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Social Protection and Private Insurance: Reassessing the Role of Public Sector Versus Private Sector in Insurance

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PIERRE PESTIEAU
University of Liège, Boulevard du Rectorat, 7 (B-4000), Sart Tilman/Liège, Belgium; Unitersity of Paris X and CORE

Abstract

This paper first discusses the standard reasons why private insurance cannot be expected to function well and why public intervention in or public provision of insurance can improve on private market outcomes. These arguments are based on efficiency but also on equity considerations. Then the paper turns to new developments in modern societies that might affect the balance between social and private insurance. They pertain to the current working of labor markets, to the openness of our economies and the ensuing fiscal competition, and to the crediblity and commitment problems faced by the state. The paper concludes that the public sector will find it less and less affordable to provide both insurance and assistance and recommends that it focus on the latter objective by awarding tax-financed uniform benefits on the basis of specified contingencies.

Key words: Social insurance, Redistribution, Welfare state

The topic of this Annual Lecture is the reassessment of the role of the public sector versus the private sector in the provision of insurance in light of recent economic and social developments. I am in no sense a specialist in insurance economics; my field is public economics, and I will speak of private and social insurance from the viewpoint of a public economist. I am surely not the first one to do so in this lecture series. In 1983, Joseph Stiglitz [1983a] argued that the problem of moral hazard, where the actions of those who purchase insurance cannot be perfectly monitored, may give rise to the government provision of social insurance. In 1991, Anthony Atkinson [1991] characterized the essential elements of social insurance and modeled its main economic consequences. In this lecture, I would like to address the questions of why we need social insurance and why social insurance programs, all over the world, seem to be in trouble. I will argue that some of these difficulties are linked to recent developments such as fiscal competition, declining credibility of the state, evolving labor markets, public opinion resisting redistributive policy, and increasing demand for protection. But first, let me clarify some conceptual issues and give some figures as to the evolution and the relative strength of social versus private insurance.

1. Preliminary remarks

1.1. The state, the market, and the family

The title of this lecture implies that the two institutions concerned with reducing the risks that individuals face are the state and the market. In so doing, we neglect the oldest and still important protection that is provided by the family. Historically, the responsibility for

providing security has rested with the family or rather with the extended family or the village. Risks such as disability, unemployment, retirement, or disease, which are today essentially born by social insurance programs, and those such as fire, street accidents, and sudden death, which are now born by private insurance companies were then accommodated at least partially by the family or by the employer. Then came the private insurance industry to bring fuller protection against some of these risks. Later, it was felt that the market was not providing appropriate coverage against some important risks, and as a result, governments became increasingly, indeed predominantly, involved in the provision of insurance.

Does that mean that the role of the family is now nil? Not really. Indeed, the family still plays an important insurance role that is widely studied and documented in the study of altruism, exhcange, and bargaining within the family. In some instances, it replaces the state or the market or its offsets their action; in other instances, it has rather a supplementary role (see Becker [1991]; Kotlikoff and Spivak [1981]). In countries that witness a retrenchment in social protection programs, there is an acute need for families protecting their members against risks such as the loss of earnings. Indeed, some governments tend to use family altruism as an alibi for cutting social protection spending.

1.2. The specificity of social insurance and social protection

What is specific in social insurance relative to private insurance? As observed by Tony Atkinson in his annual lecture, there is no easy answer to that question.[1] Is it the publicness of provision? Not really, as one can have social insurance benefits distributed to inidividuals by private organizations. This is the case in Belgium for health care. On the other hand, in many countries, such as France, there are a number of state-owned insurance companies involved in private insurance.[2] Is it the mode of financing? Even though social insurance is often associated with the functioning of the labor market and financed by payroll taxes, there are countries such as Denmark where it is exclusively financed by general revenue. We should add in this respect that the decline in regular salaried employment contributes to loosening the link between social insurance and the labor market.

