

Greß, Stefan

Working Paper

Competition in Social Health Insurance: A Three-Country Comparison

Diskussionsbeitrag, No. 135

Provided in Cooperation with:

University of Duisburg-Essen, Institute of Business and Economic Studie (IBES)

Suggested Citation: Greß, Stefan (2004) : Competition in Social Health Insurance: A Three-Country Comparison, Diskussionsbeitrag, No. 135, Universität Duisburg-Essen, Fachbereich Wirtschaftswissenschaften, Essen

This Version is available at:

<https://hdl.handle.net/10419/23140>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

Diskussionsbeiträge aus dem
Fachbereich Wirtschaftswissenschaften
Universität Duisburg-Essen
Campus Essen

Nr. 135

Juli 2004

Competition in Social Health Insurance: A Three-Country
Comparison

Greß, Stefan

Content

- Abstract 3
- 1. Introduction 4
- 2. Incentives for Competition: Risk Adjustment 5
- 3. Incentives for Competition: Consumer Choice..... 10
- 4. Instruments for Competition 15
- 5. Effects of Competition 19
- 6. References 22
- Discussion Papers since 1995 25

Tables

- Table 1: Incentives for Competition: Risk Adjustment 9
- Table 2: Incentives for Competition: Consumer Choice 14
- Table 3: Instruments for Competition..... 18
- Table 4: Effects of Competition..... 21

Abstract

The objectives guiding health care reforms in Germany, Switzerland and the Netherlands were to increase efficiency and consumer satisfaction in the provision of health care services. This paper sums up incentives and instruments of competition for consumers, sickness funds and health care providers in Germany, Switzerland and the Netherlands which are necessary to fulfill these objectives. Incentives for risk selection of sickness funds are high in Germany and Switzerland while they are low in the Netherlands. Incentives for consumer choice are also highest in Germany and Switzerland. In all three countries sickness funds have only few instruments for competition. The effects of competition have been disappointing so far. The objectives of competitive health care reforms can only be achieved if incentives and instruments for competition consistently support competitive behavior of market actors.

1. Introduction

The objectives guiding health care reforms in Germany, Switzerland and the Netherlands leading towards more competition in social health insurance have been quite similar. These objectives can be summarized as efficiency and consumer satisfaction in the provision of health care services while at the same time maintaining solidarity of health care financing and effective containment of health care costs (van de Ven, Beck et al. 2003). This paper sums up incentives and instruments of competition for consumers, sickness funds and health care providers in Germany, Switzerland and the Netherlands which are necessary to fulfill these objectives.

Section one assesses whether incentives for risk selection of sickness funds are in fact neutralized by the installation of an effective risk adjustment mechanism. If sickness funds have sufficient incentives for risk selection left they are more likely to focus their business strategies on preferred risk selection than on managing care. Section two analyzes whether consumers have incentives for mobility between sickness funds. If consumers only have little incentives for consumer mobility, sickness funds will not be induced answer consumer preferences – especially with regard to more efficient provision of health care services. Section three explores instruments for individual sickness funds to influence the provision of health care services. Individual sickness funds need to develop innovative arrangements of health care services. Otherwise health care providers will not be induced to provide services more efficiently. Section four evaluates the outcome of competition in social health insurance in Germany, the Netherlands and Switzerland so far.

2. Incentives for Competition: Risk Adjustment

One of the most important prerequisites for competition in social health insurance to be successful – i.e. fulfilling the objectives mentioned before – is an effective mechanism for risk adjustment. Since there are no risk-rated premiums in any of the three countries, sickness funds without risk adjustment have ample incentives for the selection of risks. In case of no or even imperfect risk adjustment “sickness funds have financial incentives to select the predictably profitable consumers, i.e. clients for whom the sickness fund’s revenue (far) exceeds the actuarially predicted expenses. This selection and the resulting market segmentation may seriously threaten solidarity, efficiency and quality of care (van de Ven, Beck et al. 2003).” In other words: if risk adjustment is absent or incomplete, it is more profitable for sickness funds to select risks than to manage health care services. This behavior may be rational from the viewpoint of sickness funds. However, it definitely contradicts the objectives of the health care reforms mentioned above.

