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Article

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Add-On Premiums Increase Price Transparency—More Policy Holders Switch Health Plans*

by Peter Eibich, Hendrik Schmitz and Nicolas Ziebarth

The German health care reform implemented in 2009 led to a considerable increase in price transparency within the statutory health insurance (SHI) (Gesetzliche Krankenversicherung, GKV) system and also made it more consumer-friendly which, in turn, has encouraged policy holders to react to price hikes by switching to a different health insurance fund ("sickness fund"). In 2009, the government established a central "health care fund" (Gesundheitsfond) which standardized contribution rates. Price differences between the sickness funds are now listed separately on the policy holder's bill as add-on or reimbursed premiums. It is above all these add-on premiums that gave policy holders a clear price signal. According to SOEP representative survey data, in 2010 this resulted in one in ten individuals affected by add-on premiums switching health plans. Aggregated sickness fund level data show that the add-on premiums introduced by the DAK and KKH-Allianz resulted in a 7.5 percent average annual loss of members.

However, at the beginning of 2011, a generous increase in the uniform contribution rate for all sickness funds and the extravagant filling of the health care fund with the additional reserves means that in 2012, it is likely that no sickness fund will have to charge add-on premiums thus thwarting any price transparency previously achieved by the add-on premiums. As of 2013 the situation could change again as a result of increasing health care spending and a downturn in the economy. However, the government should not count on this happening, and instead should introduce new incentives to strengthen price competition, for example by capping the health care fund's payments to the sickness funds.

The German Act to Strengthen Competition within the Statutory Health Insurance System¹ stipulated the establishment of the central health care fund which came into effect on January 1, 2009. One of the key objectives of the reform was to foster more price transparency among the, at the time, 200 SHI providers or sickness funds in Germany.² The aim of this move was to increase price competition between the sickness funds which, in spite of the introduction of free choice among sickness funds in 1996, barely existed. From 2000 to 2009, only five percent of policy holders switched sickness funds each year.³ This is astonishing as, during this period, significant price differences already existed between the different sickness funds. A sample of universally accessible sickness funds shows that, in 2008, contribution rates ranged from 13.4 to 17.4 percent⁴ (Table 1). Based on the average gross monthly wage which was 2,550 euros⁵ at the time, for policy holders this equated to a price difference of up to 51 euros per month.⁶ Individuals whose income reached the contribution assessment threshold could even have saved up to 72 euros per month by switching from the most expensive to the least expensive health plan. People's reluctance to switch health plans during that period is even more surprising if we bear in mind that approximately 95 percent of insurance benefits were classified as mandatory benefits by Volume

¹ Act to Strengthen Competition within the Statutory Health Insurance System (GKV-Wettbewerbsstärkungsgesetz, GKV-WSG), BGBl. I No. 11, 30/03/2007, available online at: www.bgbl.de

² Federal Health Monitoring (Gesundheitsberichterstattung des Bundes) (2011), available online at: www.gbe-bund.de

³ Schmitz, Hendrik and Nicolas R. Ziebarth, In absolute or relative terms? How framing prices affects the consumer price sensitivity of health plan choice. SOEPpaper 423 (2011), DIW Berlin, available online at: www.diw.de/en/diw_02.c.298577.en/soeppapers.html

⁴ Including special premiums. Only those sickness funds with nationwide coverage are considered.

⁵ Federal Statistical Office (Statistisches Bundesamt), Federal Ministry of Labour and Social Affairs (BMAS), German Statutory Pension Insurance Scheme (Deutsche Rentenversicherung Bund), available online at: www.forschung.deutsche-rentenversicherung.de

⁶ By switching, the employer could also save an additional 51 euros.

* The authors would like to thank all mentioned health insurance funds for providing the data. Special thanks goes to Tobias Schmidt and the German Federal (Social) Insurance Office, Ann Marini and the National Association of Statutory Health Insurance Funds (GKV-Spitzenverband), and the BKK Federal Association (BKK-Bundesverband) for information and advice.

Table 1

Overview of Maximum Contribution Rate Differences between Sickness Funds in 2008¹

Sickness fund	Contribution rate in percent	Employee contribution per month in euros ²	Policy holders	Coverage	Notes
City BKK	17.4	233.51	207,000	15 federal states	Closed on 01/07/2011
AOK im Saarland	16.7	224.58	230,000	1 federal state	
AOK Mecklenburg-Vorpommern	16.7	224.58	487,995	1 federal state	Merged with AOK Nordost on 01/01/2011
AOK Berlin	16.7	224.58	712,000	1 federal state	Merged with AOK Nordost on 01/01/2011
Gemeinsame BKK Köln	16.6	223.30	40,000	Countrywide	Merged with mhplus BKK on 01/01/2011
BKK BVM	16.6	223.30	70,657	Countrywide	Merged with Schwenninger BKK on 01/01/2009
...	
...	
...	
BIG direkt gesund	13.4	182.47	338,000	Countrywide	
BKK der Thüringer Energieversorgung	13.3	181.19	98,874	2 federal states	
IKK Thüringen	13.2	179.92	230,000	3 federal states	Merged with IKK Classic on 01/01/2010
IKK Südwest Direkt	13.2	179.92	500,000	3 federal states	
BKK MEM	13.1	178.64	2,100	1 federal state	
IKK Sachsen	12.7	173.54	690,000	3 federal states	Merged with IKK Classic on 01/01/2010

¹ Does not include "closed" company health insurance funds (BKK).