The most specific feature of social insurance is undoubtedly that it is mandatory and universal. But as stated by Stiglitz [1983b], one often confuses "the question of whether individuals are to be insured with the question of who is to provide the insurance. The view that society must take measures to ensure that everyone is insured against certain major risks does not, in itself, imply that the government should directly provide that insurance." Yet compulsion is not enough to characterize social insurance.[3] In a number of countries, car insurance and fire insurance are compulsory, and yet one would not speak of social insurance. This leads us to an additional specificity: social insurance is not based exclusively on an actuarially sound basis but involves some redistribution. In othe words, social isnurance can be explained not only by a merit good kind of argument but also by equity considerations. This latter feature is a prerequisite for universal access.

Two remarks on this. First, even private insurance is quite often forced to effect some redistribution. For example, in life insurance, companies are not always allowed to distinguish insurees according to sex or occupation, and hence, they redistribute from men to women and from low-life-expectancy occupations to high-life-expectancy occupations. Second, the most extreme social insurance program as far as redistribution is concerned would be the proposal for a basic income scheme: a basic allowance would replace all social security transfers. As pointed out by Atkinson [1991], one should not speak of social insurance in that case. One could, however, speak of social protection without any attempt to mimic private insurance. In this paper, for reasons to be developed below, I shall advocate such an approach to income maintenance.[4]

In that respect, a distinction is often made between two approaches to social protection—the Bismarckian and the Beveridgean approaches. The first involves benefits linked to earnings and to contributions and is therefore in the spirit of insurance; the second implies flat-rate benefits and is very close to a pure redistributive scheme with a basic and uniform allowance that is awarded on the basis of specified contingencies (see Hills and Glennerster [1994], Barr [1993]). In this paper, I definitely align myself with this latter view.

1.3. Expenditure for insurance, private and public

When contrasting over time and across countries the expenditure on social insurance and on private insurance, one can make three remarks.[5] First, social insurance proxied by social protection dominates private insurance; it is almost five times as important. Second, in terms of trends, whereas social insurance seems to have reached a ceiling and even to have decreased in some countries (e.g., the Netherlands and Belgium), the role of private insurance has steadily increased everywhere.

Finally, looking at the cross-section presented in Table 1, one notes two main features: an income effect that implies that the richer the country the higher its expenditure on both types of insurance and a taste-specific effect according to which some countries such as Ireland, the United Kingdom, and the Netherlands have a more active private insurance market than the others. Conversely, the United Kingdom seems to have a relatively slimmer social protection than other countries with equivalent per capita income.

Table 1. Social protection and private insurance in Europe, 1989.

	Per Capita GDP	Private Insurance (% GDP)	Social Protection (% GDP)
Luxemburg	125.6	3.95%	25.2%
Germany	112.8	5.81	27.5
France	108.6	5.99	27.6
Denmark	108.2	4.45	29.8
United Kingdom	105.1	9.38	21.9
Italy	103.1	2.50	23.1
Netherlands	103.1	7.67	31.0
Belgium	102.6	4.06	26.7
Spain	77.8	3.22	20.1
Ireland	69.0	10.42	20.2
Portugal	55.7	3.09	16.6
Greece	52.6	1.40	20.7
EUR 12	100.0	5.56%	25.2%

Source. OECD.

2. Standard case for social insurance

2.1. *Market failures*[6]

Economists are in general interested by the failure of the market to provide adequate mechanisms allowing individuals to divest themselves of the risks they face and by the ensuing role of the state taking over some risk bearing. Quite interestingly, they are much more interested by this rather recent evolution than by the earlier one that led to the market progressively replacing the fmaily in providing insurance protection. The standard examples of market failure are social risks, moral hazard, and adverse selection.

