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Working Paper
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Diskussionsbeiträge / Institut für Finanzwissenschaft der Albert-Ludwigs-Universität Freiburg im Breisgau, No. 128

Provided in Cooperation with:
Department of Economics, University of Freiburg

Suggested Citation: Hagist, Christian; Holldorf, Inken; Pütz, Claudia (2005) : Deductibles in social health insurance systems: Findings from Germany, Diskussionsbeiträge / Institut für Finanzwissenschaft der Albert-Ludwigs-Universität Freiburg im Breisgau, No. 128, http://nbn-resolving.de/urn:nbn:de:bsz:25-opus-18455

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Deductibles in social health insurance systems: Findings from Germany

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128/05

INSTITUT FÜR FINANZWISSENSCHAFT
DER ALBERT-LUDWIGS-UNIVERSITÄT FREIBURG IM BREISGAU
Abstract

One unique feature of the German health insurance system is the possibility for certain socioeconomic groups to opt-out of the otherwise compulsory system. To determine whether rates incorporating deductibles can heighten the appeal of statutory health insurance funds (SHI funds) compared with private health insurance companies, Germany’s third largest SHI fund Techniker Krankenkasse implemented a pilot scheme involving the use of deductibles. Preliminary scientific evaluations of the pilot scheme indicate that these deductibles are compatible with the principles of solidarity in the statutory health insurance system and provide an effective means of preventing defection to private health insurance companies.

\textit{JEL Classification: I11}
1. Introduction

The German health insurance sector is divided into two parts, a private and a public one. While this is the case in most OECD countries, Germany remains (together with Chile) the only country in the western world where certain socio-economic groups can opt out of the otherwise compulsory social health insurance system and switch to a private insurance plan. The main groups who have this right to choose are public servants, self-employed people and employees with an income over a certain ceiling. This ceiling and the right to choose especially for the third group of high-earning individuals have attracted fierce political controversy ever since their existence.

Whatever the political and social consequences might be, for the statutory health insurance funds (SHI funds) it is a question of marketing. Both, public and private health insurance funds compete for the over 11 million potential customers. What is problematic is that both are targeted at the same customer group but do not have the same competitive instruments. While the private insurance companies work with the usual tools from the insurance industry such as age provisions or rates incorporating deductibles, the SHI funds calculate their premiums based on wages and not on risk. In particular, they are prevented by law from offering products tailored at specific groups. They are not permitted to offer any optional deductibles with rebates on premiums.

Each year, thousands of voluntary insureds leave the SHI funds in favour of the private health insurance companies on account of the lower average premiums and the greater choice. This defection particularly hits the funds with a large proportion of voluntary insureds who are entitled to change to another fund. This also includes Germany’s third largest SHI fund Techniker Krankenkasse (TK) with over 5.7 million insureds. In order to improve its position in competition with the private health insurance companies, TK introduced a rate package with deductibles as part of a pilot scheme in 2003.

This paper presents the pilot scheme. It is structured as follows: Chapter 2 briefly describes certain features of Germany’s health insurance market and its socio-economic structure. In chapter 3 we specify the characteristics of TK’s pilot scheme and ask whether it accords with the solidarity principle of the German public health insurance system. We then present some preliminary findings and end with a summary in chapter 4.
2. The German health care system – a short description

The German health care system was introduced in 1883. It primarily covered sickness allowances for blue-collar workers.[1] Over the last century the system has undergone extensive change and now covers nearly 90% of the German population. The benefits now include payments of all kinds for medical services, primarily out-patient medical and dental treatment, hospital treatment, pharmaceuticals, remedies and therapeutic appliances such as massage, spectacles and hearing aids, dentures and maternity assistance. Statutory health insurance does not cover homeopathic treatment, treatment by private doctors or death benefits. Sickness allowances account for only around 7% of the overall expenditure.[2] But although all these changes have certainly broadly altered the characteristics of the German health care system, its fundamental principles, subsidiarity and solidarity, and are still in place.[3]

Subsidiarity means in this case that the government does not act directly in the management of the day-to-day business of the health care system but assigns these tasks to those who are most capable and closest to the patients.[4] Accordingly, the SHI funds are non-governmental non-profit bodies and the ministry of health and social security has only supervisory but no controlling powers over them. The government can only set guidelines and regulations but plays no role in financing the funds.1