² Compared with the average income in 2008 of 2,552 euros.

³ Information refers partially to different points in time.

⁴ Members as at 01/01/2008. Number of policy holders not available.

Sources: Focus, The National Association of Statutory Health Insurance Funds (GKV-Spitzenverband), information from the sickness funds, company annual reports, press releases, German Research Foundation Ranking (dfg-Ranking) 8/11.

In 2008, switching sickness funds saved policy holders large sums of money.

5 of the German Social Insurance Code (SGB V). This means that variations in the cost of health plans were, for the most part, pure price differences, reflecting very little difference in benefits.

The primary reason behind the reluctance to switch health plans was the lack of price transparency. The framing of price differences as contribution rate differences in percentage points made it even more difficult for the policy holder to compare the prices of the different sickness funds. Box 1 illustrates the arithmetic steps that were required to calculate the monthly price difference between sickness fund A, with a 15 percent contribution rate, and sickness fund B, with a 14 percent contribution rate. Based on the 2008 average gross monthly wage, a difference of one contribution point was equal to a monthly saving, for the employee, of 12.76 euros.

In order to calculate this figure, firstly the policy holder would have had to know their exact gross monthly wage. Secondly, they would also have needed information about the current contribution assessment threshold up to which contributions have to be paid. Moreover, the contribution rate is based not only on the employee's share of the policy premium, but also on the employer's

share. Last but not least, the employer contributes directly to the sickness fund, which further limits the policy holder's price consciousness.

2009 Reform: Framing Price Differences in Absolute Values Promotes Competition on the Health Insurance Market

With the establishment of the central health care fund in January 2009, the government introduced a uniform contribution rate for all those within the SHI system. Since 2009, the newly-created health care fund has pooled all contributions collected as a result of this standardized contribution rate. Sickness funds, in turn, no longer collect contributions directly from the employer. Instead, the central health care fund redistributes the monies to the sickness funds according to a standardized premium per insured individual. "Standardized" means that a risk structure equalization (RSA) formula is applied which equalizes the different risk profiles in the pools of policy holders between the sickness funds (SGB V, Sections 265–273). In other words: the sickness funds with a large number of sick policy holders receive

Box 1

Calculation of Monthly Health Insurance Contributions Based on Contribution Rates

Sickness fund A: contribution rate 15 percent

Average gross wage 2008^a: 2,552 euros

Contribution assessment basis threshold 2008^b: 3,600 euros

Employee share of contribution rate^c:
 $(15 - 0.9) / 2 + 0.9 = 7.95$

Monthly health insurance contribution:
 7.95 percent * 2,552 euros = 202.88 euros

Sickness fund B: contribution rate 14 percent

Average gross wage 2008^a: 2,552 euros

Contribution assessment basis threshold 2008^b: 3,600 euros

Employee share of contribution rate:
 $(14 - 0.9) / 2 + 0.9 = 7.45$

Monthly health insurance contribution:
 7.45 percent * 2,552 euros = 190.12 euros

Saving with sickness fund B vs. A:
 202.88 euros - 190.12 euros = 12.76 per month
 12.76 euros * 12 = 153.12 euros per year

Conclusion:

By switching from sickness fund A to fund B, the employee could save 12.76 euros per month. Moreover, the employer would also save 11.96 euros per month which he could pay out to the employee in the form of a wage increase.

a Federal Statistical Office (Statistisches Bundesamt), Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Soziales), German Statutory Pension Insurance Scheme (Deutsche Rentenversicherung Bund)

b Federal Ministry of Finance (Bundesministerium der Finanzen).

c Since July 1, 2005 employees have had to pay a special premium of 0.9 percent. (Act to Adjust the Financing of Dentures (Gesetz zur Anpassung der Finanzierung von Zahnersatz), December 15, 2004).

ve a higher payout from the health care fund than those with an above average share of healthy members.

The leveling of the premium price differences and the payment of average contributions by the health care fund led to a redefinition of the sickness funds' premium autonomy. If the transfers received from the health care fund do not cover the sickness fund's costs, they are obliged to charge "add-on premiums" on their members' invoices expressed as a monthly euro value. Conversely, sickness funds generating a surplus can now also reimburse their members' premiums. This makes it far easier for the policy holder to identify price differences between the sickness funds.

The increase in competition on the health insurance market resulting from the introduction of the health care fund and add-on premiums has put sickness funds under greater pressure to economize more efficiently and to keep health plan prices low either by avoiding add-on premiums or through premium reimbursements. This contributes to an increase in internal efficiency reserves.

Moreover, the concentration of sickness funds has also increased due to mergers and even the closure of individual funds.⁷ The total number of sickness funds has fallen from 241 in 2007 to 153 in 2012.⁸ Voluntary mergers of sickness funds can contribute to a better mix of risks, particularly for smaller sickness funds, and lead to synergy effects by dismantling duplicate administrative machinery.