Social risks are those risks that society as a whole faces together and that are not diversifiable. Two types of social risks come to mind. First, there are all these low-probability environmental or human-made hazards such as earthquakes, floods, and large-scale fires. Second, there are events such as wars or heavy recessions. With the first type of risks, individuals tend to have no interest in protecting themselves with insurance They rely on society to help them in the unlikely case of a disaster. This, in turn, tends to affect their decisions in particular as to location in hazard-prone areas (Kunreuther [1978]). We have here a typical case of moral hazard. With the second type of risks, one often considers that society does better than an insurance firm, particularly by engaging in risk sharing across generations. Long-term variations in public debt are often interpreted as a way of sharing the costs of wars or of heavy recessions between generations. It remains that most existing social insurance programs are not based on this argument of intergenerational risk taking. As to the first type of social risk, reinsurance oculd be the solution.

The *moral hazard* problem arises when the individual's incentives to avoid the insured-for event lower the more insurance is provided. One consequence of this incentive problem is that insurance companies are reluctant to write unlimited insurance. It explains in part the limitations of insurance provided by the private market and the resulting reliance on social insurance. Note, however, that the government faces the same tradeoffs between risk reduction and incentives as the market. On this ground, the family has a clear edge to the extent that members feels concerned as much by the welfare of the family as a whole as by their own welfare (see Arnott and Stiglitz [1991]).

The problem of *adverse selection* that confronts private insurance markets and leads to rely on social risk taking arises because the insuree knows more about the likelihood of the insured-for event occurring than the insurer. There is thus an incentive for the worst risks to sign up for insurance and for the best risks to self-insure. The state has an advantage over the market because it can make insurance compulsory. In so doing, the problem of adverse selection is avoided, but the insurance scheme is no longer actuarially fair: good risks pay for bad risks. It remains that making participation mandatory would suffice to solve the problem of adverse selections in private insurance markets.

The administration of privately managed health or retirement insurance is often considered as costly (see Diamond [1992, 1993a, 1993b]). It is, for example, estimated that in the United States, 12 percent of the revenue of the health insurance industry goes for administrative expenses. This is not far from costs observed in privately managed pension systems. Moreover, this percentage is widely variable across different types of organization of insurance and is much higher for individual policies than for group policies. In any case, it compares unfavorably with administrative costs in well-run unified government managed systems.[7] This argument pertains to *increasing returns to scale in transactions*, and it is often used in favor of social insurance.

Nobody will deny that these problems—social risks, moral hazard, adverse selection, and to a lesser extent increasing returns—are serious imperfections of private insurance markets. The debate is whether or not public provision will be an improvement. Some economists would argue that there are cases where social insurance is inferior to even poorly functioning private insurance arrangements; these are cases where "nonmarket failures" arising from public provision of insurance are more severe than the private market failures it is alleged to address. Leonard and Zeckhauser [1983: 150] argue, for example, that "moral hazard may be a more significant problem for publicly provided insurance because there is less financial incentive for the government to structure its insurance contracts efficiently" (see also Stiglitz [1983b]).

To sum up, the problems of moral hazard, adverse selection, and social risks don't really make convincing cases for social insurance. As to the increasing returns argument, it mainly applies to health and old age insurance.

2.2. *Social insurance as a redistributive device*

There is a second type of rationale for social insurance that is also often questioned—namely, the objective or redistribution. In an ideal world, what we economists call a first-best redistribution ought to be achieved through nondistortionary income taxation that would include transfers to the needy. Indeed, such redistributive taxation has been presented as a sort of insurance that individuals would contract when they put themselves behind the veil of ignorance—that is, before they know anything about their ability, their health status, and other characteristics (Varian [1980]). Then why use social insurance programs to also achieve such redistributive goals and not rely on income taxation? The answer lies in the fact that we don't live in a first-best but in a second-best world where the government pursues its redistributive tax policy with little information as to the individuals' characteristics. In such a world, one can show that providing private goods including insurance benefits to everyone regardless of what they have contributed can be desirable. This argument has been particularly developed for education, pensions, and health insurance (see Boadway and Marchand [1993], Cremer and Gahvari [1993]).