Systematically, three adverse effects of incentives to select risks can be separated (van de Ven, van Vliet et al. 2004). First and most important sickness funds face a disincentive to react to the preferences of bad risks. As a consequence, consumers for whom the sickness funds incur losses due to incomplete risk adjustment will receive poor service from sickness funds. More important, they might also receive poor quality of health care services. It is rational for sickness funds to provide good service for profitable i.e. favorable risks. Moreover, it is also rational for sickness funds to provide bad service for unprofitable i.e. unfavorable risks since investments in preferred risk selection (“cream skimming”) have higher returns than investments in improving the efficiency of health care services. From a public health point of view these disincentives are fatal, since unfavorable risks are usually patients that are chronically ill and need high-quality services. However, if risk adjustment does not neutralize incentives for risk selection they will offer bad-quality services. Neither sickness funds nor health care providers have incentives to gain a reputation for treating the chronically ill efficiently and effectively (van de Ven and Ellis 2000).

Second, if risk-selection sickness funds successfully attract favorable risks their strategy will eventually lead to market segmentation. Unfavorable risks (high risk patients) will be members of sickness funds with high contributions. Conversely, favorable risks (low risk patients) will be members of sickness funds with low contributions. This situation is not

compatible with the idea of solidarity in social health insurance countries since in fact it paves the way for risk related premiums.

Third, preferred risk selection strategies that are highly rational from an individual sickness fund's point of view create welfare losses for society. Investments for the identification of favorable risks (e.g. information technology) and investments for the attraction of favorable risks and the deterrence of unfavorable risks (e.g. resources used for developing effective marketing strategies) do not create any societal gains. Therefore, resources spent on preferred risk selection represent a welfare loss – even if resources spent by sickness funds for product innovation and contract design to improve efficiency of health care services that also attract favorable risks are not considered a welfare loss (van de Ven and Ellis 2000). Moreover, preferred risk selection strategies may create an unstable market if some sickness funds refrain from selecting risks. These funds may be forced to declare bankruptcy due to adverse selection of risks. This consequence also represents a welfare loss to society.

In order to assess the extent of which incentives for risk selection are neutralized in Germany, the Netherlands and Switzerland, the following questions need to be answered:

Does the relevant country use morbidity-based risk adjusters for the risk adjustment mechanism?

Research is unanimous that adjusters based on sex and age (demographic adjusters) will predict actual health care expenditures of individuals quite badly (van de Ven and Ellis 2000). If the risk adjustment formula takes into account information of prior diagnosis and/or prior costs, the risk adjustment formula predicts actual health care expenses of individuals more accurately. Thus, it neutralizes incentives of sickness funds to select risks more effectively. The difference between actuarially predicted expenses and revenue from contributions and the risk adjustment mechanism is much smaller.

Does the relevant country have a risk adjustment mechanism that is open-ended?

If the risk adjustment mechanism is not open-ended, the risk adjustment mechanism will neutralize incentives for risk selection for only a limited period of time. After risk adjustment expires, sickness funds will face high incentives for preferred risk selection and high disincentives for improving the efficiency of care for high-risk consumers.

Does the relevant country have mandatory risk sharing?

There are two reasons for the introduction of mandatory risk sharing. First, the risk adjustment mechanism is incomplete and does not neutralize incentives for risk selection

effectively. Second, high-risk consumers incurring very high expenses (e.g. HIV/AIDS patients) may induce losses for sickness funds even in the case of morbidity-based risk adjustment since the formula does not sufficiently adjust outlier risks with very high expenses. Mandatory risk sharing implies that sickness funds are reimbursed retrospectively for some of the costs of some of their (high-risk) members. Although risk sharing reduces incentives for risk selection it also reduces incentives for efficiency (van de Ven and Ellis 2000). Therefore, risk sharing usually is effective only above a threshold of individual health care expenses. Moreover, it does not reimburse all expenses above the threshold. Several forms of risk sharing can be discerned (van de Ven, Beck et al. 2003):

- *Proportional* risk sharing: sickness funds are reimbursed retrospectively a fixed percentage of all its costs;
- *Outlier* risk sharing: sickness funds are reimbursed retrospectively a certain percentage of the expenses per enrollee only as far as they are above a certain annual threshold;
- Risk sharing *for high risks*: each sickness fund is allowed to *ex-ante* designate a specified percentage of its members for whom they are reimbursed retrospectively;
- *Condition-specific* risk sharing: sickness funds are reimbursed retrospectively with some *prospectively* determined payment dependent on the occurrence of certain medical problems.