All Add-On Premiums Likely to be Abolished in 2012

It is anticipated that, in 2012, all sickness funds will do entirely without add-on premiums or will abolish these during the course of the year. When this article went to print in December 2011, eleven health insurance companies were still charging add-on premiums of between 6.50 and 15 euros per month (Table 2). This included two of the biggest German sickness funds—DAK and KKH-Allianz with 6 million and 1.9 million members respectively. On the other hand, there are currently 7 sickness funds reimbursing their members' premiums at a rate of between 2.50 and 10 euros per month. Admittedly, this includes very small and less well-known

7 Examples are City BKK on July 1, 2011 or the BKK for health professionals on December 31, 2011.

8 The National Association of Statutory Health Insurance Funds (Spitzenverband der Gesetzlichen Krankenkassen) (2011), available online at: www.gkv-spitzenverband.de/Presse_Zahlen_und_Grafiken.gkvnet

Box 2

Debate on the Further Development of the Risk Structure Equalization Scheme "Morbi-RSA"

In the media debate regarding add-on premiums and the workings of the health care fund, it is frequently pointed out that the sickness funds charging add-on premiums were being hastily abandoned by healthy policy holders in particular, which only serves to exacerbate these funds' difficulties. However, this argument primarily criticizes an allegedly flawed risk structure equalization scheme (RSA) and not the add-on premiums themselves. If the RSA were to function effectively, increased switching of young and healthy policy holders would not be a problem, as it is precisely policy holders' health status that the RSA is supposed to balance through redistribution among the sickness funds.

The RSA was introduced in 1994 with a view to implementing free choice between sickness funds (1996). Until 2002, the scheme only equalized outcome medical consumption differences based on age, gender and disability status. In 2002, the equalization factors were extended to include policy holders participating in disease management programs and a risk pool was established to compensate sickness funds for policy holders with very high medical expenses. With the introduction of the health care fund, the RSA underwent another reform. The risk pool was abolished and, based on expert recommendations, replaced with a "morbidity-oriented risk structure equalization scheme" (Morbi-

RSA) which balances differences in claims according to 80 defined diseases¹.

A recent comprehensive evaluation report by the Scientific Advisory Council for the Risk Structure Equalization Scheme at the German Federal Social Insurance Office provides the reformed Morbi-RSA with a positive review stating that the new structure has increased the accuracy of the allocation of funds. On the other hand, the report also states that there is probably (still) a marked surplus for healthy policy holders created by transfers from the health care fund, and rejects reform proposals for a reduction in the number of diseases covered by the RSA.²

A more accurate and effective RSA is an essential prerequisite for fair competition between sickness funds irrespective of how price differences are framed. Hence, the discussion regarding the further development of the RSA should be decoupled from the fundamental debate about the health care fund and the add-on premiums.

¹ See IGES, Lauterbach, K.W., and J. Wasem, *Klassifikationsmodelle für Versicherte im Risikostrukturausgleich* (2004), report commissioned by the Federal Ministry of Health and Social Security, available online at: www.iges.de/publikationen/gutachten__berichte/rsa_gutachten/e5166/infoboxContent5168/EndberichtRSA-Gutachten_ger.pdf.

² Scientific Advisory Council for the Further Development of the Risk Structure Equalization Scheme at the German Federal Social Insurance Office, *Evaluationsbericht zum Jahresausgleich 2009 im Risikostrukturausgleich* (2011), available online at: www.mm.wiwi.uni-due.de/fileadmin/fileupload/BWL-MEDMAN/Aktuelle_Meldungen/Gutachten_mit_Anlagen.pdf.

funds, two of which only operate in certain federal states and three of which are "closed" i.e., only accept employees from specific companies. Currently, there are a total of approximately 10.5 million people who are insured with sickness funds charging add-on premiums. The funds reimbursing premiums encompass over 500,000 members.⁹

The price differences between the 153 sickness funds currently operating have not increased as a result of

the reform—on the contrary. Whereas the maximum monthly price range in 2008 was approximately 50 euros per month for an average earner, this figure is currently 20 euros.¹⁰ There are 135 sickness funds whose members are currently being charged the same percentage point contribution rate of 15.5 percent and no add-on premiums. They constitute more than 90 percent of all SHI policy-holders.¹¹

⁹ It should be noted that this does not mean that 10.5 million statutory health insurance policy holders pay add-on premiums. The number of policy holders also includes, for example, non-contributory co-insured family members, who do not have to pay add-on premiums. The DAK currently has 4.7 million 'paying' members and KKH-Allianz 1.4 million.

¹⁰ Restricted to sickness funds with nationwide coverage.

¹¹ This figure is based on the approximately eight million statutory health insurance policy holders paying add-on premiums (approximately 75 percent of the total 10.5 million people insured with sickness funds charging add-on premiums) as well as the total number of 69.9 million statutory health insurance policy holders (Federal Health Monitoring 2011, www.gbe-bund.de).

