Uninsurability: a Growing Problem

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1. Introduction

Political calls for an increased role for market forces and greater individual responsibility coincide with a growing demand in society for greater security to safeguard existing levels of prosperity. These tensions are rising to the surface, not only with respect to insuring against natural disasters but also with regard to the privatisation of parts of the social security system. A new balance is needed in the demarcation of individual and collective responsibilities.

The discussion about the insurability or otherwise of a number of important social risks has intensified markedly in recent years. The issues include natural disasters (whether or not assisted by human intervention), high-tech products and production processes, the growing willingness to submit claims ('moral hazard' and rationally calculating policy holders), the increase in circumstances conducive to crime and in criminal behaviour, but also in political regulation (such as the introduction of risk liability, extending recourse under the heading of social security or environmental liability, sometimes with retroactive force, or the changing case law). This discussion is also raging in the political arena, especially with regard to the affordability of social security in the welfare state. In this context, practically everyone (albeit for different reasons and with different proposals) is calling for some form of privatisation of components of the social security system.

There is clearly a tension here. The government plans expansion of the private insurance sector, while the insurers are considering withdrawing from some areas of activity unless the government comes to their assistance. This theme as discussed by Corby is well

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worth reading.² He sketches the growing contradiction between on the one hand political calls for a greater role for market forces in socio-economic relations (and therefore greater individual responsibility and more risks!) and, on the other hand, the evolving cultural attitude to demand greater security, due to the far-reaching changes and level of welfare in modern society. This tension thus intensifies the discussion about (un)insurability. Can this tension be resolved? Is it possible to find «the philosophers' stone» for this problem, in other words an efficient and therefore affordable and socially acceptable insurance system? Or is it simply a vain attempt to square the circle?

The purpose of this article is to look more closely at the problem of (un)insurability. I will first discuss insurability restrictions of an actuarial nature which are generally adopted in the insurance industry. I will then look at restrictions of a socio-political nature which influence (un)insurability, using as an illustration the example of private health insurance. Finally, I will attempt to draw a few conclusions.

2. Technical restrictions on insurability

In his book on limits of the insurability of risks - highly recommended to anyone interested in the subject - Berliner, well-known non-life actuary with the Swiss Re, discusses nine criteria by which insurance firms can determine whether they will in principle offer to cover a particular risk.³ This is a question of insurability in the subjective sense. Whether a particular insurer is actually prepared to offer cover will further depend on the individual company's own characteristics, appraisals and standards. It is also important to note that Berliner in his approach deals exclusively with (un)insurability for the purposes of private insurance.

The criteria cited by Berliner are:

1. Is the possibility of loss sufficiently stochastic to be viewed as a normal stochastic variable (which can be determined empirically, and with sufficient historical stability of the underlying probability distribution)?
2. What is the maximum possible claim or loss?
3. What is the estimated average loss per event with this type of risk?
4. How long is the average period between the occurrence of two possible successive losses?
5. How high should the insurance premium be and how should it be constructed (both the so-called risk premium and the other loadings) and can the size of the premium be determined?
6. What is the possible influence of 'moral hazard' factors?
7. Which limitations are imposed by government policy?
8. What other legal restrictions are there?
9. What are the a priori (maximum) coverage limits for the policies concerned?

² B. Corby. On Risk and Uncertainty in Modern Society. The Geneva Papers on Risk and Insurance, vol. 19, no. 72. July 1994, pp. 235-243.

³ B. Berliner. Limits of insurability of risks. Englewood Cliffs. 1982.

The following remarks can be made about Berliner's nine criteria. The first four criteria are primarily concerned with actuarial issues. The individual insurer's technical knowledge will be paramount in giving the correct answer. In addition, there are also published figures on the internal insurance industry exchanges data.

Criteria 5 and 9 (the last of which I feel is in fact too much of a rest variable) are primarily of an insurance economic and legal nature. Here also, the individual company's knowledge and the combined 'conventional wisdom' of the industry will have a dominant influence on the answers given in the assessment of specific types of risk.

Criteria 7 and 8 are characterised by a socio-political bearing, sometimes with a statutory foundation. I will discuss these in the next section.

Criterion 6 ('moral hazard') relates primarily to the inter relationship between the insurer and the policy holder.⁴ The phenomenon of induced risk behaviour is of course a crucial factor. Familiar examples of this are: less cautious behaviour after the policy has been taken out, making unnecessary, or even dishonest, claims. These behavioural changes may be conscious or unconscious; the behaviour may take legal, but also more fraudulent forms. In such cases, therefore, the size of the risk increases after the policy has been taken out.