When talking about redistribution and social assistance, it is worth noting that some programs have targeted neither the poor nor the vulnerable but instead what one might call the losers. Powerful groups in some countries, developing and developed ones, have demanded and received unemployment benefits and severance compensations as the price for agreeing to economic reforms. Those people are not usually the most needy in society.[8] Yet this political voice is louder than that of the truly poor, and governments have often not been able to resist using such programs to gain political support (Fields and Mitchell [1993]). The argument of redistribution as social insurance can be fostered by an argument of altruistic externality. This latter argument is particularly used to justify the norm of universal access to health care.[9] It applies less to other types of social protection programs.

When social insurance is mainly conceived of as an instrument of redistribution—insuring people against poverty rather than against specific events such as unemployment or disability—the typical insuree is no longer a "worker" but a "citizen." This raises the issue of entitlement. In a world of increased integration and cheap mobility, there is a natural trend to develop rules of exclusion. Witness the creation of a "fortress Europe" that imposes barriers on East Europeans and Africans seeking entry to European Community member states and access to employment and social protection (Brown and Crompton [1994]).

3. New arguments for and against social insurance

3.1. Increasing demand and evolving labor market

To begin, let us mention two rather recent developments that affect the balance between private and public insurance; they pertain to increasing demand for social protection and to the changing condition of the labor market. In spite of political and financial pressure for limiting the social insurance budget, there are factors that contribute to more and more public intervention in the field of social protection. Population aging and structural unemployment are clearly two problems in today's economics that call for increasing and not decreasing the scope of social insurance. For example, to keep pension benefit levels from public schemes constant in the European Union, the contribution rates would have to grow from 18.2 to 26 by 2040. To put it another way, if (for reasons to be considered below) contribution rates cannot increase, pension benefits would have to be reduced by over 40 percent (Besseling and Zeeuw [1993]).

At the same time, changing conditions in the labor market may affect the functioning of social insurance. As forcefully shown by Atkinson [1991], social insurance (at least as far as unemployment and retirement are concerned) is historically linked to the labor market. Its development has to be founded not so much in the failure of private insurance markets as in the need for improving the functioning of the industrial labor market. Good theoretical arguments can be presented to show that such an approach is well founded. One clear implication of such a view of social insurance is that it is financed by payroll taxes paid by either employees or employers or both. This raises a serious problem. The share of individuals benefiting from regular steady employment is both declining and pretty small in a large number of countries. Put another way, there are more and more inactive people, unemployed workers, and workers with self-employment or with temporary jobs and fewer and fewer salaried workers with steady employment.

In Europe, employment as a percentage of working age is around 60 percent. In Belgium, this ratio was 53 percent in 1989. Out of these 53 percent, there were 10 percent of nonsalaried workers and 7 percent of salaried workers holding temporary or part-time jobs. This means that only 36 percent of the working age population holds a steady salaried employment (Grubb and Wells [1993]).

3.2. Payroll taxation, fiscal competition, and social dumping

In the traditional view of social insurance, most revenue comes from payroll taxes—that is, a wage-based levy that increases labor cost. In a closed economy setting, this does not

raise any difficulty. However, in an open economy particularly in a setting of increased economic integration and competition, there is pressure on firms to lower their production costs; they will plea for limiting or even decreasing the social insurance budget. This phenomenon leads to what has been labeled "social dumping" and results from fiscal competition. It occurs even when there is low labor mobility across countries. In a world without cooperation, each country competes for lower production costs and aims at ever decreasing payroll tax rates.

Two remarks on this. First, in countries where there is no direct link between the benefit and the revenue side and where social insurance is financed by general (income and consumption) taxation, pressures for limiting social insurance are as real if not as direct. Second, in countries where the link between the benefit side and the revenue side is tight, one could wonder why the agent can't see through the veil of social insurance that higher taxes imply higher benefits. After all, when an individual pays his car insurance premium, he does not see it as a levy but as a fair price for a particular service. This difference of perception between a payroll tax and an insurance premium is an important factor in the choice between one or another from of insurance.