ADD-ON PREMIUMS INCREASE PRICE TRANSPARENCY—MORE POLICY HOLDERS SWITCH HEALTH PLANS*

Table 2

Overview of Sickness Funds with Add-On Premium and Premium Reimbursement

Sickness fund	Add-on premium /premium	Amount in euros/month ¹	Introduced	Discarded	Contribution rate in 2008 in percent ³	Employee contribution per month in euros (2008)	Number of policy holders (as at: 2010)	Coverage	Notes
BKK Hoesch	Add-on premium	15.00	01/01/2011	⁵	15.8	213.09	99,415	10 federal states	Possibly discarding add-on premium in 2012
City BKK	Add-on premium	15.00	01/04/2010	01/07/2011	17.4	233.51	168,000	Countrywide	Closed on 01/07/2011
BKK für Heilberufe	Add-on premium	10.00	01/01/2011	01/01/2012	16.2	218.20	185,000	Countrywide	Closed on 01/01/2012
BKK Westfalen-Lippe	Add-on premium	12.00	01/02/2010	30/09/2010	15.7	211.82	27,355	Countrywide	Merged with BKK Vor Ort on 01/10/2010
DAK	Add-on premium	8.00	01/02/2010	31/03/2012 ²	15.4	207.99	6,049,941	Countrywide	Merged with DAK-Gesundheit on 01/01/2012
KKH-Allianz	Add-on premium	8.00	01/03/2010	01/03/2012 ²	14.8	200.33	1,900,057	Countrywide	
Deutsche BKK	Add-on premium	8.00	01/02/2010	⁴	15.1	204.16	916,765	Countrywide	Plans to discard add-on premium in 2012
BKK Gesundheit	Add-on premium	8.00	01/02/2010	31/03/2012 ²	14.9	201.61	1,200,000	Countrywide	Merged with DAK-Gesundheit on 01/01/2012
BKK Phoenix	Add-on premium	8.00	01/01/2010	⁴	16.3	219.47	10,663	Countrywide	Plans to discard add-on premium in 2012
Novitas BKK	Add-on premium	8.00	01/07/2010	31/12/2010	15.4	207.99	450,000	Countrywide	
Esso BKK	Add-on premium	8.00	01/04/2010	31/12/2010	14.5	196.50	26,000	Countrywide	
BKK Publik	Add-on premium	8.00	01/01/2011	-	15.5	209.26	6,849	3 federal states	
BKK Axel Springer	Add-on premium	8.00	01/01/2010	31/03/2012 ²	16.5	222.02	12,142	Closed	Merged with DAK-Gesundheit on 01/01/2012
BKK Merck	Add-on premium	8.00	01/04/2010	⁴	14.3	193.95	28,000	Closed	
e.on BKK	Add-on premium	8.00	01/03/2010	30/06/2011	14.5	196.50	8,900	Closed	
BKK advita	Add-on premium	6.50	01/07/2011	⁴	15.7	211.82	43,000	Countrywide	Plans to discard add-on premium in 2012
Gemeinsame BKK Köln	Add-on premium	1 percent of income	01/09/2009	31/12/2010	16.6	223.30	29,414	Countrywide	Merged with mhplus BKK on 01/01/2011
						<i>Total</i>	<i>11,161,501</i>		
						<i>Total 12/2011</i>	<i>10,451,832</i>		
BKK A.T.U.	Premium	2.50	01/01/2011	-	14.4	195.23	100,223	Countrywide	
hkk	Premium	5.00	01/01/2009	-	14.1	191.40	325,511	Countrywide	
BKK Wirtschaft und Finanzen	Premium	5.00	01/01/2011	-	14.4	195.23	10,000	12 federal states	
BKK PWC	Premium	5.00	01/01/2011	-	14.1	191.40	17,091	Closed	
BKK ALP Plus	Premium	5.83	01/07/2009	30/03/2010	14.8	200.33	107,773	Countrywide	
G+V BKK	Premium	6.00	01/10/2009	-	12.2	167.16	1,000	2 federal states	
IKK Südwest	Premium	8.33	01/01/2009	01/01/2010	13.8	187.57	680,000	3 federal states	
BKK Groz-Beckert	Premium	8.33	01/01/2009	-	13.1	178.64	6,280	Closed	
BKK Würth	Premium	10.00	01/01/2009	-	13.5	183.74	12,432	Closed	Premium payment not yet officially set for 2011
						<i>Total</i>	<i>1,260,310</i>		
						<i>Total 12/2011</i>	<i>472,537</i>		

1 As at: 15/12/2011. Premium and add-on premium levels have varied in previous years.

2 Discard is yet to be approved by the German Federal (Social) Insurance Office.

3 Including a special premium of 0.9 percent in compliance with Section 249, Subsection 1 SGB V.

4 Planned to be discarded in 2012, pending approval by German Federal (Social) Insurance Office.

5 Significant reduction or discard planned for 2012.

Sources: German Federal (Social) Insurance Office (Bundesversicherungsamt), National Association of Statutory Health Insurance Funds (GKV-Spitzenverband), information from the sickness funds, company annual reports.

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Almost all sickness funds plan to discard the add-on premiums again in 2012.

