup>27.</sup> The pensions paid to individuals in the pro rata regime will be computed on the basis of two components: the pre-1995 contributions, and the contributions paid from 1995 onward.

<sup>28.</sup> At the end of 1998 the assets managed by social security funds (mostly by the pension schemes of the public-sector employees and of some categories of self-employed workers) and by pension schemes of the banking sector amounted to 5.5 percent of GDP. Shares represented about 3 percent of total assets (see Banca d'Italia 1999).

<sup>29.</sup> In order to fund the severance-pay benefits, employers must set aside 6.9 percent of each worker's gross earnings. These funds are disbursed to the employee upon the termination of the employment contract. While this severance entitlement is accruing, the worker has a secure but uncollectable credit with his or her employer, who retains full discretionary power over the funds—a very advantageous form of financing. Each year, contributions are to be revalued by 1.5 percent plus 0.75 percent of the inflation rate. If inflation is at 2 percent, the worker gets a 3 percent return in nominal terms.

Large public benefits reduced both the demand for supplementary plans and the resources available to finance them. The severance-pay provisions reinforced both these effects.

In the late 1980s, although it had become clear that Italy's public pension system would have inevitably experienced serious financial imbalances, the potential room for supplementary private pension plans was further reduced. As mentioned in section 7.2, in 1988 the ceiling on benefits for high-income employees was eliminated. In 1990 the self-employed were granted eligibility for more than the minimum pension.<sup>30</sup> Because the contributions of the self-employed were much lower than the long-term equilibrium rate, the yield on them was high.<sup>31</sup>

Only in the 1990s was a consensus reached on the need to develop private supplementary pension funds. The growth of such funds was viewed not only as a means to adjust retirement provisions to the different needs of the citizens and to allow workers to offset the reduction in replacement rates resulting from reforms of PAYGO schemes, but also as a way to strengthen the role of institutional investors in the capital market (see Pace 1993).

However, high contributory rates and large public finance imbalances, respectively, reduced the scope for additional contributions and for supporting the transition to funding via budgetary transfers or large-scale tax deductions. The contributions allocated to severance-pay funds (about 1.5 percent of GDP for private-sector employees) were therefore considered the only sizeable source of funds to develop the second supplementary pillar.<sup>32</sup> This was not unproblematic for either employers or employees. For the former group, severance-pay funds represented a source of cheap credit. For the latter, they represented an important form of liquidity during unemployment and for the purchase of the primary residence (see Aronica 1993; Ministry of Treasury 1994c; Fornero 1999; Messori and Scaffidi 1999).

Legislation was enacted in 1993 and in 1995 with a view toward increasing the role of funding by modifying the destination of severance-pay contributions and allowing additional contributions to be tax deductible. Employers and workers can unilaterally or jointly set up "closed" funds for workers of particular industries, companies, areas, and so on. Banks, insurance companies, and other financial institutions can set up "open"

30. An alternative solution to enhance the role of funding would have been the introduction of a ceiling on contributions.

31. The contribution rate was set at a level that was sufficient to finance current pensions which had been awarded on the basis of previous rules—and not on a level consistent with the benefits that would be paid in the future on the basis of the new rules.

32. Under the assumptions that only new entrants into the labor market shift their severance-pay contributions to pension funds, (a) only these contributions are paid into the funds; (b) contributions are not drawn for any reason, and (c) the rate of return is 3 percent. Castellino and Fornero (1997) estimate that pension fund assets would represent 3 percent of GDP after ten years, 12 percent after twenty years, and 50 percent after forty years.

funds, for which anyone can sign up. However, workers can enroll in an open fund only if a closed company or industry fund is unavailable. Funds are usually based on DC criteria.

The development of supplementary pension funds has been rather slow.<sup>33</sup> Employers have been unenthusiastic because of the loss of the cheap credit source. Trade unions and the government have supported the development of contractual funds, limiting the possibility of joining "open funds." This may have negatively affected the employees' willingness to invest in pension funds. In a situation in which PAYGO pensions still guarantee relatively high replacement ratios for elderly workers and young workers are rather uncertain about the reliability of long-term commitments, many employees may have preferred to avoid the loss of liquidity determined by the shift from the severance-pay provision to supplementary funds. Moreover, tax incentives have been rather limited (Fornero 1995).<sup>34</sup>

The government is now considering further action to accelerate the development of pension funds. Tax deduction thresholds for contributions to the funds are to be increased. In order to benefit from the tax deductions, individuals would have two options: (1) joining the closed fund of the company or industry to which they belong; or (2) retaining the severance-pay provision, in which case the contributions would no longer be managed by the employer.

#### 7.6 Critical Aspects

The reforms introduced in the pension system in the 1990s substantially contributed to changing the outlook for Italian public finances. Generational accounting studies highlight this change. On the basis of 1990 public accounts, the gap between the net taxes paid by the last newborn generation (on the basis of current policies) and those paid by future generations (taking into account policy actions to restore government solvency) was estimated at 198 million lira. On the basis of 1998 accounts, it was esti-

<sup>33.</sup> Up to 15 March 1999, only ninety-six new supplementary pension funds had been set up. About 400,000 workers were enrolled in these funds. Assets represented only 0.015 percent of GDP (Banca d'Italia 1999).

<sup>34.</sup> Some decisions made about the tax treatment of pension funds may have negatively affected their development. In particular, when legislation concerning funded supplementary pension schemes was introduced in 1992, contributions to funded schemes were subjected to a 15 percent withholding tax. Tax credits proportional to the tax levied on contributions were granted on future pensions. Tax credits were to be calculated on the basis of the rate achieved by each pension fund on the remaining 85 percent of the contributions paid to pension funds. The scheme, which aimed at increasing revenues in the first period of the development of pension funds (CER 1993), was abolished in 1995. Although the scheme would not have affected the pensions eventually paid by the funds, it introduced some additional uncertainty about these pensions: Although the tax was immediately levied, the credit was to be redeemed after a long time.

mated at 100 million lira.<sup>35</sup> In the latter case, in order to ensure the longterm sustainability of public finances, a 5 percent increase in the taxes paid by all generations would be required. Without the pension reforms introduced in the 1990s the required tax increase would have been 9 percent.

In spite of the important reforms introduced in the 1990s, there is a widespread consensus that further changes are required. The nature of the changes to be introduced still remains controversial. Before examining the main reforms under consideration (section 7.7), in the following section some critical aspects of the present arrangement are highlighted.<sup>36</sup>

#### 7.6.1 The Lengthy Transition

The rules introduced in 1992 and 1995 will become fully operational only after a long transition period. This depends on the decision to exempt individuals with fifteen years of contributions from some important changes. About 40 percent of those currently employed will retire with the pre-1992 pension formula. For these people, the incentive to retire early will even be increased by the expectation that retirement conditions might be tightened (Porta and Saraceno 1996). This implies that, in spite of the increase in the age limit for old age pensions, the effective retirement age will not significantly increase over the next fifteen years. Moreover, during the same period, replacement rates will not decline.

The sharp difference in the treatment of workers who in 1992 and 1995 had small differences in contributory records raises an equity problem. There is also a budgetary problem. According to the Ministry of Treasury (1999), the ratio of public pension expenditure to GDP, which despite the reforms introduced during the 1990s reached 16 percent in 1999, is likely to rise by another 1.4 percentage points by 2015. Because the Stability and Growth Pact requires close-to-balance budgets and revenue increases are problematic, primary nonpension expenditure will have to be substantially squeezed if the transition is not sped up.

#### 7.6.2 Long-Term Expenditure Levels

The Ministry of Treasury (1999) estimates that the ratio of pension expenditure to GDP will rise by an additional 0.2 points between 2015 and 2031. Subsequently, even though the ratio of pensioners to workers is forecast to rise sharply, expenditure should stabilize in relation to GDP for some years and is expected to decline significantly thereafter. According to INPS projections, the equilibrium contribution rate of the private-sector

<sup>35.</sup> Estimates are expressed in 1998 prices (see Franco et al. 1992; Istituto di Studi e Analisi Economica (ISAE), 1999; Cardarelli and Sartor 2000).

<sup>36.</sup> Extensive statistical information about the structure of the pension system and recent developments are provided in ISTAT (1997 and 1999) and *Nucleo di valutazione della spesa previdenziale* (1998, 1999).

employees' pension fund will rise from 45 percent in 2000 to 47.8 percent in 2010 and 48.5 percent in 2025. The corresponding rate of the artisans' pension scheme is projected to increase from 21.3 percent to 28.2 percent and then to 30 percent, and that of the shopkeepers' pension scheme from 18.5 percent to 25.4 percent and then to 33.9 percent.

These expenditure trends imply either larger transfers from general taxation or a further increase in social security contribution rates, which are already higher than in the other leading industrial countries. Both these solutions conflict with the need to reduce the burden of tax and contributions in view of growing international economic integration. They also appear problematic in the context of growing mobility of tax bases, which accentuates the distortionary effects produced by taxation in the markets for goods and factors of production.

Although the system is based on a close link between contributions and benefits for each individual, it is still vulnerable to demographic and economic shocks (Aprile, Fassina, and Pace 1996; Rostagno 1996; Hamann 1997; Gronchi and Aprile 1998; Cichon 1999). Furthermore, the system is vulnerable to increases in the dependency ratio determined by reductions in birth rates, because these increases would not affect the amount of accumulated contributions and the pensions already awarded. Increases in life expectancy automatically reduce new pension benefits via the conversion coefficients. However, it will take a long time before the impact of increases in life expectancy on the number of pensions is fully offset by the reduction in the average amount paid to each pensioner. This depends on the fact that reductions in mortality rates that take place after a pension is awarded do not affect its level. The ten-year interval between revisions in coefficients further increases the adjustment lag.<sup>37</sup>

A decline in the rate of GDP growth would not affect the amount of accumulated contributions and the pensions already awarded. A lasting decline in the ratio of GDP to earnings assessed for social security contributions can affect new pension benefits, via the conversion coefficients. As in the case of changes in life expectancy, financial equilibrium would be restored very slowly.

In the face of adverse demographic and economic events, as in the case of traditional PAYGO systems, cash deficits can be avoided only by ad hoc cuts in pensions and changes in the pension formula. Increases in contribution rates would have only temporary effects because they would translate into higher benefits.<sup>38</sup>

<sup>37.</sup> Baldacci and Tuzi (1999) estimate that the new mortality ratios would already imply a 1 percent cut in the benefits paid to those retiring at fifty-seven and a 3 percent cut for those retiring at sixty-five.

<sup>38.</sup> The need for a built-in equilibrating mechanism operating via the indexation of pensions was highlighted in a study carried out at the end of 1994 for the main parliamentary group supporting the reform (see Aprile, Fassina, and Page 1996). For instance, the study

Gronchi and Aprile (1998) argue that the predetermination of the rate of return on accumulated contributions (1.5 percent) introduces unnecessary inflexibility in the system. If GDP growth were lower than 1.5 percent, there would be financial problems. In any case, the interest rates imputed to workers and pensioners would be different. Giarda (1998) takes a sterner view and argues that problems will occur whenever GDP growth is lower than 2.5 percent. This position reflects two considerations: (1) Price indexation might be supplemented by ad hoc increases in pension levels; and (2) growth rates higher than 1.5 percent are required to offset the effects of some exceptions introduced in the general rules (e.g., the higher rates of return on contributions paid before eighteen years of age). Nicoletti-Altimari and Rostagno (1999) point to the risks related to the predetermination of the rate of return on the contributions paid to the pension system. They demonstrate that the ensuing rigidity reduces the capacity to absorb shocks and may generate persistent generational imbalances.