The solidarity principle is best reflected in the calculation of the premiums. Unlike in private insurance contracts, premiums are not in any way risk-based. Instead, they are linked to the gross wage of the insured. Every SHI fund chooses from its cost structure its premium rate which is then applied to the wages of its insureds up to a certain ceiling (the so called “Beitragsbemessungsgrenze” or premium calculation ceiling).2 Non-working spouses and children are insured via their working relative (i.e. father/husband or mother/wife) and no payments have to be made for them. The premiums are paid in equal parts by employers and employees. The insureds are free to choose the SHI fund and the SHI funds are under an obligation to accept all interested parties. To eliminate differences in the premium rates between individual SHI funds resulting solely from differences in the risk structure of the insured base, there is a risk adjustment mechanism. It equalizes any differences in the costs between the funds at an average level in cases in which these differences arise from the age, gender and income of the insureds. In addition, there are special mechanisms to offset the

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1 Since 2004 the SHI-funds will receive a certain amount out of the tobacco tax revenue.
2 In 2005 the ceiling is 3.525 € per month (42.300 € p.a.).
effects of particularly high costs, insureds with no gainful employment and the chronically ill in certain certified disease management programmes. The solidarity principle leads to various forms of redistribution between the statutory insureds, for example:[5]

1.) Redistribution between healthy and sick members which is the purpose of every health insurance system
2.) Redistribution between high-income and low-income insureds
3.) Redistribution between singles and families with children (and possible non-working spouses)
4.) Redistribution between insureds with high and low illness propensity, resulting in a redistribution between young and old, men and women and insureds with a predisposition to illness and those with no such predisposition.

Redistribution is a very important point in the ongoing discussion about further reform of the German health insurance scheme. Up to this point the German system can be relatively easily compared with other continental European health insurance systems like France or Austria. But another feature of the German system which has been attracting ongoing discussion for years especially in connection with redistribution, is unique (with the notable exception of Chile): Civil servants, self employed persons and employees with a wage over a certain threshold (the upper income ceiling) can opt out of the system which is compulsory for everybody else. They have the possibility of deciding to purchase a private insurance plan from one of the over 50 private insurance companies or to remain in the statutory system as so called “voluntary” insureds.[6] The decision in favour of a private insurance plan is a life-time one.

Given all this, the rational high-income earner has to choose which system is the most efficient for him. For example, if you have (or will have) many children remaining in the public system does not sound such a bad idea because children (and non-working spouses) are covered free of charge, something which is not the case with a private insurance plan. On the other hand, if you are a young healthy single, a private insurance plan can be cheaper for you because it is based on the risk of illness and not income.4

3 Until 2002 the premium calculation and the upper income ceiling were equal. Since 2003 they have been increasing at different rates, i.e. the upper income ceiling is growing faster than the premium calculation ceiling. In 2005 the upper income ceiling is € 3,900 per month (€ 46,800 p.a.).
4 The only age group under 75 years in which females are the majority of voluntary paying members is the one between the age of 15 to 29 years. This leads to the conclusion that young women because of higher risk
Each year, over 30,000 insureds switch from TK to a private insurance company. However, the loss of each single insured not only impairs TK’s financial situation but also that of the entire statutory health insurance system. It means the loss of both a good premium payer and generally also a good risk. As most decisions to change cannot be reversed, this results in complete desolidisation with an average financial loss of € 3,500 per lost insured and year.\(^5\)

TK is not only particularly affected by this defection. Conversely, it is also required to ensure that those thinking about switching to a private health insurance company are given an incentive to remain and thus support the statutory health insurance system. In order to determine the particular needs of this target group, it conducts regular surveys. The key result is that many of those questioned would find it more appealing if they could individually determine the type and scope of their insurance cover. In particular, they are in favour of rates with an optional deductible.

Yet SHI funds are not permitted to offer such deductibles as a regular product. The only way of legally offering them is to integrate them in a trial run as part of a pilot scheme. The funds must apply to the supervisory authorities for permission to establish such pilot schemes. These pilot schemes must not extend beyond a period of five years. In addition, they must be evaluated by an independent panel of experts. TK launched its “deductibles” pilot scheme in January 2003.

3. TK’s “deductibles” pilot scheme

3.1 Principles

Every voluntary insured over the age of 18 years is eligible. Insureds are able to choose participation on a optional basis. In the programme members receive a bonus of € 240 per year, if they agree to pay a deductible for their medical treatment of up to 300 €. The deductible includes all benefits up to the cost incurred by TK. The only exception is that each visit to the doctor costs a flat-rate € 20 and each visit to the dentist € 40. The statutory co-payments for pharmaceuticals, hospital accommodation, medical treatment etc. are not

\(^5\) The financial loss is defined here as the lost profit margin contribution, i.e. the net balance of all income and expenditure allocated to a given insured.
affected by the deductible. Checkups and benefits for children under the age of 18 years do not count towards the deductible.