Sickness funds charging add-on premiums were already systematically levying higher contributions before the reform. Conversely, those sickness funds which are currently reimbursing premiums were already charging lower contributions in 2008. This can be seen as an indication that it was above all the differences in the struc-

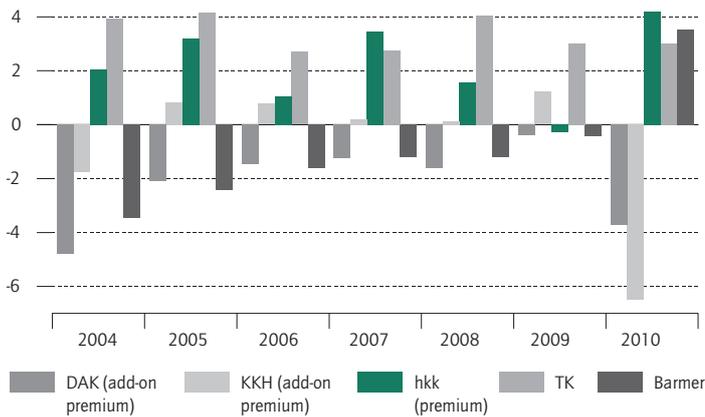
ture of policy holders or in administration costs that led to contribution rate differences (Box 2).

One of the government's primary objectives—to promote price transparency—has been achieved by the reform. At least this applies to price differences between sick-

Figure

Development of the Number of People Insured with Selected Sickness Funds from 2004 to 2010

Difference in number of policy holders compared with previous year, in percent (based on approximate annual averages)



Notes: in order to ensure comparability over the years, mergers are excluded from the calculation of the number of policy holders. The calculation assumes that, after the merger, the switching rates are the same for both merger parties. The number of people insured with hkk was, in part, measured on different appointed dates over the course of a year and is, therefore, only conditionally comparable over time. Sources: annual company reports from the sickness funds, personal inquiries, graph by DIW Berlin.

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DAK and KKH-Allianz lost a large number of members after increasing their add-on premium.

ness funds. The employee’s share of the overall contribution rate, which is currently 15.5 percent of the gross wage up to the contribution assessment threshold, will continue to be shown only on the employee’s payslip. The following empirical analyses demonstrate that the add-on premiums are a significant incentive to switch health plans.

Add-On Premiums Significantly Increase Willingness to Switch Health Plans

The figure shows the development of the number of people insured with five selected sickness funds, which, together, cover a market share of 30 percent of all policy holders.¹² Two of these sickness funds charged add-on premiums of 8 euros per month as of February or March 2010 (DAK and KKH-Allianz); the other two PHI companies refrained from doing this (BARMER-GEK, TK). The figure also shows the development of the number of

¹² Within the framework of this analysis it was not possible to obtain data on the other important market-players such as the number of people insured with the Allgemeine Ortskrankenkasse, (AOK) or with the Betriebskrankenkassen (BKK).

people insured with the hkk, the biggest German sickness fund currently reimbursing contributions.

Even before the establishment of the health care fund and the transition to the new price framing system, there were significant differences in the market performance of the different sickness funds. This meant that the growth in membership of the TK and the hkk was consistently higher than that of the DAK and KKH-Allianz.

The DAK and KKH-Allianz introduced add-on premiums respectively in February and March 2010. In a comparison of the average annual figures between 2009 and 2010, the DAK and KKH-Allianz lost a significant number of members: DAK -3.7 percent and KKH-Allianz -6.5 percent.¹³ Conversely, the hkk, which was reimbursing premiums, gained, on balance, 4.2 percent new members. BARMER-GEK also recorded similar increases in members during this period, whereas TK did not experience any further growth.

¹³ It should be noted that this data only refers to 2010. More recent reports, according to which the DAK has, to date, lost up to ten percent of its members, do not contradict this information.

Table 3

Impact of Contribution Rates, Add-On Premiums and Premium Reimbursements on the Development of the Number of Policy Holders
In percent

Change in number of policy holders	
Contribution rate in percentage points	-3.82**
Add-on premium	-7.61**
Premium reimbursement	0.71
Consideration of time effects	Yes
R ²	0.87
Number of cases	35

Error probabilities: ***under 1 percent, **under 5 percent, *under 10 percent. The dependent variable is the change in the number of policy holders in percent. OLS estimates, standard errors are clustered at the level of the sickness fund. The regression also controls for persistent differences between sickness funds with add-on premiums and premiums on the one hand and the other two sickness funds on the other hand. The data source is the same as for Figure 1, i.e., it is based on annual averages of the number of people insured with the respective sickness funds. Sources: DAK, KKH, BARMER, TK, hkk annual reports, Federal Statistical Office, written information, calculations by DIW Berlin.

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Many policy holders cancel their insurance when they have to pay an add-on premium.

Table 3 shows the results of a simple statistical analysis. The basic data is the same as for Figure 1. However, Table 3 considers the overall market trend of the five sickness funds since 2004; time effects¹⁴ are excluded.

Before the 2009 reform, a 1 percentage point increase in the contribution rate brought about the loss of an average of 4 percent of members (Line 1, Table 3).

As a result of the introduction of the add-on premium, both of the selected sickness funds, DAK and KKH-Allianz, lost, on average, 7.5 percent of their members relative to other sickness funds and to market trends (Line 2, Table 3). The effect of the hkk's premium reimbursements is, at 0.7 percent, positive, but from a statistical point of view no different from zero.

