The Private Compulsory Long-Term Care Insurance Economy in Germany: Ways and Limits of the Integration of the Private Health Insurance Sector Into the Statutory Social Security Insurance Scheme

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1. Introduction

After almost three decades of reform endeavours, the German public health care in general and in particular the statutory health insurance scheme (GKV) is still an integral part of scientific and political discussion. While at the beginning of the 1970s a transformation from an expense-oriented revenue policy towards a revenue-oriented expense policy in the GKV had taken place, which led to the circumstance that the containment of costs on the expense level was chiefly the focus of interest until the middle of the 1990s, larger emphasis has been laid on the revenue side, the financing systems and incentive structures in the public health care since then. One reason for this shift of emphasis probably was the relative ineffectualness of the repeated legal interference in the spending side of the GKV. In the last 25 years, the reaction to the increasing expenditures and premiums has been a policy of containing costs enacted by more than 200 acts. However, all this has proved futile concerning the long-term upward trend of absolute spending. The reform proposals under current discussion range from a stepwise further development of existing regulation structures to radical breaches in the system as for example the replacement of the pay-as-you-go principle by the funded system or the abolition of particular social security sectors. Among the aims one hopes to achieve by the realization of single reform proposals are the reduction of indirect labour costs, the improvement of efficiency, aiming accuracy and interpersonal as well as intergenerative distributional justice in the social health care, the tendency towards the subsidiary principle and the principle of efficiency, the utmost freedom of action and choice for the individual and last but not least the coping with the predictable demographic development (superannuation of the population).

In this paper one particular reform option is under closer examination, i. e. the intensified integration of the private health insurance sector into the compulsory system of the statutory social health care. The actual realization of such an integration then must in any case allow for
the principle of solidarity. In particular this means that on the one hand in the case of sickness a sufficient medical supply for the individual has to be secured regardless of his personal financial power (personal level of income) and that on the other hand certain processes of redistribution, which must be oriented to certain characteristics of the members, have to take place. Moreover, the health hazard is a general life risk, and most health benefits have to be regarded as indispensable commodities. Thus in many cases individual private health provision is not sufficient to grant an adequate supply with health benefits. As a consequence, the adoption of certain parts of the social health insurance by the private health insurance economy (PKV) requires for the private health insurers the establishment of a basic coverage with a standardized social security package, the obligation to contract as well as an adequate maximum premium limit. As for the individual, this adoption requires an obligation to insure. Yet, already these minimum requirements lead to an annulment of the characteristics of the private insurance sector: freedom of contract, freedom in range of benefits, risk-adjusted premiums and the funded system.

As to the field of covering the risk of nursing costs, the private health insurance economy has already been included into the statutory social security insurance scheme through the establishment of the private compulsory long-term care insurance (PPV) for a certain part of the population. With the help of this example, the implications of such an adjustment of the private insurance sector to the statutory social security will be illustrated in the following with regard to the design of the insurance contract and the calculation of premiums, which were hinted at above. Since January 1st, 1995, about 10 % of the population, mostly those who had private substitutive health insurance, have – according to the motto “care follows health” - been obliged to cover their risks of being in need of long-term care not through a membership in a branch of the statutory social security but through a company of the private health insurance economy. In order to ensure this comprehensive compulsory insurance for those who have private health insurance, the legislator has enacted a range of regulations, which in essential aspects lead to a diverging design of the PPV from the usual principles of the PKV. This concerns in particular the beginning and the ending of the insurance contract, the benefits of the contract, the kind of relation to the service providers and finally the realm of tariffication and calculation.
2. Basic Conditions of the PPV

The PPV has been designed as compulsory insurance. Subject to this compulsory insurance are those who – within the PKV – are at least insured against general hospital costs, who are entitled to special governmental allowance, who are members of the Post Office clerks’ health insurance (PBeaKK), members of the Federal Railway clerks’ health insurance (KVB) or who are entitled to free healthcare. Apart from the members of the PBeaKK and the KVB, for whom a co-insurance association was founded which all private health insurance companies which intended to run the PPV had to join, the principle “care follows health” also applies to the distribution of the people that must be long-term care insured to the single PKV-companies. In general the PPV-policy for a person who has private health insurance is taken out exactly where the health insurance contract exists. During the first six months after the beginning of the contract, however, the policyholder has the right to change the insurance company. After that period, they may do so whenever they change their health insurance companies.