Moreover, the conversion coefficients have been computed without taking part of the expenditure for disability and survivors' pensions into consideration. More specifically, it has not been considered that disabled workers will receive benefits in excess of those awarded on the basis of their contributions.<sup>39</sup> Pensions paid to survivors of deceased workers have also been disregarded. These benefits have been implicitly considered welfare benefits to be financed by the government budget. This solution is questionable because the provision of a guaranteed minimum pension to disabled workers and survivors may be considered a component of social insurance, particularly considering that the contribution rates are relatively high (see Giarda 1998).

#### 7.6.3 The Composition of Expenditure Cuts

The plan for bringing the pension system back into balance relies primarily on reducing the average pension in order to curb expenditure; limiting the number of pensions plays a relatively modest role. According to Ministry of Treasury (1999), the ratio between the pensions paid by the main pension funds and the total number of persons in work will rise from 92 percent in 1998 to 100 percent in 2015, 119 percent in 2030, and 130 percent in 2050.<sup>40</sup> The ratio of the average pension to per capita GDP would remain constant at 15.5 percent up to 2015, and then would decline to 13.3 percent in 2030 and 10.1 percent in 2050. These projections assume

advocated the introduction of a coefficient offsetting the effects of changes in working-age population. Aprile and colleagues, in an addendum to their original study, point to some drawbacks in the design of the reform from the financial equilibrium point of view.

<sup>39.</sup> Gronchi (1998) tentatively estimates that this expenditure may represent 2 percentage points of earnings.

<sup>40.</sup> See also the similar results obtained by Baldacci and Tuzi (1999).

that pensions will remain indexed exclusively to prices and that the conversion coefficients used to relate new pensions to the contribution record of each individual will be revised every ten years on the basis of demographic trends.

This situation depends on two decisions taken in 1995:

1. In spite of the increase in longevity, individuals will still be allowed to obtain a pension at age fifty-seven; an actuarially discounted old age pension will provide individuals with a greater incentive to delay retirement than previous rules. However:

- a. The conversion coefficients embody a discount rate that may still provide an incentive to quit the labor market (Brugiavini 1998) or may fail to discourage individuals from claiming a poor, actuarially reduced pension at an early age (Palmer 1999).
- b. Even an actuarially neutral pension system may not be sufficient to achieve a large increase in the activity rate of elderly individuals. Changes in the demand side of the labor market may also be required. More specifically, the wage structure for the different age groups should be consistent with their productivity.

2. The reform was designed to achieve a replacement rate at retirement that, for individuals retiring at age sixty-two after thirty-seven years of service, was close to the prereform rate; a full or a partial indexation to increases in real wages would have implied a reduction in the replacement rate at retirement (Banca d'Italia 1995; Castellino and Fornero 1997; Giarda 1998). Price indexation, which is adopted in several countries, implies that the purchasing power of each pensioner declines over time in comparison with that of workers and younger pensioners.<sup>41</sup> Two aspects may make this solution problematic in Italy over the long run. First, individuals are allowed to retire rather early. Most of those retiring at age fifty-seven may receive a pension for at least twenty-five years. Moreover, the adjustment to price increases of pensions that are twice as high as the minimum pension level is only partial. These factors may generate sizeable disparities among pensioners depending on the year of retirement.

The reliance on the reduction in the transfer ratio, instead than on increases in retirement age, may create political pressure for discretionary increases of pension in real terms (Gronchi and Aprile 1998; Peracchi and Rossi 1998).<sup>42</sup> Moreover, revisions of conversion coefficients at ten-year

42. Rostagno (1996) points to the possibility that pensions (which implicitly include an adjustment to real wage dynamics), since the conversion coefficients have been computed

<sup>41.</sup> Assuming a 1.5 percent yearly growth in real wages, other things being equal, a newly awarded pension would be 43 percent higher than a pension awarded twenty-five years earlier. The gap would increase to 61 percent with a 2 percent rate of growth and to 81 percent with a 2.5 percent rate of growth (see April, Fassina, and Pace 1996).

intervals may produce large differences in the treatment of contiguous generations of pensioners. This also may also be politically problematic.

#### 7.6.4 The Expected Microeconomic Effects

The strengthening of actuarial principles in social security systems has been recently advocated to limit some of the negative effects of the system on the labor market and employment (Folster 1999; Orszag and Snower 1999). Contributions are often loosely related to benefits, so that they are largely regarded as a tax; expenditure controls frequently rely on administrative constraints rather than on built-in incentives: redistribution and insurance features are frequently mixed; and insurance schemes are utilized for inappropriate distribution objectives. In several countries, proposals have been put forward to redesign social security schemes along lines that are less distortive of individuals' choices and more transparent in their distributive effects.<sup>43</sup> The strengthening of the contribution-benefit link is a crucial factor. It increases the incentive to work and, more specifically, to stay on in regular jobs (because benefits depend on work record), to delay retirement, to move from benefits to work.<sup>44</sup> In the case of pension schemes, this implies increasing the role of funded schemes (where the contribution-benefit link is typically very strong), or shifting PAYGO schemes from DB systems (which base pensions on earnings in the final period of work) to DC systems (which base pensions on contributions paid over the whole working life). Since 1995, Italy has taken both routes.

However, a tight link between social contributions and benefits at the individual level may be effective only if the link is transparent, easy to grasp, and perceived as stable by citizens. Workers should be informed about their benefit entitlements (e.g., accrued pension rights). Welfare benefits should be separated from insurance benefits and funded from general revenues.

Several factors may reduce the immediate impact of the rules introduced in 1995 on the behavior of individuals:

1. An important component of the workforce is not affected by the reform.

assuming a 1.5 percent returns on residual accumulated contributions, may in the end be increased by ad hoc decisions prompted by the political pressure of pensioners. Pizzuti (1998) criticizes the elimination of indexation to real wage dynamics on the grounds that it breaks a long-established intergenerational contract and makes the pension system less credible.

<sup>43.</sup> See, for instance, Ministry of Health and Social Affairs (1994).

<sup>44.</sup> Making workers more aware of the value of the benefits for which they are paying contributions could also affect wage negotiations, for, if workers are unaware of the value of nonwage benefits, they are unlikely to trade lower wage increases for the continuation of present benefits. In this respect, the U.S. case, in which contributions to company-based health and pension schemes are an important part of wage negotiations, is particularly relevant.

2. The younger workers may expect that further changes will be introduced and therefore may have the perception that the return to their contributions is uncertain. This perception has probably been reinforced by recent measures taken to curtail pension expenditure.<sup>45</sup>

3. There is a gap between the effective contribution rate and the (higher) imputed rate used in the computation of benefits.

4. There is some lack of clarity about the way the system works. No official document has explained the working of the new system; individuals do not receive a statement of their contributory accounts presenting their future pension entitlements; the formula underlying the conversion coefficients has not been published; and the methodology envisaged for the revision of the coefficients has not been specified.

More generally, one can question whether, in a quickly-evolving economic and demographic situation, the rate of return on contributions may remain sufficiently stable and provide the microeconomic benefits expected from strengthening the contribution-benefit link.<sup>46</sup>

#### 7.7 Policy Options

As considered in section 7.6, present expenditure trends imply further increases in contribution rates or general taxation, or cuts in other expenditure items. The latter may not be feasible in a situation in which pension expenditure already represents a very large share of social expenditure and of total primary expenditure (16 percentage points of GDP out of 23 and 42 points, respectively. Moreover, the pension system set up in 1995 does not fully exploit some of the major positive aspects of notional DC systems (i.e., the reduction of distortions in the labor market, the built-in incentive to postpone retirement, and the self-equilibrating mechanism). This failure may depend on the lack of an in-depth analysis of the implications and requirements of these systems. The reform was defined and introduced over the course of a few months with little preliminary work (Gronchi and Aprile 1998).

Several proposals for further changes have been formulated in recent years. They can be classified into three broad categories: faster implementation of the 1995 reform; tightening of the steady-state regime established by the 1995 reform; and acceleration of the developments of the funded pillar.

The transition to the new regime can be accelerated by the extension of the formula introduced in 1995 to all workers and by the elimination of

<sup>45.</sup> This is the case of the temporary reduction in the adjustment to price changes of pensions above a certain threshold that was introduced in 1997.

<sup>46.</sup> See the more general point made in Tamburi (1999) about the need for periodic adjustments of pension provision.

seniority pensions (see Giarda 1998). According to Ferraresi and Fornero (2000), these actions would reduce pension expenditure by about 0.8 percent of GDP in 2020. These proposals are technically simple, because they do not call into question the architecture of the pension system. However, they are politically sensitive, because they immediately affect a large number of older workers.

Several modifications of the 1995 regime have been contemplated in the large number of studies that have recently examined the reform. The extensive ex post analysis of the reform is in stark contrast to the lack of preparatory work. Among the main proposals<sup>47</sup> are the following:<sup>48</sup>

1. A shift in the old age retirement bracket (e.g., from between fiftyseven and sixty-five years to between sixty-two and seventy years)

2. A steeper curve of conversion coefficients, providing an incentive to postpone retirement

3. More frequent revisions of the conversion coefficients

4. An increase in the number of factors considered in the revision of the coefficients

5. A reduction in the pensions awarded at retirement that is associated with the introduction of an adjustment to real GDP growth or real earnings dynamics, and that takes into account the demographic and economic changes.<sup>49</sup>

Change (1) would increase the minimum age at which retirement is allowed and provide an incentive to postpone retirement beyond the age of sixty-five. It would move the Italian retirement bracket close to the one introduced in Sweden. Change (2) would remove any implicit tax on continuing work, and would take the negative externalities of retirement on public accounts into consideration. These changes should increase the effective retirement age and shift the focus of expenditure control from the reduction of replacement ratios to the reduction of the ratio of pensioners to workers.<sup>50</sup> The margins for this policy action are very large: In 1995, the

47. See *Commissione per l'analisi delle compatibilità macroeconomiche della spesa sociale* (1997), Giarda 1998; Gronchi 1997, 1998; Gronchi and Aprile 1998; Hamann 1997; Padoa Schioppa Kostoris 1996; Peracchi and Rossi 1998; Sartor 2000.

48. It has also been suggested that (a) effective contribution rates should be equal to the rates taken into account to determine the accumulated contributions, and (b) disability and survivors' pensions should be fully financed out of the contribution rate.