The phenomenon of 'moral hazard' is inextricably tied up with that of insurance itself. It is linked to asymmetry in the information available to the two sides of an insurance contract.⁵ Not only to possible differences in historical knowledge about present and past facts, but also possible differences in 'advance knowledge' about future probabilities. This has everything to do with linked to the respective assessments of the risk, and therefore with the risk selection which forms the basis (on both sides) of every insurance contract. The more knowledge the insured party and the insurer acquire about the relevant probability distribution (and so specifically of the differentiation of their components), the greater the possibility of an asymmetrical spread of information, and consequently also the likelihood of uninsurability (either because the insurer demands a higher premium on the grounds of the extra risks, or via the probability of the insurer excluding risks, or because the insured party no longer desires to cover the risk). Such developments in the degree of knowledge, and the phenomenon of risk differentiation that generally accompanies it, can in turn increasingly lead to calls for government intervention.

⁴ The term 'moral hazard' expresses the notion that the individual's knowledge that he is insured may - consciously or unconsciously - lead to a change in his behaviour in practice. This may take fraudulent forms, but it can also take the form of 'sloppiness' or less effort to take preventive action. See also the description by Arnott and Stiglitz. «It is now widely recognized that the phenomenon of moral hazard, which arises whenever risk-averse individuals obtain insurance and their accident avoidance activities cannot be perfectly monitored, is pervasive in the economy'. R. Arnott and J. Stiglitz. *The welfare economics of moral hazard* in: H. Louberge (ed.) *Risk information and insurance. Essays in the memory of Karl H. Borch*, Boston/Dordrecht/London, 1990, pp. 91-121 (quoted on page 91).

⁵ The phenomena 'moral hazard' and 'adverse selection', which both arise from the information problem, in themselves undermine the familiar Pareto optimality of the results of a traditional market with pure competition. To redress this, the introduction of reinsurers is required, among other things! It also goes hand in hand with the recommendation that all policy holders should bear some part of the risk themselves.

In fact, not all types of risk or forms of insurance are susceptible to the ills of 'moral hazard'. There are, after all, types of risk (usually natural risks) which arise independently of (direct) human action. There are also risks which, although linked to human intervention, nobody has an interest in encouraging. In so far as the 'moral hazard' risk can play a prominent role, however, it substantially reduces the degree of insurability unless its occurrence can be discouraged by the specification of the insurance contract (for instance through deductibles or claim thresholds, etc.)

The nine criteria are all of equal importance for an insurer in reaching a judgement about whether a given risk can be regarded as insurable in the given S.T.E.T. constellation. But as I have already mentioned, a positive assessment on all criteria does not necessarily mean that a policy will actually be offered. After all, socio-political factors and general economic considerations also play a role in that decision.

3. Socio-political factors

It is evident that government action has a considerable influence on (un)insurability. Obviously macroeconomics has an influence on the insurance industry (actually it is more an interplay). For instance, interest rate levels and inflation rates and changes in them will have a powerful effect on insurance conditions (and therefore also on insurability). Chaotic macroeconomic conditions create instability on the insurance market. To put it more positively: stable economic development is a good basis for insurability. In fact, the opposite is also true; a growing economy requires an adequate degree of insurability.⁶

At this point, I would like to draw attention to the influence of socio-political forces, and the degree to which they are converted into political gain (= regulation), on (un)insurability. On the one hand, this involves a form of social control of insurers, and on the other mandatory or prohibitive legislation or other instruments of government policy (financial incentives, covenants, persuasion, etc.). A concrete example of social control is the moratorium on genetic research or the policy on acceptance by insurers of candidates with HIV. This in fact has a dual effect on insurability. In the short term it increases the insurability of certain groups; at the same time, it calls into question the degree of insurability in the longer term.

More generally, government action rests on ethical, social or political desirability. For example, the judgement that justice demands that every citizen must be able to insure himself against certain risks, the desirability of protecting third parties against the actions or negligence of others, incomes policy considerations, the right to equal treatment or the wish to curb immoral practices (the ban on insuring against kidnapping in Italy).

These socio-political motives can lead to direct intervention in the market for private insurance. Illustrations of this are: compulsory acceptance, the prohibition of certain policy conditions or the compulsory stipulation of certain policy conditions (packages), the mandatory provision of certain types of (minimum) insurance, the intervention in insurance premiums (in the sense of setting minima and maxima; the equalisation of premiums for

⁶ See R.C.L. Bakker, *De macro-economische betekenis van verzekeren* (The macro-economic significance of insurance), in *'De Wit-bundel. Heterogeniteit in verzekering* (Heterogeneity in insurance). Rotterdam/Amsterdam, 1994, pp. 323-350.

different risk groups), the prohibition of, or even obligatory 'pooling' of claims, the prohibition of certain types of ex ante or ex post selection or the prohibition of forms of exclusion clause, the prohibition or prescription of elements of deductibles, etc.