On the insurers’ side the obligation to insure for the people characterized above is parallelled by their obligation to contract, which means an obligation to also provide cover for people who are already in need of long-term care or who are of an age that implies they may be close to long-term care. Since there is no obligation to contract for the private health insurers, the obligation to contract for the private long-term care insurers is only conditional in those cases where the taking out of a PPV-policy is connected to the underwriting of a health insurance policy. During the first six months of 1995, those who were voluntary members of the statutory health insurance had the right of choice between the private and the social long-term care insurance. Members of the statutory health insurance who now become voluntarily insured with the social health insurers still have this right of choice within the first three months after the beginning of their status as voluntarily insured. Rights of rescission under contract and rights to cancel for the insurance companies are excluded while the obligation to contract exists. Nor is the insurer free from its liability even if a person’s premium has not been paid at the time when the insurance case occurs or if a violation of the duty to report pre-contractual diseases occurs.

With regard to the benefits within the PPV, one has to state that a social security package, which has to be equivalent to that of the social long-term care insurance, has been stipulated for all private health insurance companies. Thus this social security package provides basic insurance against the risks of long-term care costs. The preconditions for an entitlement to
benefits are analogous to those in the social long-term care insurance (differentiation between three stages of need of care on the basis of a social-medical judgement).

There is no connection between the service providers themselves and the insurance companies offering the PPV: This is totally obvious when only cash benefits are claimed; yet, also in case of non-cash benefits there are no contractual relations between the insurance companies and the service providers for a principle of refunding the costs analogous to that of the PKV is followed. Here the same rates of compensation apply as are paid in the social long-term care insurance sector. The remuneration is negotiated between the nursing institutions and the social long-term care insurance. The PKV-Association is a partner to these negotiations; however, it is no contracting partner. The insured persons are generally free in choice as to the service providers; nevertheless if no contractual agreement could be reached with a specific service provider there is only a restricted entitlement to benefits of 80 % of the sum which has generally been granted.

The private PPV-companies face the most important regulations in the areas of tariffication and calculation. Here the legislator enacted social-political demands, which have forced the insurance companies to abandon the risk-equivalent premium calculation, which actually is typical for the PKV. This break leads to far-reaching consequences: the obligation to contract, which was mentioned above, is one, the balancing of risks discussed below another consequence. The regulations concerning the insurance policies in force, which came into effect at the beginning of the PPV on January 1st, 1995, provide the restrictions specified in the following:

- no risk surcharges, no exclusion of the policyholders’ pre-contractual diseases from insurance coverage,
- no gender-specific premiums,
- premium-free co-insurance of children who are not employed under those preconditions which also enable children to be insured on a premium-free basis via the co-insurance within their families in the social long-term care insurance,
- limitation of premiums to the respective maximum premium of the social long-term care insurance,
- limitation of premiums for married couples to 150 % of the maximum premium of the social long-term care insurance if one spouse has an aggregate income which does not exceed the limit for low-income earners on a regular basis.

For the later underwriting result, i. e. for those who took out insurance after January 1st, 1995, certain measures of relaxation had been established:
risk surcharges are admissible,

- the limitation of premiums (including risk surcharges) to the maximum premium presupposes a period of insurance of at least five years,

- the limitation for spouses has been ruled out.

Nonetheless, these measures of relaxation are closely restricted so that the principle of individual equivalence as the guiding principle of the PKV has thus not been re-introduced. It is rather replaced by the solidarity principle of the social security insurance, which requires the realization of a social balancing in the PPV within the scope of the private insurance sector. Particularly the limitation of premiums to the maximum premium of the social long-term care insurance, which for policyholders older than about 55 years is distinctly below the risk-equivalent premiums, has in its train a massive need for adjustment from younger to older policyholders within the PPV.

3. Effects on the Calculation of the PPV

The premiums of the PPV, which due to the legal regulations are not risk-equivalent, require a financial transfer among the policyholders. On the one hand an intragenerative transfer from men, whose risk-equivalent premiums are less high, to women, from singles and married couples without low-income earners to married couples with at least one low-income earner and finally from people without to people with pre-contractual diseases. On the other hand require the exemption from premium-paying for children and the limitation of premiums to a maximum premium, which is distinctly below the actuarially required risk-equivalent premium for older people, an intergenerative adjustment.