49. Gronchi (1998) suggests a reduction of the conversion coefficients by 15–20 percent. Giarda (1998) considers different options: (a) Coefficients could be computed every year assuming a rate of return on accumulated contributions equal to real GDP growth minus 1 percent; (b) whenever GDP growth is lower than 2.5 percent, indexation to price dynamics could be accordingly reduced; and (c) the rate of return on accumulated contributions could be reduced from 1.5 percent to 1 percent, while at the same time pensions could be increased in real terms if GDP growth exceeds 2 percent.

50. This strategy is in line with the policy response to population aging, advocated by OECD, that is centered on increasing the average number of years individuals spend active in the labor force and guaranteeing adequate income to pensioners (see Visco 1999).

average retirement age was about sixty years for males and fifty-seven for females; in 1998, about 25 percent of pension expenditure was paid to individuals below sixty-five years of age on old age pensions (Italian National Statistical Institute [ISTAT] 2000). In order to ensure an increase in the effective retirement age, these changes should probably be supplemented by reforms in the labor market, such as changes in the age profile of wages, more training for elderly workers, and more flexibility in work arrangements.<sup>51</sup> Gronchi (1998) argues that only an increase in the effective average retirement age would allow a reduction in payroll taxes: If retirement age remains low, high payroll taxes would still be required to provide politically adequate replacement rates, which he estimates in the 60–65 percent range.

Changes (3) and (4) would accelerate the adjustment of the system to demographic and economic shocks and broaden the range of shocks taken into consideration, respectively. Change (5) would reduce the political pressure for discretionary increases of pension in real terms, stemming from sizeable disparities among pensioners depending on the year of retirement. It would also introduce a second built-in equilibrating mechanism in the system: Adjustments in the conversion coefficients would offset the effects of changes in life expectancy, and the indexation mechanism would take cyclical aspects and birth-rate changes into account. These devices, which were considered in the preparatory work for the reform (see Aprile, Fassina, and Pace 1996), would make the pensioners share the burden or take advantage of negative and positive shocks, respectively.

The modifications considered above are probably sufficient to ensure the financial equilibrium of the pension system. They would still leave in place a situation in which the compulsory old age provisions require employees to pay a contributory rate of at least 40 percent (33 percent for the PAYGO scheme plus at least 7 percent for the supplementary schemes). Workers with long contributory periods would have relatively high replacement rates.

Several recent studies have explored the possibility to reduce PAYGO contribution rates and widen the role of funded schemes.<sup>52</sup> These studies generally move from the consideration that, taking returns and riskiness into account, a mixed system is superior to either a fully PAYGO system or a fully funded system. In the analysis of the implications of different balances between the two systems, the studies point to a trade-off between the benefits of a larger share of funding—in terms of higher rates of return or lower contribution rates—and the budgetary cost.

<sup>51.</sup> Sartor (2000) estimates that the reforms introduced in the 1990s do not necessarily reduce lifetime earnings significantly because the increase in labor earnings caused by the delay in retirement almost offsets the decrease in pension benefits. This condition applies if individuals can actually work longer.

<sup>52.</sup> Messori and Scaffidi (1999) formulate proposals about the tax treatment of pension funds and the reassignment of severance-pay contributions to pension funds.

Castellino and Fornero (1997) consider a reduction of the contribution rate of 8 percent (from 33 to 25 percent) only for the new entrants into the labor market. They estimate that it would take sixty years for the ensuing reduction in benefits to offset fully the cut in contributions. The government would have to cover a deficit that would peak after forty years at about 2 percent of GDP. Brugiavini and Peracchi (1999) consider the implications of reducing the PAYGO contributions of new entrants by 20 percent (5.6 points out of 28.3 points paid on average by all workers) and paying this amount into a pension fund. Revenue losses for PAYGO schemes will reach a peak of 1.7 percent of GDP after forty years.<sup>53</sup>

Forni and Giordano (1999) show that the replacement rates guaranteed by the PAYGO system to newly insured workers contributing for forty years range between 50 and 90 percent, depending on the career profile. Assuming that severance-pay contributions are fully used to finance supplementary funded schemes, replacement rates range between 60 and 120 percent. They argue that a 10 percentage point reduction in the contributions paid by employees to PAYGO would still guarantee adequate replacement rates: about 70 percent for a worker with an average career profile, working forty years and retiring when sixty-five years old. They consider two main scenarios: one in which the rate reduction applies only to new entrants; and another in which it also applies to the workers who are subject to the 1995 pension formula (those with fewer than eighteen years of contributions in 1995). In the first scenario, revenue losses would reach 0.4 percent of GDP in 2010 and peak at 1.8 percent by 2045. In the second scenario, revenue losses would increase more quickly (1.5 percent in 2010) and peak earlier (1.8 percent in 2025).54

Modigliani and Ceprini (1998) take a different approach and suggest a gradual transition to a fully funded system. They suggest the creation of a new fund financed by an additional contribution of 2 percent of earnings. Workers would receive the same pension benefits paid by the PAYGO schemes. The fund would gradually pay an increasing part of these benefits, allowing a reduction of PAYGO rates, which in the end would be 0 percent. In the process, the contributions to the funded scheme would be increased up to 6 or 7 percent of earnings. The funded scheme would operate on DB criteria, with the government guaranteeing a minimum rate of return on assets and benefiting from returns above this minimum. This solution would raise some problems of compliance with the Stability and

<sup>53.</sup> Assuming a 5 percent return on capital, workers receive higher pensions than in the no-change scenario. With a 33 percent reduction in PAYGO contributions, revenue losses would peak at 3 percent of GDP.

<sup>54.</sup> Forni and Giordano (1999) show that the cost of the transition would be substantially reduced if the payroll tax reduction induced positive effects on labor productivity and employment. If the unemployment rate were gradually reduced to half its current level, and if labor productivity growth were 0.5 percent higher each year, in the first scenario the impact on the budget would be positive by 2025.

Growth Pact. If the government were called to pay part of the pensions, the deficit could easily exceed the 3 percent threshold set by the Maastricht Treaty.

In conclusion, there is considerable consensus among pension experts that a comprehensive package including a faster implementation of the 1995 reform, some parametric changes in the pension regime established by that reform, and an acceleration of the development of funded schemes would avoid the expected rise of the pension expenditure to GDP ratio and reduce the negative effects of the systems on the labor market and employment. The acceleration of the implementation of the 1995 reform would provide some budgetary margins for a gradual reduction of the contributions to the PAYGO system, which could be implemented in parallel with the development of funded schemes.<sup>55</sup>

The optimal mix of PAYGO pensions and funded pensions remains open to discussion. High present contribution rates and budgetary constraints limit the speed of the transition to funding. It is likely that the Italian pension system will remain for a long time predominantly based on PAYGO criteria. However, it is likely that, if funding were to assume an important role, the structure of the PAYGO system would be discussed again. More specifically, the optimality of coupling a funded DC system and a PAYGO DC (rather than a DB) system could be questioned.

The introduction of the DC pensions aimed at mimicking the incentive effects of funded pensions, while avoiding the need to prefund future liabilities. For this reason, the 1995 reform clearly separated social insurance pensions (to be awarded on the basis of individual contributions) and welfare support for the elderly (to be financed out of general revenues). In a context in which the PAYGO DC pensions were significantly scaled down via a reduction in contribution rates, the levels of the pensions awarded to many individuals would be close to the minimum income guaranteed to all elderly citizens. The incentive effects of the PAYGO DC pensions would no longer be relevant. This might suggest reconsidering the separation of the social insurance and welfare functions, as well as the structure of the PAYGO benefits.

#### 7.8 The Reform Process

This section considers four issues related to the pension reform process in Italy: the reasons underlying the critical situation of the Italian pension system in the early 1990s; the difficulties met in introducing reforms; the role of forecasts in the reform process; and the changes introduced into Italian policy-making in the pension domain during the 1990s.

<sup>55.</sup> Pizzuti (1998) takes a critical position on the development of supplementary pension funds, pointing to their costs and effects on income distribution.

### 7.8.1 How Italy Got into the Critical Situation of the Early 1990s

Even though Italian public pension expenditure is relatively high, the ratio of social expenditure to GDP is lower than the European Union (EU) average (24.6 percent, versus 28.5 percent in 1995). This depends on Italy's having an extraordinarily pension-biased social protection system: Old-age and survivors' benefits represent 63 percent of social expenditure in Italy, versus 42 percent in the EU.<sup>56</sup> The pension bias depends on the decisions to increase pension benefits and soften eligibility conditions that were made until the mid-1970s, and on the inability to reform the system in the following years. The other social benefits were crowded out.

The extensive role of pensions in the Italian social protection system is the result of a number of unrelated concurring factors and incremental decisions rather than of deliberate government plans. In the main report by public institutions on the future of the social protection in Italy, prepared by the National Council for Economic and Labor Issues (*Consiglio Nazionale dell'Economia e del Lavoro*, or CNEL) in 1963, expenditures for old age, survivors', and disability pensions were expected to increase under constant policies—from 42 percent of total social expenditure in 1960 to 58 percent in 1980. These ratios were considered too high. In the "optimal" scenario outlined by CNEL, the ratio would have remained constant.

CNEL probably underestimated the inertial effects of decisions that had already been made. According to Beltrametti (1996), net pension liabilities increased from 0.66 percent of GDP in 1951 to about 2.20 percent in 1960. In 1960, pension expenditure was relatively low, but commitments were already very high. In a context in which the demographic structure was rather favorable and the Italian economy was growing fast, there was a strong pressure to extend and increase the benefits. When the system became more mature and dependency ratios increased, pension expenditure grew rapidly. Partly because short-run savings on pension outlays are politically impracticable, curbs on social spending concentrated more heavily on health services, unemployment benefits, and family allowances.

The expansion of pension expenditures also depends on the segmentation of the system in several industry-based schemes and on the ensuing segmentation of policy making. Maestri (1986, 1987), in examining the role of pensions in Italian politics, points to the existence of a political cycle in pension lawmaking and notes that competition between parties in a segmented pension system determined higher expenditure levels. Ferrera

<sup>56.</sup> In Italy, old age expenditure includes severance-pay benefits, only a part of which is paid to workers taking retirement. Excluding these benefits (about 1.5 percent of GDP), the ratio of old age and survivors' benefits to total social expenditure remains very high (see Ferrera 1997; Peracchi 1998b).

and Gualmini (2000) note that a highly fragmented social insurance system allowed the distribution of differentiated entitlements to selected party supporters. Pension schemes with temporarily low dependency ratios could provide high returns on the contributions paid by workers, whereas schemes with high dependency ratios were subsidized by government (Castellino 1998). The lack of evaluations concerning the long-term consequences of the decisions made and the limited role of actuarial principles also contributed indirectly to increased expenditure levels (Castellino 1996).

In the 1970s, when the demographic and economic conditions became less favorable to PAYGO systems, pension policies were carried out in a context of growing budgetary imbalances. As high deficits and rapidly growing public debt were politically accepted, there was no appreciation of the long-term implications of decisions that improved benefits or loosened eligibility conditions.