The picture painted above betrays a wide degree of variability. Precisely because the political regulation appeals to the well-understood self-interest of - usually - large (or deprived) social groups, such interventionist government policy has a strong social basis. Obviously insurers usually feel differently about the desirability of such intervention, especially when such intervention is given more or less retroactive force through legislation or case law.

There are also economic - theoretical - objections to government instruments which intervene directly in market processes (the situation is somewhat different when the purpose is to influence the framework for ordering the market). The government must therefore always ask itself the following questions when considering such plans: (a) what side-effects will they have on the insurance market by causing adjustments in the behaviour of both insurers and policy holders? and (b) will the desired objectives actually be achieved in this way (both the effectiveness and the efficiency of the policy)? Particularly important in this context is the question of whether insurability will not in fact be reduced in practice. After all, intervention may cause the suppliers of certainty to withdraw. This may be due to an increase in uninsurability, but may also be because those insurers regard the commercial prospects as insufficient, due to unequal of competition or otherwise.

Questions of this nature expressly arise in the issue of the privatisation of social security. After all, in this case the government is not only seeking greater market efficiency. Usually, the desire to reduce (especially statistically?) the collective tax burden is at least as strong a political motivation. Socio-political motives with respect to insurability which is affordable to every citizen also play a significant role. In practice, this generally means the establishment of specific limits to the level of premiums for certain 'vulnerable' groups (the elderly, invalids, low income groups). In fact, the government attempts to build substantial forms of income solidarity into the system of private insurance.

Although it cannot be considered out in advance as a priori impossible (or in conflict with the working of market forces), the feasibility of such hybrid forms must be carefully analysed on a case-by-case basis. In the slightly longer term especially, both competition and shifting exogenous variables (the ageing of the population, for instance) cause a degree of instability in such markets. Supplementary pensions in the Netherlands are a good historical example of an instance when a substantial degree of income solidarity was secured, to the extent that this risk coverage is arranged within company or industry-wide pension funds. This was made possible by the formation of compulsory (under private or public law) collectives with only very limited possibilities for opting out. It would have been far more difficult without this 'compulsory' basis.

4. Case study: health insurance

The difficulty of the problem can be illustrated by developments in the health insurance sector in the Netherlands. This is a reasonably 'normal' sector (there are no factors such as nuclear risks, danger of flooding or risk of earthquakes), with a high social content due to the public/private duality. In view of the social importance that citizens with limited

means should also be able (and will) to adequately cover themselves against the risks of medical costs, the Netherlands opted for a system involving partly social security, namely through the AWBZ (the General Act on Exceptional Medical Expenses) and the public health insurance funds, and otherwise for the market mechanisms through the private health care insurers.⁷

Many changes have been introduced in this sector since the early eighties.⁸ The following are some examples. Insurance for the elderly and the voluntary insurance through the public health insurance funds for, among others, the self-employed with a low income, were abolished due to the financial deficits that had to be borne by employees within the compulsory public health insurance scheme (those employees with an income below the wage limit for compulsory insurance). This led to the construction of the standard policy or standard package policy (a defined package at a maximum but loss-making premium plus compulsory underwriting for private insurers), whereby the 'excess claims' were recovered from the ordinary privately insured policy holders through a pooling system (via the WTZ pooling contribution). This group also had to pay an extra so-called MOOZ contribution as a solidarity contribution to the public health insurance funds since they also had to accept some of the elderly and those formerly voluntarily insured with the public health insurance funds.⁹ Because of the differences in terms of ageing in the portfolios of the private insurers (which is detrimental in a global system involving an average premium with high claims from people over 65), there was a proposal to introduce a further balancing mechanism between the private insurers (through the ILPZ), but this did not happen because of the difficulties of implementing it. For some time, however, private insurers had been obliged by the Insurance Supervisory Authority to form a fixed provision as extra cover against ageing of the portfolio. This latter obligation related to the intense competition which led to substantial differences in premiums for new policy holders based on age. (The background to this is that the insurer may not cancel the policy and the periodic increases in premiums in this sector may in principle only cover the average cost increases and therefore not the costs of the extra claims due to ageing among policy holders). Efforts to curb competition between private insurers - and their hunt for healthy young people! - by establishing a premium bandwidth failed, despite the forms of self-regulation which still prevailed in the Netherlands at the time but which were later banned at the instigation of the competition policy makers in Brussels.