While the transfer from men to women and from normal risks at the commencement of cover to higher risks do not lead to any problem within the framework of the PKV-specific funded system to calculate tariffs, the other components of adjustment require a financial transfer with comprehensive modifications to the usual PKV-calculation model. Therefore, the Private Health Insurance Association agreed on a uniform calculation model within the health insurance line with uniform bases of calculation. This model will be specified briefly in the following.

Unless the reader’s attention is deviated from the essential aspects of the context of this paper, certain aspects of comparatively less importance are deliberately left out here. Among these are the differentiation between grant and non-grant tariffs, the differing maximum premiums for Western and Eastern Germany and for couples below the low-income level, the adjust-
component for the policyholders of the Post-Office and the Federal Railway as well as some further technical details.

At first, age- and gender-depending net premiums \( P(x) \) are calculated on the basis of age- and gender-depending expected annual insurance payouts, the so-called actuarial per capita benefits \( K(x) \). Depending on the age \( x \) different methods are applied for that purpose. For children and those advanced in years, a pure risk premium is fixed, the funded system forms the basis for the other adults. To be more precise the following holds:

\[
P(x) = \begin{cases} 
K(x) & \text{where } 0 \leq x \leq 18 \text{ or year of birth } \leq 1915, \\
\frac{A(x)}{a(x)} & \text{where } 19 \leq x \leq 100 \text{ and year of birth } \geq 1916.
\end{cases}
\]

In this connection \( A(x) \) and \( a(x) \) denote the usual present value of expected aggregate benefits and the present value of annuity.

Because of the ban on gender-depending premiums, for each entry age the premiums mentioned above are then converted into the actuarially required gender-neutral premiums

\[
P(x \mid y) = (1 - Q_y) \cdot P(x) + Q_y \cdot P(y), \quad 0 \leq x = y \leq 100.
\]

\( Q_y \) in this context is the proportion of women in relation to all policyholders of age \( y = x \).

The fact that children have to be insured on a premium-free basis by law leads to an income deficit, which is covered by the transfer amount

\[
UK = \sum_{x=0}^{18} L(x) \cdot P(x \mid y).
\]

\( L(x) \) denotes the total number of premium-free children of age \( x \). For reasons of simplicity, only children up to the age of 18 are considered in this connection here although under certain conditions, the legislator also provides this status to people older than that.

For people who are older than 18 years the premium is limited to the maximum premium of the social long-term care insurance. The corresponding transfer item calculates as

\[
UG = \sum_{x=0}^{100} \sum_{y=0}^{9} (L(x) + L(y)) \cdot \max\{P(x \mid y) - (12 \cdot (1 - \sigma) \cdot HG - \Gamma_{\max}), 0\},
\]
where \( L(x) \) and \( L(y) \) denote the number of male and female policyholders respectively of respective age \( x = y \), \( HG \) the maximum premium of the social long-term care insurance, \( \Gamma_{\text{max}} \) the maximum cost loading per capita, which is fixed by statute, and \( \sigma \approx 5\% \) the safety loading, which is common to all companies of the Private Health Insurance Association. Here some simplifying assumptions are made as well: no differing maximum premiums for Western and Eastern Germany, all people of age are „normal policyholders“ (i. e. no premium-free insurance, no limitation of premiums for couples, no student premiums, no premiums for qualifying periods). Moreover, only the extent of transfer at the moment of the establishment of the PPV is taken into account; thus the individual net premiums, which have to be taken as a basis, are identical with the net premiums of newly acquired policyholders mentioned above.