Reform Significantly Increases Consumer Price Sensitivity and Achieves Key Objective

Although, even before the introduction of the health care fund, increases in insurance contributions led to significant losses in members, and, although the sickness funds selected for this study also experienced different growth trends before the health care reform, the following is evident: by increasing price transparency, the reform increased the willingness to switch health plans. Whereas before the introduction of the health care fund a monthly contribution rate increase of 1 percentage point or 13 euros¹⁵ led to a 4 percent loss of members among the 5 sample sickness funds, after the introduction of an add-on premium of 8 euros, the loss of members increased to more than 7.5 percent per month. Relatively speaking, the effect is three times larger: previously an increase in contribution rates of 1 euro per month led to a 0.3 percent loss in members, today, the same increase results in an almost 1 percent loss. Price competition has increased dramatically.

When interpreting these figures, it must be borne in mind that they are based on a limited number of observations and do not represent all SHI companies. The statements refer exclusively to the five selected sickness funds and, regarding the add-on premium, they

¹⁴ Time effects are systematic unobserved annual effects which have the same impact on all sickness funds. In our case study it could, for example, have been the case that all the sickness funds analyzed here launched special advertising campaigns in one specific year. This would have led to an observed increase in members for all sickness funds which would, however, be statistically excluded.

¹⁵ Based on the average gross wage.

only refer to a short-term effect from 2009 to 2010.¹⁶ The mid to long-term effects for individual sickness funds are likely to be less significant as policy holders only had extraordinary rights to cancel their contracts and switch funds within two months of the introduction of the add-on premium.

The significance of the selective aggregate sickness fund data can be verified using estimates based on representative survey data from the Socio-Economic Panel Study (SOEP)¹⁷.

Individual-Level Switching Probability Doubles Due to Add-On Premium

Based on SOEP data, an extensive research study was conducted by the authors of this work. The study confirms the aforementioned findings and conclusions:¹⁸ before the introduction of the health care fund and add-on premiums—when price differences were still expressed as percentage point contribution rate differences—the individual-level switching probability was five percent. This means that, on average, five percent of all paying SHI members switched their health plans every year. Due to the new legal requirement of sickness funds to express the price differences between health plans in absolute euro values, the individual-level switching probability for members paying an add-on premium doubled to more than ten percent. After the reform, members of sickness funds which were not charging add-on premiums had a switching probability of only 3.5 percent. This is not surprising as the prices for this group no longer differ.¹⁹

If the actual subsequent health plan switch is related to the preceding price increases, the difference becomes even more apparent. This can be shown by analyzing those being charged add-on premiums: before the reform, with a monthly increase of ten euros (veiled by the price

¹⁶ Moreover, the add-on premium effect was slightly underestimated because the calculations were based on the average number of policy holders in 2010 whereas the DAK and KKH-Allianz only introduced the add-on premium on 1/2/2010 and 1/3/2010 respectively (Table 2).

¹⁷ The Socio-Economic Panel Study (SOEP) is a longitudinal study that has been carried out annually, sampling the same households and individuals, since 1984. The SOEP gathers information on, inter alia, employment, income, health and choice of sickness fund. See Wagner, G.G., J.R. Frick, and J. Schupp, "The German Socio-Economic Panel Study (SOEP) – Scope, Evolution and Enhancements," *Schmollers Jahrbuch*, 127 (1) (2007), 139–169.

¹⁸ Hendrik Schmitz and Nicolas R. Ziebarth (2011): "In absolute or relative terms?" How framing prices affects the consumer price sensitivity of health plan choice. SOEPpaper 423 (2011), DIW Berlin, available online at: www.diw.de/en/diw_02.c.298577.en/soeppapers.html

¹⁹ The switching probability of members of sickness funds who have to pay an add-on were reimbursed part of their premium was not analyzed. The number of observations is too low.

Box 3

Further Development of the Social Compensation Scheme by the SHI Financing Act 2010

The public debate frequently gives the impression that add-on premiums are socially unacceptable and have a disproportionately negative impact on poor households, in particular. In order to allay this criticism, up until 2010 a hardship provision existed which limited the maximum add-on premium to one percent of monthly income. Income testing was not a requirement for add-on premiums of up to eight euros per month, however, which explains why the majority of add-on premiums are eight euros per month. However, this rule had two undesirable effects. The hardship provision was at the expense of the individual sickness fund which was not able to charge more than one percent of income even if it had greater financial requirements. Moreover, the regulation reduced the policy holder's incentive to switch to a less expensive sickness fund regardless of add-on premiums.

The GKV-FinG rescinded the hardship provision on 1/1/2011. Sickness funds were permitted to charge unlimited add-on premiums. When the average add-on premium exceeds two percent of the individual's assessable income, the policy holder is eligible for tax-financed social compensation. They then receive the difference between the average add-on premium and the two-percent-threshold with their salary or pension payment i.e., their income-dependent contribution is reduced by this difference. The average add-on premium is calculated according to Section 272a, Subsection 1 of the GKV-FinG "based on the difference between the sickness funds' estimated annual expenditure and the health care fund's estimated annual income [...]." Further, Subsection 2 states that: "After analyzing the results presented by of the Council of Experts, the Federal Ministry of Health shall determine the average add-on premium for the subsequent year in euros with the consent of the Federal Ministry of Finance [Bundesministerium der Finanzen]."