In subsequent years, socio-political motives led to new groups, such as pensioners, people paying in excess of the standard premium, and students, being allowed to take up the cheap (loss-making) standard package policies. The pooling of losses was first extended, and later again subjected to certain restrictions. Further changes were introduced by parliament based on the aspirations in the so-called Simons Plan (a programme of health care reform named after the then Under Secretary of Health), which had substantial

⁷ There is also the separate group of statutory health care insurance schemes for various groups of public servants.

⁸ C.f., J.C.M. Remmerswaal. *Solidariteit en zorgverzekeringen* (Solidarity and Health insurance) in *De Wit-bundel*, op. cit., pp. 543-55.

⁹ The MOOZ contribution is in fact not levied on participants in statutory health insurance schemes, although they include a smaller share of the over-65s. See J.C.M. Remmerswaal, op.cit. p. 546.

consequences for the health insurance sector. However, implementation of the Simons Plan seems to have been discarded in the meantime. Further changes are being introduced but with no sign of any clear direction. An example of this is the Van Otterloo bill, which would allow elderly people with a low earned income (but sometimes substantial assets and capital income!) to join the public health insurance fund cheaply. This again leads to the passing on of losses via pooling.

The system of health insurance as it exists today actually satisfies nobody. Transparency in the financial flows is lacking to a large extent. The market mechanism has been obscured in part by the subsidised components. Furthermore, the former division between public patients and private policy holders has remained, and individuals are fairly often classified in the 'wrong' group. The scale of the extra solidarity charges levied on the ordinary privately insured individual has become so large in relative terms that they threaten to undermine market forces. This is in part due to the fact that theoretically desirable actuarial premium systems can scarcely come into their own in a private insurance market which is internally so unstable and which furthermore is regularly shaken by new regulation. Political regulation, moreover, which lacks both internal consistency and historical continuity (for example through the implementation of a Master Plan). Regulation which furthermore - usually - unintentionally provokes evasive behaviour in an internally unstable market constellation.

Looking at the health care sector in the Netherlands with a certain distant objectivity, and bearing in mind the continuing ageing of the population and cost inflationary medical technology, it is legitimate to ask whether insurability is not going to be a serious social problem in the years after 2000.

5. Conclusion

The above illustrates the considerable influence government policy can have on the possibilities and the results of the private insurance market. It is crucial in this respect that the government takes note of the potentially negative impact of its measures on the efficiency and stability of the market mechanisms. The idea that a compensatory competition policy will in fact ensure efficient price S.T.E.T. forming is a dangerous one.

It would be more useful if the government and insurance sector were to look for solutions to the identified growth in uninsurability in both the public and the private domain, encompassing also the limitations based on demographics and international developments through open consultation.

In the allocation of insurance risks to the private market the government must take account of the fact that a number of essential conditions have to be met. Imposing restrictions on products or premiums without compensation should be avoided as far as possible on penalty of distorting the private market and creating some type of hybrid, which will ultimately be unable to function either effectively or efficiently.

In the case of privatisation of social security and explicit restrictions on the private market in order to compel a sufficient degree of social insurability, the government must create sufficient scope to enable private insurers either to independently generate sufficiently large collectives (needed to set average-type premiums at the level felt to be neces-

sary to effect the sought after income solidarity) or through self-regulation to find solutions in terms of, for instance, premium bandwidth, pooling or similar corrective mechanisms. Further consideration is also needed regarding the question of whether Brussels' current competition policy does not unnecessarily frustrate such a form of self-regulation. It would seem a logical idea to analyse the effectiveness of Berliner's nine criteria from the perspective of testable self-regulation for once. I feel there is a real chance that the government and insurance industry can reach some arrangement on privatisation of social security which incorporates a carefully planned mix of socio-political wishes and objective insurance principles.

This brings me to the first recommendation with which I wish to conclude this article, and that is a plea for a new balance to be struck between competition and testable self-regulation in the industry.

The second recommendation would be a plea for an insurance system with both public and private elements, and, moreover, with sufficient flexibility to accommodate to good (economic) and bad times. The presently existing Dutch pension system based on the three pillars (panels) seems to be an excellent specimen of such a system.¹⁰ The idea (put forward by the CNV labour union) of a minimum basic insurance for everyone, with supplementary coverage through various forms of collectives (on the basis of, for most part, mandatory law) and finally, entirely voluntary supplementary coverage on an individual basis for everyone, could be incorporated here.

¹⁰ The well known Swedish economist A. Lindbeck comes to a similar conclusion in: "Uncertainty under the Welfare State - Policy-Induced Risk". 14th Annual Lecture of the Geneva Association, Geneva Papers on Risk and Insurance, vol. 19, no.73, October 1994, pp. 379-393.