All in all, the aggregate need for transfer (in a simplified way without consideration of limitations for couples and the adjustment for Post-Office / Federal Railway clerks) calculates as

\[
UK + UG,
\]

which is to be paid for by those policyholders who are liable to pay insurance premiums and whose risk-equivalent premiums are below the maximum premium (at the beginning of the PPV this corresponded to people who were younger than about 55 years). In this context one decided upon a model which provides for all age cohorts the same per capita adjustment component \( U \) as an absolute premium surcharge. Nevertheless, if the occasion arises that surcharge is reduced in a way that the aggregate premium, i. e. the sum of risk-equivalent premium and adjustment component, does not exceed the maximum premium of the social long-term care insurance. This leads to the following inequality for \( U \):

\[
\sum_{x,y=19}^{100} (L(x) + L(y)) \cdot \min \{ U; \max \{ 12 \cdot HG \cdot (1 - \sigma) - \Gamma_{\text{max}} - P(x \mid y); 0 \} \} \geq UK + UG.
\]

From this inequality the (minimal) sum of transfer can be deduced.

The absolute loading \( \Gamma \) which is necessary for the monthly gross premiums \( b(x \mid y) \) is calculated individually for each insurance company. In this connection one has to make sure not to exceed the legal maximum loading \( \Gamma_{\text{max}} \). From all this one obtains:
At the beginning of the compulsory long-term care insurance, premiums already reached the maximum premium of the social long-term care insurance from the so-called limit age of about 40 years on. That, of course, was due to the inclusion of the transfer component.

The calculation model presented above ensures that taking into account the PPV-portfolios of all participating insurance companies, the total actuarial premium income is sufficient to cover the need for the actual risk-equivalent premium, which has been calculated according to the funded system. On the level of the individual companies, however, this can by no means be assumed since the portfolios of the companies may diverge distinctly from the actuarially considered average of the business concerned. Thus, a comparatively young insurance company, for instance, with accordingly young policyholders will probably have a higher total premium income than it requires to cover its insurance benefits; on the other hand, a more traditional company with a relatively high portion of older policyholders will usually face systematic losses. Furthermore, the age- and gender-depending actuarial per capita benefits within the individual companies usually deviate from those of the average of the private health insurance economy, which also leads to premium surpluses and deficits respectively.

As the individual companies cannot influence the age or gender distributions nor the specific actuarial per capita benefits (at least as to the portfolio of policyholders who have taken out insurance from January 1st, 1995, on), a risk adjustment among the insurance companies running the PPV is inevitable. This risk adjustment has been organized in two stages and is executed for each calendar year afterwards. First, the difference between the actual net premium income and the actuarial net premium income required for the respective portfolios are calculated for each insurance company:

\[
b(x \mid y) = \min \left\{ \frac{P(x \mid y) + U}{12 \cdot (1 - \sigma)} : HG - \frac{\Gamma_{\max}}{12 \cdot (1 - \sigma)} + \frac{\Gamma}{12 \cdot (1 - \sigma)} \right\}.
\]

In contrast to the above context, here and in the following \( L(x) \), \( L(y) \) denote the number of male and female policyholders within one specific insurance company. Companies with a positive difference balance proportionately the negative differences up to the absolute value of their own positive difference. Through this so-called D1-transfer the diverging age- and gender-distributions within the portfolios of the companies are adjusted. In a second step, the
different risk structures are balanced in the so-called D3-transfer. Therefore, the actual benefits \( S \) are opposed to the actuarial benefits inclusive of a safety loading \( S_{\text{rech}} \) in consideration of an interest profit component \( Z \):

\[
S_{\text{rech}} = \sum_{x, y=0}^{100} \left( L(x) \cdot K(x) + L(y) \cdot K(y) \right) \cdot \frac{1}{1-\sigma},
\]

\[
Z = (i - 0.035) \cdot V,
\]

where \( i \) denotes the interest rate of the respective insurance company for the ageing reserves and \( V \) the amount of the PPV-ageing reserve of the specific company. Insurance companies for which

\[
S - Z > S_{\text{rech}}
\]

holds are entitled to a payment of

\[
D3 := S - Z - S_{\text{rech}}
\]

within this transfer component. These payments are proportionately made by those companies that are liable to pay (i.e. companies with \( S < S_{\text{rech}} \)), which, if necessary, also have to spend parts of their interest profit components. In the simplest case in which the surpluses of the companies liable to pay just cover the claims, the amount of the liability to pay is given by

\[
D3' := S_{\text{rech}} - S.
\]

4. The Model of the PPV as a Pattern for the Integration of the Private Health Insurance Sector Into the Social Security Insurance Scheme

In 1995, the establishment of the compulsory long-term care insurance in Germany marked the beginning of a new kind of national insurance (only about 0.3% of the population are not policyholders). This new kind of insurance was not transferred to a new organization but to
the health insurance sector. Thus the time-tested dualism of the social and the private health insurance sector remained untouched just as well as the corporate structure of the private insurance sector. The legal relationship towards the policyholders is established by the contracts under civil law. Consequently the private PPV is beyond the traditional national social security scheme; yet, it is not subject to the usual free market forces. Now does it make sense to extend the model of the PPV, which has proved to be functioning and suitable for compulsory insurance against long-term care risks for those who have private health insurance, to larger groups of people and to other risks, particularly the sickness costs risk?