Risk adjustment mechanisms are implemented in all three countries (see table 1). Risk adjustment differs widely with regard to the adjusters used in the risk adjustment formula. The mechanism is most advanced in the Netherlands. It is based mostly on two morbidity-based adjusters that appear to be both “effective and complementary” (van de Ven, van Vliet et al. 2004: 45). Diagnostic Cost Groups (DCGs) are computed from hospital diagnoses. Pharmacy-based Cost Groups (PCGs) are computed from outpatient prescription drugs. The combination of these two risk adjusters is able to predict almost 17 percent of total expenses. Demographic adjusters based on age and sex are able to predict only a maximum of 5 to 7 percent of total expenses (van de Ven, van Vliet et al. 2004). It is important to note that only 25 to 30 percent of total expenses can be predicted at all in prospective risk adjustment models (van de Ven and Ellis 2000). 70 to 75 percent of health care expenses are random and therefore cannot be predicted – neither by the risk adjustment mechanism nor by information available to sickness funds. Therefore, this share of total expenses is irrelevant for neutralizing incentives for risk selection. Although the predictive accuracy of the Dutch risk adjustment mechanism is high, it does not completely neutralize incentives for risk selection. For the 10 percent of patients with

the highest expenses in year t-1 sickness funds still incur average predicted losses of approx. 1,000 € in year t. This compared to average predicted losses of approx. 2,500 € if there was no risk adjustment mechanism at all (van de Ven, van Vliet et al. 2004).

Neither Germany nor Switzerland use morbidity-based adjusters for risk adjustment. In Germany risk adjustment is based on age, sex, entitlement for disability pensions, entitlement for sick pay, income, and registration in a certified disease management programme. The predictive accuracy of this risk adjustment mechanism is definitely smaller than that of the risk adjustment model in the Netherlands and still leaves ample incentives for sickness funds to make risk selection worthwhile (Behrend, Greß et al. 2004). This has also been recognized by the legislator. Government has decided to base the risk adjustment mechanism in Germany on morbidity-based adjusters from 2007. The decision about which adjuster will be used has not been made yet.

Risk adjustment in Switzerland is only based on sex and age. Therefore, incentives for risk selection of sickness funds are large. Although health economists in Switzerland are demanding morbidity-based risk adjusters in order to decrease incentives for risk selection (Spycher 1999; Beck, Spycher et al. 2003) the Swiss legislator is very reluctant to fulfill these demands. Moreover, Switzerland is also the only country where risk adjustment is not open-ended. According to Beck, Spycher et al. (2003) the legislator expected high mobility between sickness funds of both healthy and sick insured as soon as open enrolment was introduced. According to the same source the legislator argued that the obligation to accept every applicant would be strong enough to prevent preferred risk selection. It was expected that consumer mobility was high and would lead to convergence of risk structures of sickness funds. Therefore, the government limited risk adjustment to a period of thirteen years. At the end of this period (2005) it was expected that high consumer mobility prevents preferred risk selection from being profitable at all (Beck, Spycher et al. 2003). So far it is unclear whether the risk adjustment mechanism will be extended. If risk adjustment was abolished in Switzerland incentives for risk selection of sickness funds would be increased even further.