The problems that the tax administration met in assessing income, in particular that of the large number of self-employed workers, and the lack of social services also concurred in increasing the role of the pension system. These factors hampered the development of a welfare system comparable to those of most other EU countries and of an extensive unemployment support system. Universal welfare benefits were not considered viable from a budgetary point of view. Pensions were therefore used extensively for income distribution and for checking social tensions (Maestri 1986). Disability pensions surrogated welfare benefits in agriculture and in poor regions. Seniority pensions and early retirement schemes were used in place of unemployment benefits. In the 1990s welfare disability pensions were also used extensively to compensate for the lack of services to disabled citizens.

#### 7.8.2 Why Was the Reform Delayed up to 1992?

The reforms introduced in the 1990s could have been introduced ten or even fifteen years earlier, when the coming imbalance of the system had become apparent. Even at that time, it should have been evident that the benefit and demographic structures were mutually incompatible and that gradual cuts in benefits would have eased the burden of the reform (in terms of changes in citizens' expectations) and, hence, softened the opposition to it.

The need to reform the Italian pension system had actually been recognized in the late 1970s. In 1981 this need was stressed in a report of the Ministry of Treasury, which also outlined some reform guidelines. The first long-term forecast of Italian pension expenditure carried out in the same years pointed to substantial increases in the ratio of pension expenditure to GDP (see Morcaldo 1977; Ministry of Treasury 1981). However, no action was taken for a long time, in spite of high expenditure, large prospective imbalances, and rapid aging.

Several factors delayed the implementation of the pension reform: the long-term nature of pension contracts, the short-term perspective of Italian politics, the lack of uncontroversial projections and of agreement on the direction of reform, the segmentation of the Italian pension system, and the high level of pension wealth.

The long-term nature of implicit pension contracts and the large number of elderly citizens make difficult the introduction of pension reforms in any country. However, reforms can be implemented gradually, avoiding abrupt reductions in expected benefits. This approach, which limits opposition to changes, may work only if both government and public opinion take a long-term view of budgetary issues and if long-term expenditure projections are available and provide unequivocal indications.

This was not the case in Italy. Due to a number of political reasons among others, the frequent changes in government—policy makers took a short-term view of public finance developments (see Sartor 1998). Moreover, for some time there was also no general agreement on pension expenditure trends and on the size of the prospective deficits of pension schemes (see section 7.8.3). According to some projections the pension system was already approaching maturity and the aging process could be partially offset by a large increase in female labor force participation. Therefore, it was argued that the need for corrective measures was limited. Only in the early 1990s did all available projections concur on the seriousness of the situation.

Moreover, during the 1980s there was no agreement on the direction of reform. Some proposals supported a radical move from the public PAYGO system to a privately funded system. These proposals met with the intimidating problems of transition and with the lingering uneasiness about funded systems stemming from their crisis in the 1940s. Proposals were also made to abandon the rule of proportionality between pension and salary and to introduce a system in which each elderly citizen would receive the same benefit financed out of general revenues (Paci 1987). Such a reform would have required a difficult switch from social security contributions to other sources of revenue. It would also have represented a complete reversal of the traditional role assigned to Italian pensions. In the end, all plans for radical changes met strong opposition and were rejected.

The reform process was also hampered by the segmentation of the Italian pension system. As mentioned in sections 7.2 and 7.3, the system involved sizeable differences in benefits between categories of recipients. Categories with less favorable treatment (e.g., private-sector employees) accordingly opposed any reduction in their benefits in the absence of an even more pronounced reduction in the benefits of the more privileged categories (e.g., public-sector employees; see Vitaletti 1990). This meant that pension reform should have imposed different burdens on different categories and should have abrogated a large number of special benefit programmes set up over the years. The reform proposals got lost in the intricacies of the system till financial constraints developed a strong pressure for harmonization.<sup>57</sup>

The size of citizens' pension wealth and the large number of pensioners may also have contributed to stop the reform process. Trade unions were particularly active in defending pensioners and prospective pensioners. This situation was closely related to the increasing weight of pensioners in trade unions. In 1980, pensioners represented 18 percent of total union members; in 1991 their numbers were up to 40 percent with a peak of 48 percent in the main union (Peracchi and Rossi 1998).

#### 7.8.3 The Role of the Forecasts

Long-term forecasts have played an important role in the Italian pension reform process. The analysis of the projections produced over the last twenty years suggests that this has been a two-way relationship: Forecasts have affected reforms, but at the same time political decisions to accelerate or postpone reforms may have influenced the forecasts as well. It also shows that expenditure forecasts have been frequently revised upward. In particular, sizeable changes in estimates took place over short periods of time with no adequate effort to explain the reason for the change.

As mentioned in section 7.8.2, the first long-term forecasts of Italian pension expenditure were carried out in the late 1970s and pointed to substantial increases in the ratio of pension expenditure to GDP. Several new projections were carried out in the second half of the 1980s, and the forecasting methodology was gradually improved. However, for some time there was no agreement on expenditure trends. Franco and Morcaldo (1986) projected a large rise in the equilibrium contribution rate of the private-sector employees' scheme, whereas Alvaro, Pedullà, and Ricci (1987), INPS (1989), and Ministry of Treasury (1988) projected a limited increase.<sup>58</sup> According to the latter projections, there was no urgent need to introduce major reforms in the pension system.

In the early 1990s it became gradually apparent that this optimistic view was inconsistent with actual expenditure trends. All projections now concurred on the seriousness of the situation. Both INPS (1991) and Ministry of Treasury (1991) pointed to alarming trends. Later projections, carried out after the 1992 pension reform, presented even more worrying prereform expenditure trends. INPS (1993) estimated that without the reform,

<sup>57.</sup> See *Commissione per l'analisi delle compatibilità macroeconomiche della spesa sociale* (1997). The governmental committee, in examining the reform of the Italian welfare state, noted that the harmonization was a prerequisite for pension reform.

<sup>58.</sup> On this debate, see Gronchi (1989).

the equilibrium contribution rate of the scheme for private-sector employees would have risen from 42 percent in 1992 to 54 percent in 2010. Ministry of Treasury (1994a) forecast the rate to be 50 percent in 2010 and 60 percent in 2025.<sup>59</sup>

However, these projections provided a reassuring postreform outlook. INPS (1993) projected a decline in the equilibrium contribution rate for the private–sector employees' scheme (from 42 percent in 1992 to 40 percent in 2010). Ministry of Treasury (1994a) was even more optimistic for this scheme (41 percent in 1995, 36 percent in 2010, 37 percent in 2025).<sup>60</sup> As a percentage of GDP, total pension expenditure was expected to decline slightly up to the year 2005, and then to increase gradually thereafter.<sup>61</sup>

In 1995 both INPS and the Ministry of Treasury released more unfavorable projections. In spite of the 1992 reform, INPS expected the equilibrium contribution rate for private-sector employees to remain stable at its 1995 level (49 percent). According to Ministry of Treasury (1995a), this rate would decline from 47 percent in 1995 to 42 percent in 2010 and then increase to 46 percent in 2030.<sup>62</sup>

Ministry of Treasury (1995a) also estimated the long-term effects of the 1995 reform. In the baseline scenario, the equilibrium contribution rate for the private-sector employees was moderately lower than in the prereform scenario (40 percent in 2010 and 45 percent in 2030). The GDP ratio of these pensions would decline from 7.3 percent in 1995 to 6.2 percent in 2010 and then increase to 7.0 percent in 2030.

The baseline scenario of Ministry of Treasury (1996) was significantly worse. The expenditure for the pension of private-sector employees was expected to increase from 8.3 percent of GDP in 1995 to 8.4 percent in 2010 and to 9.8 percent in 2030. In the new forecasts, the total expenditure of the main schemes was expected to increase from 13.6 percent in 1995 to 14.1 percent in 2010 and to 16.0 percent in 2030.

In Ministry of Treasury (1997) expenditure levels higher than in the 1996 projection were projected up to 2020, whereas they were expected to

59. It is also estimated that the equilibrium rate for public-sector employees' schemes would have risen from 40 percent in 1994 to 73 percent in 2010.

60. Ministry of Treasury (1994a) projected a moderate increase in the average rate for public-sector employees' schemes (from 42 percent in 1994 to 46 percent in 2010). The projections concerning the main schemes for self-employed workers were less reassuring. The equilibrium rates were expected to more than double by the year 2010 (INPS 1993). Quite strikingly, the equilibrium rates projected for the self-employed workers, taking the effects of the reform into account, were higher than those projected before the 1992 reform (INPS 1991).

61. This profile is obtained by summing up the expenditure-to-GDP ratios estimated by the Ministry of Treasury for the pensions of public-sector employees, and by INPS for the pensions of private-sector employees and the self-employed.

62. The equilibrium contribution rates of the schemes for the self-employed workers were also revised upward.

be lower thereafter.<sup>63</sup> Further changes along the same lines were introduced in Ministry of Treasury (1998), which expected total expenditure to increase to 15.0 percent of GDP in 2010 and to 15.8 percent in 2030.<sup>64</sup>

These developments emphasize the need for regular revisions of pension expenditure projections. The reasons underlying changes in assumptions and results with respect to previous exercises should be explained in each revision. The attribution of the responsibility for producing the projections could also be reconsidered. Indeed, an autonomous agency responding to Parliament or to the *Corte dei Conti*<sup>65</sup> would be more independent and less affected by the policy debate than the Ministry of Treasury and the National Institute for Social Security.

#### 7.8.4 Has Policy-Making Changed?

As was argued in the previous sections, 1992 represents a turning point in Italian pension policy in terms of expenditure control. With a sudden change with respect to the previous decades, the policy debate since 1992 has been basically about the control of pension expenditure. This section considers whether this change affected the way policies are defined and implemented.

One major change regards the governmental departments in charge of developing pension policy proposals. Responsibility rapidly shifted to the Office of the Prime Minister and the Ministry of Treasury. They developed both the 1992 and 1995 reforms, whereas the Ministry for Labor and Social Protection had a very modest role. As in other countries (Tamburi 1999) the change is related to the reasons underlying the reforms, which were economic and financial in nature rather than social.

The role played by the different pressure groups changed in several respects. Although in the pre-1992 period both public-sector employees and self-employed workers had relatively advantageous rules with respect to those of private-sector employees (Castellino 1996), in the following years the cut in benefits was proportionally higher for them than for privatesector employees; public-sector employees lost more than the other groups in relative terms (Sartor 2000). Although private-sector employees managed to retain the right to take seniority retirement with thirty-five years of contributions, public-sector employees lost their preferential conditions for seniority retirement. Self-employed workers fared relatively better: As already mentioned, in 1995 their contribution rate was set at 15 percent whereas their pensions would be calculated on the basis of a 20 percent contribution rate.

<sup>63.</sup> In the new baseline scenario, which referred to new demographic projections, total expenditure was expected to increase from 13.7 percent of GDP in 1995 to 14.6 percent in 2010 and to 15.7 percent in 2030.

<sup>64.</sup> Only marginal changes were introduced in the latest projections (Ministry of Treasury 1999).

<sup>65.</sup> This is the independent court responsible for auditing government accounts.

With the gradual harmonization of rules, the division between pressure groups gradually shifted from employment characteristics to generational characteristics. In this context, the rules to be applied in the transition to the new regime became the main issue.