To answer this question one has to find out to what extent such an expansion of the model of the PPV would have new (insurance specific) technical difficulties in its train, which have not occurred in the context of the PPV. In addition, one has to analyze if the integration of the private insurance sector into the social security system according to the model of the PPV is basically suitable to achieve the aims hinted at in the introduction, such as the improvement of efficiency in the health care for instance.

Since the health insurance must not remain inaccessible to anyone the transfer of this branch of the social security to the private insurance sector necessarily requires the determination of an unconditional obligation to contract for the insurers. That again implies the establishment of an obligation to insure already from merely insurance specific technical reasons. This is the only way to avoid effects of anti-selection. As a consequence the following problems arise: registration of all relevant personal data of all members of the population, distribution of these persons to the single private insurance companies and supervision of the execution of the obligation to insure. In the PPV, however, the principle of “care follows health” largely holds so that the acquisition of potential policyholders and the procurement of relevant addresses does not present any difficulties. Furthermore, just as in the PPV an insurer must not refrain from paying benefits even if the premium has not been paid or the duty to report pre-contractual diseases has been violated. From this it follows that massive collection failures are extremely likely to occur. In the private PPV this risk is distinctly lower. As was mentioned further above, the obligation to contract here is usually only conditional, as the PPV-policy in most cases is linked to the underwriting of a health insurance policy so that a pre-selection of the policyholders by the insurers is possible.

Basically, one motive for the integration of the private insurance sector into the social security scheme is the hope to thus promote competition, increase efficiency and obtain a better orientation towards the actual policyholders’ wishes. Yet, the model of the private PPV does not seem to be suitable to achieve these aims. On the one hand, a uniform benefit package is
stipulated, the freedom of design as part of the freedom of contract is almost ruled out. On the other hand, also the second part of the freedom of contract, the freedom of acquisition, does not exist as the obligation to contract and simultaneously a prohibition of the exclusion of benefits are legally stipulated. As seen before, the need for adjustment, which is thus enforced together with the limitation to the maximum premium and the children’s exemption from premium-paying, requires a company-overlapping risk balancing, which again for its part leads to a uniform calculation of all insurance companies running the PPV. Consequently the PPV is in fact some kind of standard insurance; only in the small area of administrative costs there is room for individual business dispositions. On the other hand, the relationship of the PPV-companies to the service providers has not been organized competitively, either. Symptomatic of this is that the extent of the entitlement to benefits depends on the fact whether the service providers have reached a contractual agreement with the social care insurance as to remuneration. Finally, the incentive effects of the risk balancing within the PPV are to be considered. A balancing of risks must be performed in a way that it does not enable the companies concerned to shuffle off the consequences for their own inefficient acting on the others. The D1-balance is up to the required standard; uneconomic behaviour in the benefit range or in contractual arrangements does not affect the amount of the transfer payments. The D3-balance acts as an incentive on the one hand not to become entitled to balancing payments since at first the company’s own interest profits have to be used. However, if an insurance company is already a recipient of transfer payments, there are no more incentives for economic behaviour both for recipients of payments and payers. The fact that at present the D3-component only plays a subordinate role relative to the amount of transfer payments is due to the company MEDICPROOF run by the PKV-Association, which determines when benefit claims are to be regarded as justified and, if so, the amount of these benefits. Within the private health insurance sector, this determination is performed uniformly and centrally. Yet, without the establishment of a centrally organized transfer inspection the D3-balance seems to be inappropriate for an extension of the PPV-model to the covering of the health costs risk. One further point of view regarding the evaluation of a social security model is the extent to which intra- and intergenerative distributional justice has been realized. With respect to the intragenerative balancing the PPV takes an intermediate position between the two extreme concepts of purely risk-equivalent premiums with a social transfer not within the insurance sector but via transfer payments taken from the revenue tax system on the one hand, and on the other hand a balancing between good and bad risks as well as higher and lower incomes within the insurance sector: by the prohibition of discrimination against the policyholders
with commencement of cover on January 1st, 1995, only the “risk solidarity”, i.e. the balancing of good and bad risks, has been realized in the private PPV. Nonetheless, also elements of income equalization have been included through the premium-free co-insurance. For the policyholders whose commencement of cover is after January 1st, 1995, risk surcharges are admissible; yet, after five years premiums are limited to the maximum premium if necessary. In the course of an extension of the private PPV-model to the whole population (with the obligation to insure) the problem of discrimination could be confined to immigrants. In the PPV-model the general idea of insurance is thus not overtopped by large-scale vertical income redistribution as in the social security systems. This renders a greater competitive transparency possible. Intergenerative distributions finally are required whenever the risk-equivalently determined actuarial premium charges of the older generations are unacceptably high. As the expected care costs as well as the expected general health costs increase distinctly as one advances in years, an intergenerative redistribution to ease those of a ripe old age in 1995 was indispensable. This so-called “old burden” leads to a double burden of the younger age groups, who do not only have to provide the means to cover their own benefits and to build up their ageing reserves but additionally have to finance the benefit claims of the older policyholders. The amount of the need for transfer may be reduced at the expense of the speed of change towards the pure funded system. If a quick change to the funded system is striven for, premiums have to be fixed according to the funded system for the policyholders advanced in years as well. If, however, the need for transfer is to be limited also for people who have reached a considerable age at the commencement of cover pure risk-premiums (without the building up of ageing reserves for these persons) can be fixed. The PPV-model intends this second possibility.