The New Social Compensation Scheme is Incentive-Compatible

As a result of the reform, the social compensation scheme was restructured to increase its incentive com-

patibility. As policy holders who receive tax-financed social compensation still have to pay the full add-on premium, it is worth them switching to sickness funds which charge a small or no add-on premium. This is a very unproblematic process and does not conflict with the social acceptability of the add-on premiums. Those insured by sickness funds which only charge a small (or no) add-on premium can even receive social compensation which is higher than the add-on premium itself. On the whole, from the point of view of incentive compatibility, the reform can certainly be regarded as successful. However, the new social compensation scheme is occasionally criticized as being too bureaucratic.

As the health care fund's income for both 2011 and 2012 exceeds the estimated expenditure of the sickness funds, the current average add-on premium is zero euros. No social compensation is planned for 2012 either as the health care fund's income is enough to cover forecast sickness fund expenditure in its entirety.

Example:

Policy holder I:		Policy holder II:	
Income:	1,000 euros	Income:	600 euros
2-percent threshold ¹ :	20 euros	2-percent threshold:	12 euros
Add-on premium charged by sickness fund A:	25 euros	Add-on premium charged by sickness fund B:	6 euros
Share of income:	2.50 %	Share of income:	1.00%

¹ Based on income subject to health insurance contributions.

Scenario A: average add-on premium of 0 euros

Result: no social subsidy is awarded.

Scenario B: average add-on premium of 20 euros

Result: policy holder I receives no social subsidy but could save 19 euros by switching to sickness fund B. Policy holder II receives an eight-euro reimbursement subsidy with their salary or pension payment, independent of the actual add-on premium charged.

framing system) the individual-level switching probability increased by one percentage point. After the reform, this figure increased by six times in comparison. With

a ten euro higher monthly contribution, the switching probability increased by six percentage points.

At the same time, representative SOEP data also shows that it is primarily the young, healthy and childless policy holders who have an above average rate of switching health plans. This is a predictable result of non-contributory family insurance as the costs of an increased premium price work out less per person in this case. A possible explanation as to why older people are less likely to switch health plans could be higher switching costs due to more limited internet access. Alternative explanations refer to habitual effects or brand loyalty resulting from longstanding membership.

Dubious Premium Price Increases at the Beginning of 2011

On January 1, 2011 in the course of the implementation of the Statutory Health Insurance Financing Act (GKV-FinG), the overall uniform contribution rate was increased again to 15.5 percent after having been temporarily reduced to 14.9 percent on July 1, 2009. The official argument given by the German Government to justify the increase, which came into effect at the beginning of 2011, was that the standardized contribution rate was supposedly only previously cut as part of the economic stimulus package.²⁰ However, this is only half the truth as the initial standardized contribution rate which was fixed at 15.5 percent on January 1, 2009 was heavily criticized as being too high. With the increase to 15.5 percent on January 1, 2011 the German government obviously wanted to buy some peace on the health care front until the next General Elections in 2013 and counteract the threat from various sickness funds to introduce add-on premiums. Moreover, this helped the government avoid having to pilot the new social compensation scheme (Box 3).

The fear is that the generous contribution rate increase has thwarted an effective instrument for fostering competition between sickness funds.²¹ The big funds charging add-on premiums such as DAK or KKH-Allianz have already announced that they are going to discard the premium again in spring 2012.²² Almost all the

sickness funds listed in Table 2 intend to drop the add-on premium again during the course of 2012.²³ From a competition point of view, however, it would be preferable if there were greater price differentiation between the sickness funds. The government would be able to achieve this by capping transfers from the health care fund to the sickness funds at 95 or 98 percent, for example.²⁴ Planned transfers for 2012 amount to 185 billion euros, five percent less would be equal to 9.25 billion euros or 15 euros per member per month. This would, however, be a politically brave step as the increasing reserves in the health care fund are already now inciting envy.²⁵ As it is undisputed that SHI expenditure will, however, continue to increase in the future, the growing fund reserves are, at most, a short-term phenomenon.

The GKV-FinG explicitly states that future increases in expenditure may only be covered by add-on premiums and not by increasing the uniform contribution rate or through higher tax subsidies. However, due to the bad

²⁰ See The Federal Ministry of Health (Bundesministerium für Gesundheit, BMG), available online at: www.bmg.bund.de/krankenversicherung/gesundheitsreform/zusatzbeitrag.html

²¹ If the contribution rate were not to be increased by 0.6 percentage points, the health care fund would still have recorded a surplus of approximately two billion euros at the end of 2011 year end due to the stable economic situation and the unexpectedly low sickness fund transfer expenditures. Moreover, the law has stipulated a three billion euro minimum reserve as well as two billion euros for tax-financed social compensation from 2012 to 2014. Federal Ministry of Health (Bundesministerium für Gesundheit, BMG (2011)): press release of 05/09/2011.

²² However, this is yet to be approved by the German Federal (Social) Insurance Office (Bundesversicherungsamt, BVA).