When migration is allowed, the advantage of private over social insurance increases further. As Sinn [1990: p. 502] put its, discussing European integration with increasing mobility and no cooperation among governments, this would lead to "the death of the insurance state." He goes on: "Any country that tries to establish an insurance state would be driven to bankruptcy because it would face emigration of the lucky who are supposed to give and immigration of the unlucky who are supposed to receive. Voting with one's feet would only work if it could be limited to the young and if the middle-aged managers and successful entrepreneurs could be prevented from migrating, a rather awkward idea. A Europe with competing tax systems and unrestricted migration would be like an insurance market where the customers can select their company and pay the premium after they know whether or not a loss has occurred."

The perverse effect of governments competing for a tax base was first underlined by George Stigler [1965] in an often quoted paper on the limits of local government. One can indeed view European governments as local governments lacking a central (supranational) authority. Stigler [1965: p. 172] also noted that the current organization of local governments would make it impossible for any of them "to obtain money from the rich to pay for the education of the children of the poor, except to the extent that the rich voluntarily assumed this burden."

There is another effect of economic integration that is closely related to the working of the private insurance market. In an open economy, it is increasingly difficult for government to impose regulations on private insurers that can be redistributive.[10] Let me give an example. It is likely that the legal impossibility to discriminate against individuals according to their risk class in private health insurance is desirable from a social welfare viewpoint. Such regulation will not be implementable as soon as "healthy" people realize that they can do better by buying some cheaper insurance policy in a neighboring country. When this happens, the government has to use other and less efficient redistributive tools.

3.3. Credibility and commitment

Governments and parents have in common the problem of commitment—that is, to bind themselves to courses of action they know desirable. For the children's own good parents

want to induce them to be responsible and hence to restrict their protection to unavoidable risks. Yet those children that Gary Becker labels rotten have little incentive to be responsible because they know that their parents will be tempted to forgive. Governments, particularly when they are responsive to citizen's concerns, are under constant pressure to move away from policies that are optimal in the long run. Two illustrations of this difficulty of commitment are public pensions schemes in some European countries and the federal insurance of savings and loan institutions in the United States.

The crisis in the U.S. savings and loan industry is symptomatic of problems in many government insurance and guarantee programs. These problems involve moral hazard, if not fraud, and arise in both government and private sectors. However, they tend to be less severe in the latter because private corporations cannot sustain huge losses without going bankrupt, and they cannot rely on the taxpayers to pay for their financial ineptitude. The money-making objective of private companies is quite different from the objectives of a government agency. A private company would have no trouble deciding to terminate a program involving substantial losses even if the program's purpose is to protect the life savings of small depositors. Long-term contracts among private agents are an important source of efficiency of markets. State sovereignty makes such contracts unenforceable among successive governments.

In a related area, private life insurance companies will always handle retirement on a purely actuarial basis even if this implies providing meager benefits. A social security agency will have a terrible time resisting popular pressure if the otherwise optimal pension scheme it adopted generates at one point pension benefits that are deemed too low. Note that health insurance raises similar problems. With aging and technology, the demand for health care is skyrocketing, and even though some sort of priority setting cannot be avoided, it is difficult for public programs to do it in the open, which is the only decent way. But health care is a particular case in social insurance.