5. Conclusion
By the establishment of the private compulsory long-term care insurance in Germany on January 1st, 1995, a change in system has undoubtedly been executed. The PKV let itself embed on a large scale in social-political responsibility. Although there are tendencies towards an approximation of the PKV to the basic social-political concepts of the GKV also in other domains of the PKV (such as the implementation of the standard tariff, which is also a PKV-uniform tariff with risk-balancing, and the use of interest surpluses according to § 12a insurance supervision act (VAG), which partly provides for a redistribution of surpluses, which does not follow the principle of causality, from younger to older policyholders), the private
PPV distinctly exceeds these features: obligation to contract, exclusion of cancellation right for the insurer, prohibition of risk surcharges and of the exclusion of benefits, maximum premium limits, explicitly calculated transfer components, uniform calculation, stipulated security package and risk-balancing are elements which do not occur in the PKV which operates in the free market according to the principle of individual equivalence.

The question now is whether it is worth generalizing the PPV-model to further groups of persons and further branches of social security. What speaks in favour of this idea is that on a long-term basis, the PPV-model provides a gradual removal of the balancing component to limit the premiums to the maximum premiums of the social long-term care insurance and thus provides the transition to the more demography-secure funded system. Nevertheless, this transition is slowed down by the expected increase in costs in the long-term care sector, which will require a dynamization of the legal limitations of benefits. Furthermore, the double burden of the younger policyholders caused by the “old burden” has been distributed adequately to the subsequent younger age-groups in the PPV-model. Finally, also the separation of the vertical income distribution from the insurance principle has to be considered as positive.

Consequently, the model of the PPV is basically worth being generalized both with regard to the underlying actuarial calculation procedure and the design of the insurance relationship. Besides some difficulties in the practical realization, however, particularly the prevention of competition speaks against this generalization. A uniform range of benefits has been stipulated for all insurance companies, the relations to the service providers have not been designed competitively, the premiums have been calculated uniformly in the Private Health Insurance Association and last but not least, a balancing of risks with incentives to uneconomic behaviour has been established.

All in all an extension of the PPV-model does not seem to be desirable as it might lead to a weakening of the present time-tested bipolar health insurance system in Germany, i. e. a private health insurance economy, which is oriented towards and capable of competition, as a counterpart to the statutory health insurance. Moreover, such an extension would comprise the risk of a rigorous co-ordination of all private health insurance companies and a degradation to mere executive bodies of the social security.