The Netherlands are the only country that applies a combination of outlier risk-sharing and proportional risk sharing to prevent selection. The degree of risk sharing depends on the health care sector. Outlier risk sharing is applied for outpatient care variable hospital costs only. As a consequence, sickness funds are reimbursed 90 percent of costs in these health care sectors of individuals incurring costs of more than 4,500 Euros. Proportional risk sharing is applied for fixed hospital costs (95 percent), specialist care (70 percent) and variable hospital

costs (25 percent) (Lamers, van Vliet et al. 2003). Since 1993, the degree of risk sharing has been lowered gradually – parallel to the improvement of the risk adjustment mechanism. As a consequence, the sickness funds’ financial risk has increased gradually from 3 percent in 1993 to 53 percent in 2004 (van de Ven, van Vliet et al. 2004). While, in Switzerland, there is no risk sharing at all, in Germany the legislator has introduced outlier risk sharing in 2002. Sickness funds are reimbursed retrospectively 60 percent of costs for individual members exceeding 20.450 €. This outlier risk sharing will be reformed after the introduction of morbidity-based risk adjustment in 2007. There is no mandatory proportional risk sharing in Germany.

The last row of table 1 sums up the remaining incentives for risk selection in Germany, the Netherlands and Switzerland. The combination of open-ended morbidity-based risk adjustment, outlier risk sharing and proportional risk sharing leaves only few incentives for preferred risk selection in the Netherlands. Incentives for risk selection in Germany are much higher. Risk adjustment does not include morbidity-based risk adjusters. Although the legislator has recently introduced outlier risk sharing, the threshold for reimbursements is very high. While in Germany the legislator has at least decided to introduce morbidity-based in risk adjustment in 2007, there are no similar plans in Switzerland. Moreover, risk adjustment in Switzerland is not open-ended. Accordingly, risk selection for sickness funds in Germany and Switzerland is less profitable than it would be in a situation without risk adjustment at all. However, it is still profitable enough to make selection strategies worthwhile. This is not the case in the Netherlands. Even if sickness funds may have small financial incentives for the selection of favorable risks, they also have to consider the costs for pursuing these strategies. These costs consist not only of costs for identifying and attracting favorable risks but also consist of negative public relation effects if these strategies become public knowledge.

Table 1: Incentives for Competition: Risk Adjustment

	Germany	Netherlands	Switzerland
Morbidity-based risk adjusters	-	+	-
Open-ended risk adjustment	+	+	-
Proportional risk-sharing	-	+	-
Outlier risk-sharing	+	+	-
Remaining incentives for risk selection	Medium/High	Few	High

+ Yes; - No

3. Incentives for Competition: Consumer Choice

The second major prerequisite for competition to be successful is free consumer choice. Consumers need to have an exit option in order to search successfully for more efficient sickness funds: "...the exit option is widely held to be uniquely powerful: by inflicting revenue losses on delinquent management, exit is expected to induce that 'wonderful concentration of the mind' akin to the one Samuel Johnson attributed to the prospect of being hanged (Hirschmann 1970: 21)." Free choice of sickness funds has been established in all three countries. However, the principal reasons behind the introduction of free choice have been slightly different in Germany, the Netherlands and Switzerland.

Prior to the introduction of free choice, sickness funds in Germany charged widely varying income-related contribution rates (Wysong and Abel 1996). Sickness funds were fully at risk for all non-elderly enrolees (younger than 65) and were not allowed to calculate risk-rated premiums. Hence, the level of contribution rates largely depended on the risk structure of the enrolled members. Moreover, most of the insured persons in Germany (mostly blue-collar employees with an income below the income ceiling) could not choose their sickness fund. On average this group of enrolees had to pay much higher contribution rates than others for the same standardized benefits package. However, they were not allowed to change this situation by switching to a less expensive sickness fund – while other enrolees were allowed to do so (mostly white-collar with an income above the income ceiling). In order to create equal opportunities to choose sickness funds, in the beginning of 1996 sickness funds were required to have annual (since 2002 monthly) open enrolment periods during which they had to enrol any applicant in the region (state) they were active in. It is important to note that only a secondary reason behind the introduction of freedom of choice in Germany was to create more competition among sickness funds in order to improve efficiency (Reiners 1993).

In contrast, the reforms of Dutch social health insurance have been based on the model of regulated or managed competition (Enthoven 1978; Enthoven 1988). Free choice of consumers was intended to induce sickness funds to contract selectively with efficient providers and to purchase efficient health services on behalf of their enrolees (Schut, Greß et al. 2003). Before the reforms most sickness funds had a regional monopoly and the contribution rates of funds did not differ.