3.4. Health insurance: a particular case

Most social insurance programs consist of cash income transfers. Beneficiaries can use them the way they want, and they have an income effect only on the rest of the economy. There is, however, an exception to this general rule—health insurance. With health insurance there is an additional issue coming from the supply side. Social or private insurance institutions attempt to affect the delivery of medical care by negotiating over price and by setting rules for what medical services are covered by insurance. Further, in this field of social insurance, adverse selection problems and administrative costs make it desirable to handle very large groups and offer them standardized services. As Diamond [1992: p. 1235] puts it, "This is may be an area where the tradeoff between diversity and transaction costs looks very different from that with most consumer goods. We don't want our employers selecting our food, clothing, or books. But there does not seem to be much objection to their narrowing down the arrays of alternative health insurance policies to a small menu or a single policy."

Casual observation—comparison of health care in the United States and in the United Kingdom—shows that the nature and the structure of health care depends on whether or not it is public. A number of health economists are concerned that keeping the health insurance market as universally accessible as possible is important from both equity and efficiency viewpoints. They claim that opening even a small breach to the private market could lead to an inefficient and possibly inequitable system.

Health insurance has another specificity: assuming that the main pillar is public, a supplementary private scheme can have perverse effects. Public health insurance generally includes deductibles to reduce moral hazard. If private insurers are allowed to offer insurance for the deductibles (as is done in France), a high level of moral hazard is reintroduced in the public program to the benefit of private insurers.

4. Implications and conclusion

Let me summarize the main points that have been made here. Table 2 sketches the case for government intervention versus market control in the field of insurance. First, one must realize that the public sector is subject to many of the same incentives problems that lead to private insurance market failures. Second, on the revenue side, fiscal competition and economic integration make it increasingly more difficult to maintain "generous" social protection programs regardless of their objective—insurance or assistance. Third, the recent evolution of employment conditions leads to a widening gap between social protection programs and labor markets. Fourth, recent economic and demographic developments call for increased public interventions in the area of redistributive income maintenance.

The lesson one can draw from these facts is straightforward. It is not sure that social insurance or rather social protection can pursue their two traditional objectives—insurance and assistance. For some time and still in some countries, such a duality of objectives hasn't raised any difficulty. Today, in a number of countries, providing insurance and at the same time taking care of the needy are unaffordable. Furthermore, these objectives may interact inefficiently. On the one hand, redistribution is often used as a veil behind which allocative and even distributional disfunctionings occur; on the other hand, sticking too closely to the insurance principle or, to put it differently, to the Bismarkian idea of social insurance makes true redistribution impossible.

It has been shown that keeping the Bismarkian principle unchanged for the basic pension system in France or in Belgium in a setting of demographic aging and of pay-as-you-go financing would rapidly lead to pockets of poverty among the elderly (see Delhausse, Perelman, and Pestieau [1993]). Henceforth, one should think of reshaping social protection in the direction of uniform transfers to all current beneficiaries of its various components. If this transfer were fixed at a decent level, the cost for public finance would already

Table 2. Comparative advantage of social over private insurance.

Large risk	Nil when reinsurance is possible
Intergenerational smoothing	High
Moral hazard	Negative
Adverse selection	Nil if insurance is made mandatory
Administrative costs	Noticeable particularly in the field of health care
Redistribution	High
Financing	Negative because of tax competition and social dumping
Commitment	Negative
Single provision	High in the field of health care

be high, possibly higher than the current one. Individuals with middle or high income could supplement these transfers by private insurance programs (presumably without tax advantages).

Health insurance would also have this feature of universal access to a basic policy that would be collectively decided. The Clinton administration and others in the United States suggest combining universal access and competition among insurers and providers. The entire population would be divided into many large groups. Within each group, optimal social insurance principles could be applied; private insurance companies would compete for these groups. Financing would be by a combination of taxes and out-of-pocket payments for premiums; there would be some redistribution across groups. Within a group, selected insurance companies would also have the opportunity to offer supplementary policies to provide additional coverage for those who can afford it. There would be no connection between health insurance and employment.