²³ This is primarily due to the good financial position of the SHI sickness funds, which is, for the most part, the result of a specific effect: the health care fund allocates monthly advance payments to the individual sickness funds. These are based on the total SHI expenditure estimate which is carried out in the fall of the previous year by the Council of Experts (Schätzerkreis) of the German Federal (Social) Insurance Office. In the previous year, the Council of Experts forecast an increase in statutory health insurance expenditure of 4.3 percent. However, in reality the increase was only 2.8 percent. This means that the individual sickness funds are currently receiving more money from the health care fund than they actually need to cover their expenditure. The overestimated development of statutory health insurance expenditure can be traced back to the German Government's pharmaceuticals austerity package (Act on the Reform of the Market for Medicinal Products (Gesetz zur Neuordnung des Arzneimittelmarktes, AMNOG)). Pharmaceutical expenditure dropped by 6.3 percent in the first two quarters of 2011 for the first time in many years. German Ministry of Health (Bundesministerium für Gesundheit, BMG (2011)): press release of 05/09/2011, www.bmg.bund.de/ministerium/presse/pressemitteilungen/2011-03/gkv-finanzentwicklung-1-halbjahr-2011.html

²⁴ The 0.3 percent point reduction in the premium price standardized contribution rate which is currently being discussed would not necessarily lead to more add-on premiums, as the health care fund would still have sufficient reserves to completely cover all sickness funds' expenditure. Moreover, this would strengthen the impression that the Government behaves inconsistently, as the overall contribution rate was only codified in Volume 5 of the German Social Insurance Code (SGB V) at the beginning of the year. If the fund were to have a sudden deficit due to an economic slowdown, demands for a further increase in the contribution rate would doubtless not fall on deaf ears.

²⁵ See "Krankenkassen sitzen auf 10 Milliarden Euro," Handelsblatt, September 15, 2011.

reputation of the health care fund and its add-on premiums, this announcement has little credence.²⁶

If the government does not have the courage to cap sickness fund transfers, it should at least urge the financially strong sickness funds to make more use of the premium reimbursement instrument. At year end, some sickness funds had pooled reserves of more than three billion euros.

Conclusion

The primary goal of the health care reform implemented by the Grand Coalition and effective as of 2009 was to make the price differences between the sickness funds more transparent and, thus, more consumer-friendly. This aimed to increase the policy holders' willingness to switch health plans and, thus, foster competition between the sickness funds. This goal was achieved. The standardization of contribution rates led to price differences between health plans being expressed in absolute euro values as add-on and reimbursed premiums. This resulted in a strong increase in the willingness to switch health plans of those policy holders who were being charged add-on premiums. This, in turn, led to both big PHI funds, which had been charging add-on premiums since spring 2010, losing approximately 7.5 percent of their members. Add-on premiums doubled the switching probability of those affected from five to ten percent.

The health care fund reform works by making it much easier for the policy holder to identify the price signal for the add-on premium than with the previous contribution rate differences. This, in turn, significantly increases their willingness to switch health plans. This should also lead to an increase in price competition and efficiency. There exists still potential to decrease costs and increase efficiency maintaining quality of care; for example in efficiency reserves for the sickness funds. One way of ensuring this would be to reduce adminis-

trative costs, where there is potential for savings, without impairing the funds' performance.²⁷

Regrettably, the health care fund and add-on premiums have a rather negative public image and are either vilified as "bureaucratic monsters" or a step on the slippery slope into "GDR-style state-controlled socialized medicine". In response, the government should be defending its chosen path with greater conviction and, moreover, should refrain from further hampering the add-on premium instrument with more increases in the overall contribution rate. In order to prevent the competition between insurance companies coming to a halt, the government should ensure that, in 2012 and in the more distant future, a significant price differentiation is maintained between the sickness funds. This can be made possible through greater premium reimbursements by the most financially strong sickness funds.

Efficiency in the market reserves could be further increased if there were greater differences between the sickness funds in terms of the range of benefits offered. If, for example—in a strictly legally regulated way—the funds had the option of selective contracting—entering into contracts with individual hospitals covering specific services—, they would be able to pass on the efficiency pressure exerted by the health care fund to the service provider. The sickness funds would then, for example, have the option of sending their policy holders who have been waiting for operations for some time, selectively to those hospitals providing the best quality or most efficient care.²⁸ The present price competition could then develop into a real quality competition—to the benefit of the policy holder. The willingness of the policy holders to select the sickness fund that is most suited to them is essential to successful competition. Policy holders have proven over the last two years that they are increasingly prepared to do this.

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²⁶ Moreover, there are, at least in part, inconsistencies between these government statements and the current wording of the SGB V. It implies that total sickness fund expenditure will be equalized in compliance with the health care fund's provisions. This would mean that the fund's ability to cover all health care expenditure in the long-term is (significantly) below 100 percent. Simultaneously, a minimum reserve (Section 271, 2), reserves for tax-financed social compensation, and tax subsidies (Sections 221, 221a, 221b) are stipulated by law. Section 271, Subsection 3 states: "If the liquidity reserve is not sufficient to carry out all transfers, the Government shall provide the health care fund with an interest-free liquidity loan to the sum of the missing amount. The loan shall be paid back during the given fiscal year. Repayment by year end shall be ensured using appropriate measures." It remains unclear what is meant by "appropriate measures".

²⁷ See RWI and ADMED, *Einsparpotenziale bei den Verwaltungskosten gesetzlicher Krankenversicherungen* (2010). The authors estimate that the sickness funds have a possible administrative cost saving potential of a total of 1.4 billion euros per annum.

²⁸ Of course, emergencies must be legally codified exceptions and, particularly in rural regions, the accessibility of the hospital must be guaranteed.



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