In other respects, the policy process did not significantly change. The following aspects are particularly relevant:

1. Reforms were introduced without adequate preliminary work. This deficiency was understandable in the emergency situation of 1992; it was less so in later years, however, when the focus shifted from expenditure control to a wider range of objectives. Gronchi and Aprile (1998) relate some deficiencies of the 1995 reform to the swiftness of its introduction, which prevented the reflection necessary to understand its implications (see also Aprile, Fassina, and Pace 1996).

2. No government document was ever presented in the 1990s illustrating the case for reform, the alternative changes taken into consideration, the objectives, and the expected outcomes. In particular, it is remarkable that the 1995 pension formula was never officially published (Gronchi 1997). This creates some ambiguity for future revisions of conversion coefficients.

3. Policy making remained both largely incremental and affected by short-term considerations. Changes were frequently introduced under external pressure. The effort to minimize the reactions of the more vocal groups led to solutions that may prove unsustainable in the long run. Most expenditure cuts came from changes in the indexation mechanisms, which are perhaps more acceptable to public opinion because they are less visible and more gradual. As mentioned in section 7.6, the 1995 reform avoided showing cuts in replacement rates at the cost of increasing pressures from pensioners in the future.<sup>66</sup> It also envisaged extremely long and complex transitory arrangements that will substantially reduce the expected incentive effects of the reform. Some important exceptions were introduced in the actuarial approach underlying the 1995 reform. In particular, the gaps between actual and imputed contribution rates are in stark contrast with this approach.

4. The distribution of the burden of reform between generations and groups of workers is uneven. The cut in the pension wealth of pensioners and elderly workers is very limited with respect to that imposed on younger workers. Generational disparities have replaced industry-based disparities. Moreover, workers with long contributory records have retained their seniority pensions, whereas those with shorter records have faced a sudden increase in the minimum age for obtaining an old age pension (a five-year increase over an eight-year period).

<sup>66.</sup> Pizzuti (1998) remarks that this decision, which relies on the short-sightedness of individuals, is in stark contrast with one of the main roles of public action in retirement provision, which is that of compensating for individuals' short-sightedness.

In the end, there is considerable continuity in Italian policy making in the pension domain. The same incremental and short-sighted approach that determined the extraordinary expansion of pension expenditure up to 1992 continued to work in the following years. Changes in benefit and eligibility conditions have again been introduced without adequate analysis of their implications.

#### 7.9 Conclusion

The reforms introduced in the 1990s have significantly changed the outlook of the Italian pension system. Prospective expenditure growth has been contained, and the harmonization of the different schemes is well underway. The incentives for early retirement have been reduced.

The reform process is not yet complete, however. Faster implementation of the 1995 reform and some parametric changes in the pension regime established by that reform would avoid further increases in payroll taxes and make some resources available for other social benefits. An increase in effective retirement age would shift the focus of expenditure control from the reduction of replacement ratios to the reduction of the ratio of pensioners to workers, and would make the pension system more sustainable. Moreover, it is important to exploit fully the incentive effects and the self-equilibrating mechanism of the new, actuarially based system. An acceleration of the development of funded schemes would allow a gradual reduction of PAYGO contribution rates. The system would remain predominantly PAYGO, but it would be better suited to deal with different shocks. Some changes in policy making may also be required, in terms of preliminary work, communication with the public, and forecasts. It is important that further changes reduce uncertainty about the future prospects of the pension system, and that pension rules are perceived by public opinion as long lasting.

Italian experience provides some indications concerning the issue of pension reform:

1. Late reforms are necessarily less gradual and more painful than would be desirable. The delay in introducing a reform has imposed high costs on Italian pensioners and prospective pensioners in terms of unexpected reductions in purchasing power (e.g., those produced by the partial suspension of price indexation in 1993) and sudden changes in expectations (e.g., those related to the fast increase in the standard retirement age).

2. A lengthy reform process introduces additional burdens. The widespread perception that more adjustments are required increases uncertainty and induces elderly workers to retire at the earliest possible date. This increases public expenditure and negatively affects the labor market. Figure 7.2, for example, shows that the employment rates of Italian males





in the fifty-to-sixty-four age brackets significantly declined during the 1990s in spite of the increase in minimum age for old age pensions. Moreover, although most experts consider that further changes are required, public opinion is experiencing "adjustment fatigue."

3. The segmentation of the pension system may hamper the reform process. Important changes in pension rules were introduced in Italy only when a process of harmonization was begun.

4. Some groups of workers accepted large cuts in their pension rights without major negative reactions. This is particularly the case for public-sector employees. Private-sector employees who lack long contributory records also accepted large cuts in their entitlements. On the other hand, workers with long contributory records resisted changes and retained entitlement to seniority pensions.

5. An actuarially based pension system, such as that introduced in Italy in 1995, can deliver the expected labor market benefits only if the link between contributions and benefits is transparent, easy to grasp, and perceived as stable by citizens. This may not be the case in Italy, where a large number of workers are unaffected by the new pension regime and further reforms are expected by public opinion.

6. Projections are very important to guide policy changes. The lack of regular and reliable projections contributed to the postponement of pension reform in the 1980s. Transparent and regular revisions of projections can contribute greatly to guiding the reform process and smoothing changes over long periods of time.

7. There is a trade-off between the need to make use of political windows of opportunity and the production of in-depth preliminary analysis of pension reforms. In Italy, the swiftness of the introduction of the reforms prevented adequate reflection on their designs and implications.

## References

- Alvaro, G., G. Pedullà, and L. Ricci. 1987. "Sull'evoluzione del sistema economico italiano e dei trattamenti pensionistici agli inizi del 2000" (The evolution of the Italian economic and pension systems in the new century). In *Il futuro del sistema pensionistico italiano*, ed. INPS, 161–222. Rome: INPS.
- Aprile, R., S. Fassina, and D. Pace. 1996. "Equilibrio ed equità in un sistema a ripartizione: Un'ipotesi di riforma" (Equilibrium and equity in a PAYGO system: A possible reform). In *Pensioni e risanamento della finanza pubblica*, ed. Fiorella Padoa Schioppa Kostoris, 272–323. Bologna: Il Mulino.
- Aronica, A. 1993. "Il trattamento di fine rapporto: Dall'autofinanziamento al mercato finanziario" (Severance pay: From self-financing to the financial market). In *Il risparmio previdenziale e i fondi pensione*, ed. D. Pace, 265–314. Milan: Franco Angeli.
- Artoni, R., and A. Zanardi. 1996. The evolution of the Italian pension system.

Milan: Mission Interministerielle Recherche Experimentation (MIRE). Mimeograph.

- Ascoli, U. 1984. "Il sistema italiano di welfare" (The Italian welfare system). In *Welfare state all'italiana*, ed. U. Ascoli, 5–51. Bari: Laterza.
- Baldacci, E., and L. Inglese. 1999. "Le caratteristiche socio-economiche dei pensionati in Italia: Analisi della distribuzione dei redditi da pensione" (The socioeconomic characteristics of Italian pensioners: An analysis of the distribution of pension income). Paper presented at the Riunione Scientifica Gruppo MURST. 22–23 November, Messina, Italy.
- Baldacci, E., and D. Tuzi. 1999. "Gli effetti delle riforme degli anni '90 sull'evoluzione della spesa per pensioni" (The effects of the reforms of the '90s on the evolution of pension expenditure). Paper presented at the eleventh Riunione Scientifica della Società di Economia Pubblica. 8–9 October, Pavia, Italy.
- Banca d'Italia. 1991. The pension system: Reasons for reform. *Economic Bulletin* 13 (October): 68–70.

. 1995. The 1995 pension reform. *Economic Bulletin* 21 (October): 65–70.
. 1999. *Relazione annuale* (Annual report), May. Rome: Banca d'Italia.

- Becchi Collidà, A. 1979. Politiche del lavoro e garanzia del reddito in Italia (Labor policies and guaranteed income in Italy). Bologna: Il Mulino.
- Beltrametti, L. 1994. "Su alcuni aspetti redistributivi della riforma del sistema previdenziale" (On some redistribution aspects of the reform of the pension system). In Secondo rapporto CNEL sulla distribuzione e redistribuzione del reddito in Italia, ed. N. Rossi, 194–99. Bologna: Il Mulino.
- ———. 1996. *Il debito pensionistico in Italia* (Public pension liabilities in Italy). Bologna: Il Mulino.
- Beltrametti, L., and R. Soliani. 1999. "Il sistema pensionistico italiano nel periodo 1919–39: Alcuni effetti macroeconomici e redistributivi" (The Italian pension system from 1919 to 1939: Some macroeconomic and redistribution effects). University of Genova, Department of Economics and Quantitative Measurement. Mimeograph.
- Brugiavini, A. 1999. Social security and retirement in Italy. In *Social security and retirement around the world*, ed. J. Gruber and D. A. Wise, 181–238. Chicago: University of Chicago Press.
- Brugiavini, A., and F. Peracchi. 1999. Reforming Italian social security: Should we switch from PAYGO to fully funded? Paper presented at the sixth annual conference on "Le nuove frontiere della politica economica." 7 June, Rome.
- Cannari, L., and D. Franco. 1990. "Sistema pensionistico e distribuzione dei redditi" (The pension system and the distribution of income). In *Contributi all'analisi economica*, vol. 6, 121–61. Rome: Banca d'Italia.

——. 1997. "La povertà tra i minorenni in Italia: Dimensioni, caratteristiche, politiche" (Poverty among minors in Italy: Size, characteristics, policies). *Temi di discussione* no. 294. Rome: Banca d'Italia.

- Cardarelli, R., and N. Sartor. 2000. Generational accounts for Italy. Paper presented at the Banca d'Italia Workshop on Fiscal Sustainability. 20–22 January, Perugia, Italy.
- Castellino, O. 1976. Il labirinto delle pensioni (The pension labyrinth). Bologna: Il Mulino.

. 1986. "Il futuro del sistema previdenziale italiano" (The future of the Italian pension system). *Rivista di politica economica* 76 (8): 1163–85.

——. 1995. "La previdenza sociale dalla riforma Amato alla riforma Dini (The pension system from the Amato reform to the Dini reform). *Rivista Internazio-nale di Scienze Sociali* 103 (3): 457–72.

-. 1996. "La redistribuzione tra ed entro generazioni nel sistema previdenzi-
ale italiano" (Redistribution between and within generations in the Italian pension system). In *Pensioni e risanamento della finanza pubblica*, ed. Fiorella Padoa Schioppa Kostoris, 59–146. Bologna: Il Mulino.

\_\_\_\_\_. 1998. There is nothing either good or bad. *Politica Economica* 14 (1): 21–30.