I do believe that social protection should progressively abandon its insurance mission and focus on uniformity in benefits; financing should come from general revenue and be totally disconnected from the labor market.[11] Private insurance would be allowed to provide additional coverage for those who find the basic policy insufficient and can afford to supplement it.[12] Such a proposal is quite consistent with the Geneva Association's three-pillar approach that is here extended to all traditional areas of social protection. It is however at odds with the opinion of Europeans.

In a recent survey, Europeans were asked to choose between two options—a minimalist one suggesting the prospect of only basic social guarantees and increased individual initiatives and a maximalist one calling for a continuous involvement of the state in a broad range of social security benefits even at the cost of increased taxes and benefits. The respondents' choices are reported in Table 3. Within the EC as a whole the maximalist

Table 3. A minimalist or a maximalist approach to social protection?

	Support for Minimalism[a] (in %)	Support for Maximalism[b] (in %)
Belgium	46	63
Denmark	54	58
Germany	27	59
Greece	37	76
Spain	47	71
France	41	65
Ireland	47	66
Italy	47	58
Luxemburg	27	66
Netherlands	50	53
Portugal	45	82
United Kingdom	44	79
EUR 12	41	65

a. Exact item: "The government should provide everyone with only a limited number of essential benefits and encourage people to provide for themselves in other respects."

b. Exact item: "The government must continue to provide everyong with a broad range of social security benefits even if it means increasing taxes and contributions."

Source: Ferrera [1993: p. 5].

option is more widely supported than the first: 65 percent versus 41 percent. This would indicate that the status quo enjoys high public appreciation. By way of contrast, in the same survey a majority Europeans expressed a preference for lighter taxes and contributions. Such a schizophrenic attitude is not all surprising. People want more social protection without being willing to undertake further tax efforts to achieve it. Yet here as elsewhere, you can't have your cake and eat it too.

To conclude, I do believe that the alternative facing social protection is not between a maximalist and a minimalist option, the former being financially infeasible. The real alternative is between guaranteeing to the unemployed, the old, the sick, the disabled, and the poor a uniform but sufficient amount of benefits and keeping the current system subject to a continuous erosion that will very likely lead to increasing pockets of poverty.

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Notes

1. Quite interestingly, Diamond [1993b] restricts the meaning of social insurance to retirement insurance and sees two main reasons for government intervention—myopia of people contemplating a distant retirement and the need of redistribution towards the current old. See also Kessle [1989].
2. Note that efficiency comparisons indicate that there is not much difference between public, nonprofit, and private insurance companies. See Pestieau and Tulkens [1993].
3. Atkinson [1991] also considers as an essential element of social insurance the absence of a test of means.
4. This view is shared by others. See, e.g., Snower [1994], who argues in favor of redirecting social protection from the middle class to the poor, the infirm, and the disadvantaged.
5. These figures yield quite a rough approximation of the reality of social insurance versus private insurance. At the micro level, one could use expenditure surveys. For example, in the United Kingdom in 1992, households devoted on average 4.4 percent to national insurance contributions and 6.9 percent to life insurance, pension funds, sickness, and accident insurance.
6. For an excellent survey of these, see Eeckhoudt [1993].
7. Diamond [1993a, 1993b] reports that the U.S. Social Security Administration has administrative costs that are less than 1 percent of annual benefits, whereas the life insurance industry has costs running 12 to 13 percent of benefits.
8. One might think of agricultural programs in the European Union.
9. See, e.g., Evans [1984], who uses it to explain the actual health care institutions and the cross-subsidies observed in Canada. Boyer and Dionne [1987] use a similar argument to justify universal compensation for financial loss due to bodily injuries in car accidents regardless of whether or not the victim is at fault.
10. See Rochet [1991], who proves that such regulation may indeed be welfare enhancing.
11. Note that this scheme is very different from known proposals for a basic income or for a negative income tax. In the latter, the benefits are both universal and uniform; in our scheme, the benefits are uniform but awarded on the basis of specified contingencies and not on an income test.
12. In the case of health insurance, one must be cautious in introducing such supplementary insurance.

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