In addition to improving the competitive position compared with private health insurance companies, the purpose of the pilot scheme is to provide scientific evidence in support of the theory that deductibles can work in a social health insurance environment which is based on the principle of solidarity. This is achieved by ongoing scientific monitoring on the part of “Institut für Gesundheits- und Sozialforschung (IGES)” (Institute for Health and Social Research) in Berlin. The preliminary findings of the scientific monitoring activities are set out in the next subsection.[8-9]

3.2 Findings

Scientific monitoring focuses on three main questions:

(1) What are the certain socioeconomic characteristics of the participants of the pilot scheme?

(2) How many voluntary insureds are remaining in the statutory system because of the pilot scheme and what are the financial implications for the statutory system?

(3) Are insurance models with deductibles financially sustainable and compatible with the principle of solidarity?

The findings presented are based on data collected between January and October 2003 in the first year of the pilot scheme. The first question is answered by a comparison of the socioeconomic structure of the groups of participants and entirety of voluntary insureds of TK. The parameters for the comparison are gender, age, income and the change of benefit claims from 2001/2002 to 2003. The comparison shows that the pilot scheme is especially attractive for young men without any co-insured family members i.e. the group which is also likely to switch to a private insurance plan as we have seen in chapter 2. However, participants also include pensioners, married persons as well as insureds who were ill in earlier years. A sample of the results for question 1 is set out below:

- 86 % of the participants compared to 82 % of all voluntary insureds are male
- 46 % of the participants compared to 29.2 % of all voluntary insureds are between 35 and 44 years old
• 71 % of the participants compared to 63 % of all voluntary insureds have an income over € 5000 per month

• 12 % of the participants compared to 35 % of all voluntary insureds have co-insured spouses, who also count towards the annual deductible of € 300.

• 37 % of the participants did not go to the doctor at all in 2001 and 2002, while half went to the doctor less than three times.

Question (2) looks at the “retention effect” of the pilot scheme.

In the absence of the pilot scheme, any voluntary insured of TK would have had three options: First, he could have chosen a private insurance plan, second, he could have chosen to switch to another SHI fund and, third, he could have chosen to stay with TK. The question now is if the introduction of deductibles (and thus also the bonus payment) changed this decision-making process for a significant large group of insureds.

It is difficult to quantify the number of TK insureds who have been prompted to stay with the fund on account of the deductible model as this is by definition a “non-event”. In order to identify the “retention effect” scientifically, it was necessary to develop a scoring model to identify from the total number of participants the proportion which would very likely have left TK if it had not been possible to take part in the model project.

The scoring model produced the following overall results: On the reporting date October 1, 2003 the pilot scheme had 10,300 participants of whom 3,400 could be assumed to have otherwise switched to a private insurance plan without the pilot scheme. On average such a voluntary insured contributes 3,500 € to the statutory system’s profit margin. Over the duration of participation and the number of participants this gives the statutory system a net profit of € 8 million, of which TK obtains only € 0.7 million for its own operations while the rest is redistributed to the other SHI funds via the risk-adjustment mechanism.

Question (3) shows that the model project recouped its own costs and is not a burden for non-participating compulsory and voluntary insureds. So the benefits of the pilot scheme have to exceed the costs. The benefits are the amount of deductibles plus the net profit from non-switching insureds (see question 2) and the redistributed profits for TK from the risk-adjustment mechanism. The costs on the other hand are the bonus payments of € 240 per participant and the administrative costs which stood at around € 350,000 p.a. With an average
deductible of € 102 per participant the overall outcome is an increase of € 1 million. Hence the pilot scheme is financial sustainable.

4. Summary

Germany’s statutory health insurance system has a long and complex history. Due to this history and Germany’s commitment to the solidarity principal in its social security systems, the system has some international unique features, particularly the competition between the statutory and the private-sector systems for healthy and higher-earning insureds.

To determine whether rates incorporating deductibles can heighten the appeal of SHI funds compared with private health insurance companies, Germany’s third largest SHI fund TK implemented a pilot scheme involving the use of deductibles along the lines of the system used by the private health insurance companies. Preliminary scientific evaluations of the pilot scheme indicate that these deductibles are compatible with the principles of solidarity in the statutory health insurance system and provide an effective means of preventing defection to private health insurance companies.
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ISSN 0943-8408