- Castellino, O., and E. Fornero. 1997. "Privatizzare la previdenza sociale? Condizioni, modalità e limiti" (Privatizing the pension system? Conditions, methods and limits). *Politica Economica* 13 (1): 3–25.
- Centro Europa Ricerche (CER). 1993. "Fondi pensioni: Una legge da riformare" (Pension funds: A law to be reformed). *Rapporto CER* no. 2, monograph. Rome: CER.
  - ——. 1994. "Pensioni: E ora la riforma" (Pensions: And now the reform). *Rapporto CER* no. 6, monograph. Rome: CER.
- Cichon, M. 1999. Notional defined-contribution schemes: Old wine in new bottles? International Social Security Review 52 (4): 87–105.
- Consiglio Nazionale dell'Economia e del Lavoro (CNEL). 1963. *Relazione preliminare sulla riforma della previdenza sociale* (A preliminary report on the reform of social protection). Rome: CNEL.
- Commissione per l'analisi delle compatibilità macroeconomiche della spesa sociale. 1997. *Relazione Finale* (Final report), 28 February.
- Fausto, D. 1978. *Il sistema italiano di sicurezza sociale* (The Italian social security system). Bologna: Il Mulino.
  - ———. 1983. "La diffusione delle pensioni di invalidità: Una piaga non esclusiva del Sud" (The spread of disability pensions: a problem not limited to the South). *Mezzogiorno d'Europa* 1:53–75.
- Ferrera, M. 1984. Il welfare state in Italia (The welfare state in Italy). Bologna: Il Mulino.

——. 1997. "La spesa sociale italiana in prospettiva comparata" (Italian social spending from a comparative point of view). Documento di base no. 1. Commissione per l'analisi delle compatibilità macroeconomiche della spesa sociale, relazione finale, 28 February.

- Ferrera, M., and E. Gualmini. 1999. Rescue from without? Italian social policies 1970–1999 and the challenges of internationalisation. European University Institute Working Paper no. 13. Florence: European University Institute.
- Ferraresi, P. M., and E. Fornero. 2000. "Costi e distorsioni della transizione previdenziale ed effetti correttivi di alcune proposte di riforma" (Costs and distortions in pension transition and the corrective effects of some reform proposals). *Politica Economica* 16 (1): 3–48.
- Folster, S. 1999. Social insurance based on personal savings accounts: A possible reform strategy for overburdened welfare states? In *The welfare state in Europe*, ed. M. Buti, D. Franco, and L. Pench, 93–115. Cheltenham, U.K.: Edward Elgar.
- Fornero, E. 1995. Totally unfunded versus partially funded pension schemes: The case of Italy. *Ricerche Economiche* 49:357–74.
- ——. 1999. L'economia dei fondi pensioni (The economy of pension funds). Bologna: Il Mulino.
- Forni, L., and R. Giordano. 1999. Can Italy fund its social security system? Banca d'Italia, Rome. Mimeograph.
- Franco, D. 1993a. *L'espansione della spesa pubblica in Italia* (The expansion of public spending in Italy). Bologna: Il Mulino.

——. 1993b. "Il sistema pensionistico fra provvedimenti di emergenza e riforme di struttura" (The pension system between emergency provisions and structural

reforms). In La finanza pubblica nel 1993, ed. L. Bernardi, 105-40. Milan: Franco Angeli.

- Franco, D., and F. Frasca. 1992. Public pensions in an ageing society: The case of Italy. In *The future of pensions in the European Community*, ed. J. Mortensen, 69–95. London: Centre for European Policy Studies, Brassey's.
- Franco, D., J. Gokhale, L. Guiso, L. Kotlikoff, and N. Sartor. 1992. Generational accounting: The case of Italy. In *Saving and the accumulation of wealth*, ed. A. Ando, L. Guiso, and I. Visco, 128–60. Cambridge: Cambridge University Press. Franco, D., and G. Morcaldo. 1986. *Un modello di previsione degli squilibri del sistema previdenziale* (A model for forecasting the imbalances in the pension system). Rome: Istituto Poligrafico e Zecca dello Stato.

——. 1989. The origins, functions and planned reform of some features of the Italian pension system. In *Social security and its financing*, ed. Ministero del Lavoro e della Previdenza Sociale, 45–92. Rome: Istituto Poligrafico e Zecca dello Stato.

——. 1990. *La spesa per la tutela degli invalidi in Italia* (Public expenditure for the care of the disabled in Italy). Milan: Franco Angeli.

- Giarda, P. 1998. "La revisione del sistema pensionistico nel 1997: Come avrebbe potuto essere" (The 1997 revision of the pension system: How it could have been). *Economia Politica* 15 (2): 267–94.
- Gronchi, S. 1989. The long-term outlook for the Italian social security system. In Social security and its financing, ed. Ministero del Lavoro della Previdenza Sociale, 131–201. Rome: Istituto Poligrafico e Zecca dello Stato.
  - ——. 1997. "Un'ipotesi di correzione e completamento della riforma delle pensioni del 1995" (A proposal for correcting and completing the 1995 pension reform). *Studi e Note di Economia* 2:7–40.

——. 1998. "La sostenibilità delle nuove forme previdenziali ovvero il sistema pensionistico tra riforme fatte e da fare" (The sustainability of the new pension reforms: the pension system between completed and prospective reforms). *Economia Politica* 15 (2): 295–316.

Gronchi, S., and R. Aprile. 1998. The 1995 pension reform: Equity, sustainability and indexation. *Labour* 12 (1): 67–100.

Hamann, A. J. 1997. The reform on the pension system in Italy. IMF Working Paper no. WP/97/18. Washington, D.C.: International Monetary Fund.

Istituto Nazionale della Previdenza Sociale (INPS). 1970. "Sviluppi dell'assicurazione obbligatoria per l'invalidità, la vecchiaia ed i superstiti nel suo primo cinquantennio di applicazione" (The development of the compulsory insurance for disability, old age and survivors in its first fifty years). In *Settant' anni dell'Istituto Nazionale della Previdenza Sociale: Cinquant'anni dell'Assicurazione Generale Obbligatoria per l'Invalidità e la Vecchiaia,* ed. INPS, 321–34. Rome: Raccolta di Studi.

. 1989. *Il modello INPS e le prime proiezioni al 2010* (The INPS model and the first projections up to 2010). Rome: INPS.

——. 1991. Il nuovo modello previsionale INPS per le pensioni: Caratteristiche generali e risultati di sintesi della proiezione al 2010 del Fondo pensioni lavoratori dipendenti (The new INPS model for pension expenditure forecasting: General characteristics and a synthesis of the projections of the employees' pension fund through 2010). Roma: INPS.

-. 1993. Le pensioni domani (The future of pensions). Bologna: Il Mulino.

—. 1995. "Relazione del Presidente Gianni Billia" (Report of the president, Gianni Billia). In *Crisi del sistema previdenziale italiano e confini tra pubblico e privato*, 25–39. Rome: Senate of Italy.

- Istituto Ricerche Sociali (IRS). 1995. Vecchie e nuove pensioni: La proposta Dini (Old and new pensions: The Dini proposal). Milan: IRS.
- Istituto di Studi e Analisi Economica (ISAE). 1999. *Rapporto trimestrale: Finanza pubblica e redistribuzione* (Quarterly report: public finance and redistribution). Rome: ISAE, October.
- Italian National Statistical Institute (ISTAT). 1997. *Il sistema pensionistico italiano: Beneficiari e prestazioni* (The Italian pension system: pensioners and benefits). Rome: ISTAT.
  - ——. 1999. I trattamenti pensionistici: Anno 1998 (Pensions: year 1998). Rome: ISTAT.
- ——. 2000. *I beneficiari delle prestazioni pensionistiche: Anno 1998* (Beneficiaries of pensions: year 1998). Rome: ISTAT.
- Maestri, E. 1986. "La politica delle pensioni in Italia fra ciclo elettorale e competizione interpartitica" (Pension policy in Italy between the electoral cycles and political party competition). *Quaderni di Sociologia* 33 (7): 47–73.

——. 1987. "La regolazione dei conflitti redistributivi in Italia: Il caso della politica pensionistica (1948–1983)" (Redistribution conflicts in Italy: The case of pension policy [1948–1983]). *Stato e Mercato* 20 (August): 249–79.

- Messori, M., and A. Scaffidi. 1999. "Lo sviluppo dei fondi pensione 'chiusi': Il possibile ruolo del Trattamento di Fine Rapporto e del regime fiscale" (The development of "closed" pension funds: The possible role of severance pay and the tax regime). Rome: Società Per Lo Sviluppo Del Mercato Dei Fondi Pensione (MEFOP). Mimeograph.
- Ministry of Health and Social Affairs. 1994. Pension reform in Sweden: A short summary. Proposal of the 1994 Working Group on Pensions, Stockholm.
- Ministry of Treasury. 1981. La spesa previdenziale e i suoi effetti sulla finanza pubblica. Relazione della Commissione di studio istituita dal Ministro del Tesoro (Pension expenditure and its effects on public finance. Report of the committee appointed by the Minister of Treasury). Rome: Istituto Poligrafico e Zecca dello Stato.

——. 1988. *Metodi per la previsione a lungo termine degli squilibri previdenziali* (Methods for long-term forecasting of pension imbalances). Rome: Istituto Poligrafico e Zecca dello Stato.

. 1991. Fondo pensioni lavoratori dipendenti: Una proiezione al 2025 (Employees' pension fund: A projection through 2025). Rome: Istituto Poligrafico e Zecca della Stato.

—. 1994a. "Audizione del Ragioniere Generale dello Stato Andrea Monorchio" (Audit of State Comptroller General Andrea Monorchio). Camera dei Deputati, XI Commissione Permanente Lavoro pubblico e privato. 7 September, Rome.

——. 1994b. "I rendimenti impliciti della previdenza obbligatoria: Un'analisi delle iniquità del sistema" (The returns implicit in compulsory insurance: an analysis of the system's iniquities). *Conti pubblici e congiuntura economica,* vol. 2, monograph. Rome.

——. 1994c. "La previdenza complementare: Problemi e prospettive per il decollo" (Complementary insurance: Problems and prospects for its take-off). *Conti pubblici e congiuntura economica,* vol. 1, monograph. Rome.

——. 1995a. "Il progetto di riforma del sistema pensionistico pubblico presentato dal governo: Le tendenze di medio-lungo periodo del Fondo Pensioni Lavoratori Dipendenti" (The reform of the public pension system presented by the government: Trends in the medium and long term for the Employees' Pension Fund). Rome: Ministry of Treasury.

-. 1995b. "Il progetto di riforma del sistema pensionistico pubblico pres-

entato dal governo: Le tendenze di medio-lungo periodo del Fondo Artigiani e Commercianti" (The reform of the public pension system presented by the government: Trends in the medium and long term for the Artisans' and Retailers' Funds). Rome: Ministry of Treasury.

—. 1996. "Tendenze demografiche e spesa pensionistica: Alcuni possibili scenari" (Demographic trends and pension spending: Some possible scenarios). *Quaderno Monografico: Conti Pubblici e Congiuntura Economica*, vol. 9, monograph. Rome.

——. 1997. "Sanità, scuola e pensioni: Le nuove previsioni basate sugli scenari demografici ISTAT" (Health, schools, and pensions: New forecasts based on ISTAT demographic scenarios). *Quaderno Monografico: Conti Pubblici e Congiuntura Economica*, vol. 13, monograph. Rome.

——. 1998. Italy's convergence towards EMU, January. Rome: Ministry of Treasury.

——. 1999. "Aggiornamento del modello di previsione del sistema pensionistico della Ragioneria Generale dello Stato: Le previsioni '99" (An update of the state comptroller general's pension system forecast: The 1999 forecast). June, monograph. Rome.

- Modigliani, F., and M. Ceprini. 1998. Social security reform: A proposal for Italy. *Review of Economic Conditions in Italy* 2 (May–August): 177–201.
- Morcaldo, G. 1977. "Analisi della struttura dei trattamenti pensionistici e della sua evoluzione" (An analysis of the structure of pensions and its evolution). *Contributi alla ricerca economica* 7:77–162.
- Nicoletti-Altimari, S., and M. Rostagno. 1999. The *dis*-advantages of tying one's hands: Yield rate flexibility in unfunded pension systems. Paper presented at conference, "Le Nuove Frontiere della Politica Economica," 7 June, IGIER, Rome.
- Nucleo di valutazione della spesa previdenziale (Pension Expenditure Evaluation Committee). 1988. "Analisi del Sistema Pensionistico Obbligatorio: I dati base e gli indicatori di gestione" (Analysis of the compulsory pension system: Data and indicators). Rome, May.

——. 1999. "Nota sugli andamenti della spesa previdenziale" (A note on the development of pension expenditure). Rome, April.

Organization for Economic Cooperation and Development (OECD). 2000. Labor force statistics, 1978–1998: Part III. Paris: OECD.

- Onofri, P. 1998. "Nonostante tutto, un altro pezzo di riforma del sistema pensionistico" (In spite of everything, another step in the pension system reform). *Politica Economica* 1 (April): 5–19.
- Orszag, J. M., and D. J. Snower. 1999. Expanding the welfare system: A proposal for reform. In *The welfare state in Europe*, ed. M. Buti, D. Franco, and L. Pench, 116–35. Cheltenham, U.K.: Edward Elgar.
- Pace, D. 1993. "I fondi pensione e la previdenza obbligatoria in Italia" (Pension funds and compulsory insurance in Italy). In *Il risparmio previdenziale e i fondi pensione*, ed. D. Pace, 25–48. Milan: Franco Angeli.
- Padoa Schioppa Kostoris, F. 1995. "A proposito dei tassi di rendimento interno per i neopensionati italiani: 1995–2001" (Concerning the rates of return for newly pensioned Italians: 1995–2001). In *Le pensioni difficili*, ed. O. Castellino, 143–64. Bologna: Il Mulino.

——. 1996. "La riforma italiana delle pensioni anzianità e vecchiaia del 1995 e gli effetti di finanza pubblica" (The Italian reform of seniority and old age pensions in 1995 and its effects on public finance). In *Pensioni e risanamento della finanza pubblica*, ed. F. Padoa Schioppa Kostoris, 399–480. Bologna: Il Mulino.

- Palmer, E. 1999. Exit from the labor force for older workers: Can the NDC pension system help? *Geneva Papers on Risk and Insurance* 24 (4): 461–72.
- Peracchi, F. 1998a. "Demografia, mercato del lavoro e spesa per la protezione sociale: Un confronto fra i paesi dell'Unione Europea" (Demographics, labor market, and social protection spending: A comparison among the countries of the European Union). CEIS Working Paper no. 45. Rome: Centro Interdipartimentale di Studi Internazionali sull'Economia e lo Sviluppo.

——. 1998b. "La spesa per la protezione sociale nei paesi dell'Unione Europea" (Social protection spending in the countries of the European Union). *Politica Economica* 14 (1): 31–63.

——. 1999. "Lavoro, retribuzioni e pensioni: Un confronto tra generazioni di italiani" (Work, salaries and pensions: A comparison between generations of Italians). Paper presented at conference on "Metodi quantitativi per l'analisi economica." December, Banca d'Italia, Perugia.

Peracchi, F., and N. Rossi. 1998. "Nonostante tutto, è una riforma" (In spite of everything, it is a reform). In *La costituzione fiscale*, ed. G. Tabellini, 63–155. Bologna: Il Mulino.

Pizzuti, F. R. 1990. La sicurezza sociale tra previdenza assistenza e politica economica (Social security between insurance, assistance and economic policy). Naples: Liguori.

- Porta, P., and P. Saraceno. 1996. The mandatory pension system in Italy: Country report of the Phare-Ace, Research project P95-2139-R. *Contributi di Ricerca IRS* no. 37.
- Regonini, G. 1984. "Il sistema pensionistico: Risorse e vincoli" (The pension system: Resources and constraints). In *Welfare state all'italiana*, ed. U. Ascoli, 87– 117. Bari: Laterza.
- Rossi, N., and I. Visco. 1995. National saving and social security in Italy. *Temi di discussione* no. 262. Rome: Banca d'Italia.
- Rostagno, M. 1996. "Il percorso della riforma: 1992–1995. Nuovi indicatori di consistenza e sostenibilità per il Fondo Pensioni Lavoratori Dipendenti" (The path of reform: 1992 to 1995. New consistency and sustainability indicators for the employees' pension fund). In *Pensioni e risanamento della finanza pubblica*, ed. F. Padoa Schioppa Kostoris, 325–97. Bologna: Il Mulino.

Sartor, N. 1998. Il risanamento mancato: La politica di bilancio italiana, 1986–90 (A consolidation that failed: Italian budgetary policy, 1986–1990). Rome: Carocci.
2000. The long-run effects of the Italian pension reforms. International Tax and Public Finance 8 (1): 83–111.

- Senate of Italy. 1995. "Crisi del sistema previdenziale italiano e confini tra pubblico e privato" (The crisis in the Italian pension system and the borders between public and private sectors). *Incontri di studio a Palazzo Giustiniani, 21 February* 1995, no. 8, monograph. Rome.
- Tamburi, G. 1999. Motivation, purpose and processes in pension reform. *Interna*tional Social Security Review 52 (3): 15–44.
- Visco, I. 1999. Welfare systems, ageing and work: An OECD perspective. Paper presented at conference, "New Welfare and Social Security in Europe," 10–11 September, University of Brescia, Italy.
- Vitaletti, G. 1990. "I conflitti di interesse sulla riforma pensionistica" (Conflicts of interest in pension reform). In *Il sistema pensionistico: Un riesame*, ed. F. R. Pizzuti and M. R. Rey, 281–88. Bologna: Il Mulino.

-----. 1993. "Apparenza e realtà degli effetti dei provvedimenti di riforma pen-

<sup>. 1998.</sup> Pension reform and economic policy constraints in Italy. *Labour* 12 (1): 45–66.

sionistica" (Appearance and reality in the effects of pension reform provisions). *Economia Pubblica* 23 (11): 491–99.

## **Comment** Franco Peracchi

The paper by Daniele Franco provides an excellent overview of the recent process of pension reform in Italy. The message of the paper is not very optimistic:

In spite of the reversal of pension policy in 1992, in terms of expenditure control, there is considerable continuity in the Italian policy-making style. The same incremental and short-sighted approach that determined the extraordinary expansion of pension expenditure up to 1992 continued to work in the following years. The reforms implemented in recent years under the pressure of budgetary constraints largely reflect the demands of some specific groups. They have been introduced without adequate analysis of their implications and include solutions that may prove unsustainable in the long run. This also made the reform process longer and determined lengthy transition periods.

In my comment, I would like to strengthen Franco's conclusions by arguing that, at least so far, the Italian process of pension reform has missed the four main objectives it was originally supposed to achieve, namely, (1) stabilizing the ratio of public pension expenditure to gross domestic product (GDP), (2) reverting the trend toward early retirement, (3) increasing equity and fairness, and (4) promoting the creation of a two-pillar system. To this end, I will also present some additional statistical evidence that supplements the wealth of information provided in the paper.

### The Expenditure-GDP Ratio

Figure 7C.1 shows the historical trends in the number of pensions (top left panel), average pension amounts (top right panel), pension expenditure (bottom left panel), and the ratio of pension expenditure to GDP (bottom right panel) as measured by the Italian National Statistical Institute (*Istituto Nazionale di Statistica*, or ISTAT). For simplicity, I consider only data on old age, disability, and survivors' pensions, thus excluding noncontributive pensions. Monetary amounts are at constant 1998 prices.

Between 1975 and the beginning of the reform process in 1992, the number of pensions outstanding grew by 34 percent, from 12.5 to 16.6 million, while the average pension doubled in real terms. As a result, expenditure increased by nearly three times and the ratio of pension expenditure to

Franco Peracchi is professor of econometrics at Tor Vergata University.





Communities (Eurostat).

GDP rose by more than 4 percentage points, from 8.4 percent to 12.8 percent. The increase in the number of pensions outstanding reflects the progressive aging of the Italian population and the steady reduction of the average retirement age, largely due to workers' taking advantage of the possibility of retiring with a seniority pension (*pensione di anzianità*) after thirty-five years of contributions (or even fewer for public-sector employees) without any actuarial reduction. On the other hand, the rise of average pensions is due to the sharp increase of lifetime earnings of successive cohorts of workers, a number of legislated changes that made the system progressively more generous, and the fact that outstanding pensions were *de facto* linked to productivity growth.

Between 1992 and 1998, pension expenditure increased by about 20 percent in real terms and the ratio of pension expenditure to GDP increased from 12.8 to 13.5 percent, as a result of a 6.6 percent increase in the number of pensions outstanding (from 16.6 to 17.7 million) and a 12.9 percent increase in the average pension. This slowdown of pension expenditure growth is often presented as a major achievement of the 1995 reform. In fact, the objective of stabilizing the ratio of pension expenditure to GDP (explicitly stated in the 1995 reform law) has not yet been reached, and pension expenditure has been growing at rates that, although lower than in the past, are still higher than GDP growth rates. Furthermore, the slowdown of expenditure growth is largely the result of decisions made in 1992, namely, the elimination of the double-indexing of pensions to price inflation and productivity growth, the introduction of limitations to early retirement, and the gradual increase of the normal retirement age from sixty to sixty-five for men and from fifty-five to sixty for women. Of the three, the elimination of double-indexing has been by far the most important.

#### Labor Market Trends

According to Istat baseline projections of the resident population for the period 1996–2050, the working-age population (persons aged twenty to fifty-nine) is expected to shrink from 32.5 million in 1996 to 20.9 million in 2050, with a loss of 11.6 million units. During the same period, the elderly population (persons aged sixty and older) is expected to increase from 12.9 to 17.4 million, gaining 4.5 million units. As a result, the elderly dependency ratio (the ratio between the elderly population and the working-age population) is expected to more than double, increasing from 40 percent in 1996 to 83 percent in 2050.

Although these demographic prospects have attracted considerable attention, the crucial issues of labor market trends and labor market incentives have been largely neglected in the policy debate. In fact, one of the most striking developments of the Italian labor market during the last three decades is the dramatic drop in labor force participation and employment rates in the age range between fifty and sixty years, as measured by the ISTAT quarterly labor force survey. This trend toward early retirement from the "official" labor market has contributed to a worsening of the financial situation of the social security system, above and beyond that caused by the unfavorable demographic trends and the generosity with which pensions have been awarded in the past.

Figure 7C.2 compares the employment rates of Italy (by sex and age) with those for the rest of Europe. It focuses on the eleven countries that, together with Italy, were part of the European Union in the early 1980s (EU-11). Between 1983 and 1997 Italy has lost its advantage in terms of higher male employment rates relative to the other countries. In the mean time, the gap between Italy and the EU-11 in terms of female employment rates has widened. Figure 7C.3 compares the average annual variation of employment rates, by sex and age, for Italy and the EU-11 between 1983 and 1997. Italy distinguishes itself by its much sharper decline in male employment rates before age thirty and in the age range of fifty to sixty, and by its more limited expansion of female rates.

Figure 7C.4 shows the average annual variation of Italian employment rates by sex and age separately for the two subperiods 1983-92 and 1992-98. Consider first the period 1983–92. Male employment rates have been falling at all ages, but the decline has been especially strong before age thirty and between ages fifty and sixty. Female employment rates have also been falling at these ages, but they have been rising at all ages between twenty-five and fifty. The drop in employment rates of young men and women reflects the increase in school attendance and the rise of youth unemployment. On the other hand, the available evidence shows that current social security regulations played a major role in the decline of employment rates among older men and women. Two aspects of the system appear to have had strong negative incentive effects on labor supply. One is the high implicit tax on continuing to work, through the benefit formula currently in use and the availability of seniority pensions. The other is the negative effect on human capital investment, through the early retirement option and the highly progressive taxation of earnings.

With regard to the first aspect, one should note that seniority pensions are the main escape route into retirement. Other escape routes, such as unemployment benefits or disability pensions, appear to be much less important. Eligibility for disability pensions has been tightened up considerably in the 1980s, whereas unemployment benefits have never played an important role.

Turning to the second aspect, it is a fact that schooling levels in Italy are lower than the European average, especially among women and older workers. This, by itself, may help explain about one-third of the differences in employment rates between Italy and the other countries. Increases in the education level of the Italian workforce may therefore go a long way in reducing the gap with respect to the rest of the EU.





Sources: Author's calculations based on raw data from the Italian National Statistical Institute (ISTAT) and the Statistical Office of the European Communities (Eurostat).



Fig. 7C.3 Average annual variation of employment rates by sex and age, 1983–97: Italy versus EU-11 Sources: Author's calculations based on raw data from the Italian National Statistical Institute (ISTAT) and the Statistical Office of the European Communities (Eurostat).



**Fig. 7C.4** Average annual variation of employment rates by sex and age in Italy, 1983–92 and 1992–98 *Sources:* Author's calculations based on raw data from the Italian National Statistical Institute (ISTAT) and the Statistical Office of the European Communities (Eurostat).

As shown in figure 7C.4, the trend toward early retirement intensified after 1992, especially among male workers. Whereas male employment rates in the age range of fifty to sixty have been falling by a little less than 1 percentage point per year during the period 1977–92, during the period 1992–98 they have been falling by about 2 percentage points per year. From the viewpoint of labor market incentives, therefore, the recent process of social security reform has been remarkably unsuccessful, at least so far. As discussed by Daniele Franco, the main reasons for this are the extremely generous transitional rules adopted, coupled with uncertainty about a further tightening of the system and the fear of losing the benefits associated with the current regime. The lack of a similar effect for female workers is due to the presence of strong cohort effects and the fact that early retirement through a seniority pension is open only to workers with uninterrupted work histories, few of whom are women.

## **Equity and Fairness**

Once fully phased-in, the 1995 reform will imply a more transparent and actuarially fair pension system. The reasons are twofold. First, benefits are more clearly linked to contributions and residual life expectancy than was the case with the previous "final-salary" type formulas, thus reducing negative incentive effects on labor supply. Second, most of the workforce is now covered by essentially the same system, thus reducing incentives in favor of certain types of employment (public-sector employees and the self-employed). The system is not completely neutral, however, and several provisions remain that tend to favor the self-employed.

Although equity and fairness of the system have been improved along some dimensions, the burden of the reform has been spread very unevenly. The problem arises because of the different treatment of workers depending on their seniority in 1992. The prereform rules apply, with only small changes, to workers with at least fifteen years of contributions at the end of 1992. These workers have been completely sheltered by the reform process. For workers with fewer than fifteen years of contributions at the end of 1992, the provisions for the transitional period allow the rules of the old regime to hold for the fraction of years in employment under that regime, whereas the remaining fraction is regulated by the new rules. As a result, workers will retire under the pre-1992 regime until about the year 2015. During the following fifteen to twenty years, an increasing fraction of a retiree's pension will be computed on the basis of the new system. It will be around 2030 that a significant number of workers will start retiring fully under the rules introduced by the 1995 reform.

#### The Second Pillar

In principle, the reform process also envisages a partial move toward a two-pillar system. At least so far, this does entails no reduction in the contribution to the public pay-as-you-go (PAYGO) system, but only a gradual rechanneling of the funds currently accruing to a separate severance-pay fund, known as *Trattamento di fine rapporto* (TFR). The TFR is managed directly by the employer and has been, until now, an important source of cheap credit to firms. Its annual contribution of 7.41 percent of gross earnings is retained by the employer (except for a small fraction that goes to the PAYGO system) and paid out as a lump sum when the worker quits or is laid off. TFR contributions are capitalized at an annual real rate of return equal to 1.5 percent minus 25 percent of the annual inflation rate.

Converting the TFR into a proper pension fund may increase its expected rate of return but has some disadvantages for the worker, mainly the loss of liquidity and the increase in risk. These disadvantages, along with the limited tax incentives and the excessively strong role given to trade unions in promoting pension funds, may explain why so few workers have decided to take this option.

#### Conclusions

Despite recent reforms, the long-run prospects for the Italian public PAYGO system remain worrisome. Even the official forecasts by the Ministry of Treasury acknowledge that, in the absence of further changes in policy, the ratio of public pension expenditure to GDP will keep increasing till about 2030. Given current demographic trends, stabilizing the expenditure-GDP ratio (as prescribed by the 1995 reform) requires a sharp increase in employment rates and a substantial reduction in the generosity of the system, as measured by the ratio between average pension and labor productivity.

The system designed by the 1995 reform goes a long way in both directions, by reducing the current implicit tax on continuing to work and by cutting benefits with respect to the current level. However, the new system will be introduced only very gradually. Furthermore, the high level of social security contribution represents a powerful negative incentive to employment creation and limits the attractiveness of complementary pension plans. So far, the main positive effect of the reform process has been the slowdown in the growth of the pension-GDP ratio, due largely to severance of the automatic link between productivity and pension growth. There are many signs that the resulting gap between new and old cohorts of pensioners is becoming politically unsustainable.

As argued by Daniele Franco, a faster implementation of the 1995 reform, the fine-tuning of several of its parameters, and the availability of regular and reliable projections to guide policy are necessary. The two unresolved questions are (1) whether this is enough, and (2) whether this is politically viable. The available demographic projections imply that the age of the Italian median voter will increase rapidly: It was between fortyfour and forty-five in 1995, and is expected to grow to fifty in the year 2016 and fifty-five in 2032. It is unlikely that this will ease the reform process.

# **Discussion Summary**

Ignazio Visco pointed out that the problems of the Italian pension system are no larger than elsewhere in Europe. He quoted an earlier paper of the discussant, saying, "after all, this is a reform." Visco highlighted the long transition period in the new system as an important point mentioned in the paper. In the transition period, around 40 to 50 percent of the labor force still retires according to the old rules. Visco reported that there is currently a debate about whether everyone has to retire according to the new rules, and he projected that this will be the outcome of the debate. Visco agreed with the author of the paper that the main problem in Italy is the labor market problem and that labor market reforms still have to show their effects if they are introduced at all.

Visco mentioned that the group of self-employed people, which accounts for one third of the labor force, is one of the most vocal groups in the political process. This group had ridiculously low contribution rates. The contribution rates have been raised, but Visco wondered whether this is enough. *Daniele Franco* added that the case of the self-employed is very interesting from a political economy point of view. He reported that the self-employed benefited greatly from the pension system in relative terms up to the 1992 reform. Even in 1990 there was a reform increasing the benefits of the self-employed. In the pension reform process of the 1990s, the self-employed lost with respect to what they were promised in 1990, but still they managed to have some benefits compared to private-sector employees.

Visco also referred to the second pillar in the Italian pension system, the advance-funded severance pay system. He noted that the fund in this system provides only an extremely low rate of return, currently of about 1 percent. He asked about the possibility of transforming the severance pay into open pension funds, which offer a higher rate of return, and of reducing the contribution rates of the firms with a part of the difference in the rates of return. *Daniele Franco* called the 7 percent of earnings paid to severance benefits are a pot of gold that other countries do not have. It was an obvious target for any government policy to develop a supplementary pension, because it was not possible to even consider having the pay-as-you-go (PAYGO) pension, the severance pay benefits, *and* the supplementary pension. Franco said that although in theory it appears to be simple to move money from severance pay to the supplementary pension, in practice it is more difficult to get the supplementary scheme started.

John McHale asked whether there is evidence that people in Italy have increased their savings, either because they do not believe that they will get their promised pension benefits or as a reaction to pension reforms that have take place already. McHale also noted that there does not seem to exist a natural obstacle to the pension system's getting larger if the birth rate declines: A decline in the birth rate leads to higher contributions and to higher benefits in a notional defined contribution (NDC) system, because benefits are linked directly to contributions. In his answer to McHale, Daniele Franco said that shocks in the birth rate were not taken into account in the 1995 reforms. He agreed with McHale that discretionary adjustments should not take place on the contribution side but rather on the conversion coefficients that affect future benefit payments.

McHale was puzzled that the second Italian pension reform went through so well, although the reform had such starkly contrasting distributional effects—especially with respect to the distribution between women and men. Franco noted that women lost more than men in the reforms in the 1990s. This is basically because many men can still retire with seniority pensions, for which they need thirty-five years of contributions, whereas women have a more irregular work pattern and typically do not have this opportunity. As a result, the five years' increase in the retirement age over the last eight years mostly affected women. However, the conversion coefficient introduced in 1995 is the same for men and women, although women have a higher life expectancy than men.

Martine Durand wondered why so much emphasis is put on the average retirement age of fifty-seven. Given the fact that Italy has moved to an NDC system, she asked why the retirement age is seen as a problem for the pension system and not as a matter of pure individual choice. Daniele Franco responded that some economists argue that the conversion formula is not completely neutral, so that the retirement age matters. In addition, even if coefficients are neutral with respect to the pension system, they are not neutral with respect to the whole public sector. A person retiring at age fifty-seven pays lower taxes but draws higher benefits from services of the public sector. In addition, if workers retire at fifty-seven, there is a higher likelihood that some of these people will ask for welfare benefits.

With respect to the allocation of labor, Durand asked why, if the reform is actually unifying all systems of retirement provision, there still exists the problem of reallocation of labor across industrial sectors.

*Martin Feldstein* asked whether individuals choose the opportunity to substitute for the severance accounts in any significant way. *Daniele Franco* reported that about 400,000 workers are involved in the new supplementary pension fund, which is about 2 percent of manpower.