In Switzerland the motivation of the legislator to introduce free choice of sickness funds was twofold. In the pre-reform situation sickness funds were not obligated to enrol every

applicant. This was considered to be unfair, since unfavorable risks had problems to get access to health insurance. Second, free choice for consumers was also considered to increase the pressure on sickness funds to increase efficiency (Greß, Kocher et al. 2004). In all three countries, free choice for consumers was accompanied by the introduction of some kind of risk adjustment mechanism (see section 1).

In order to assess the incentives for free choice of consumers in Germany, the Netherlands and Switzerland, the following questions need to be answered:

Is there open enrolment for consumers?

Open enrolment implies that consumers are able to switch sickness funds and each sickness fund must accept all applicants. Usually, there is an open enrolment period during which consumers can switch to another fund. Open enrolment is the *conditio sine qua non* for free consumer choice.

Is there an exceptional right to switch after an increase of contributions?

Incentives for consumer choice are increased if consumers may change not only during the usual open enrolment period but also immediately after their sickness fund increases contributions.

Do consumers bear the full effect of lower (or higher) contributions?

Incentives for consumer choice are enhanced if consumers can realize the full benefits of lower contributions after switching sickness funds. If this is not the case, consumers may refrain from switching although they might do so if they were able to collect the full benefits of switching.

Do employers have any interest in the switching decisions of their employees?

Incentives for consumer choice are increased if employers are also interested in lower contribution rates. They might put pressure on their employees to switch to lower priced sickness funds.

Are there substantial price differences between sickness funds?

Incentives for consumer choice are enhanced if the benefits of switching (lower contributions) are substantial enough to outweigh the costs of switching (information costs, search costs, administration costs).

Is there a strict separation between social (basic) health insurance and private (supplementary) health insurance?

Incentives for consumer choice are increased if there is a strict separation between basic health insurance and social health insurance (Wasem and Greß 2004). Sickness funds may link basic and supplementary insurance in a way that consumers are unable to realize the difference between both insurance products. Moreover, funds may also use supplementary health insurance to gather information about the risk status of applicants in basic health insurance. Therefore, sickness funds can also use supplementary health insurance as a tool for risk selection – particularly if incentives for risk selection are not neutralized effectively.

Free consumer choice of sickness funds has been established in Germany, the Netherlands and Switzerland. However, incentives for consumer choice still vary (see table 2). Open enrolment has been established in all countries. While there are open enrolment periods in the Netherlands and Switzerland at the end of the year, consumers in Germany may switch at the end of each month. However, they are only entitled to do so after a minimum contract period of 18 months. Moreover, not all sickness funds in Germany have to accept all applicants. Company based sickness funds (*BKK*) and craft based funds (*IKK*) may restrict their membership to employees of the respective company or the respective craft. The market share of these funds is decreasing rapidly. If *BKK*-funds or *IKK*-funds decide to extend their membership beyond their respective company or craft they have to introduce open enrolment. Moreover, this decision is irreversible. In all three countries consumers have the right to switch immediately after their sickness fund has raised contributions.

It depends on the manner of contributions' calculation whether consumers can realize the full benefits of switching to a lower-priced sickness fund or not. In Switzerland, contributions are community rated and independent of income. The states (cantons) subsidize enrollee if their income is low. Therefore, in general, consumers can realize the full benefits of switching to another sickness fund. However, subsidies for low-income enrollees by the states usually reimburse the contributions actually paid by consumers (Balthasar 2001). Thus, low-income consumers have little incentives to switch to lower priced sickness funds, because they cannot gain any pecuniary benefits by doing so.

In the Netherlands contributions consist of two parts. The first part is an income dependent contribution paid by employers and employees that is uniform for all sickness funds. The second part of the contribution is community rated, differs between sickness funds and is financed only by the insured. Therefore, consumers are able to realize the full benefits of switching to a lower priced sickness fund in the Netherlands. This is not the case in Germany where employers and employee pay 50 percent each of an income-dependent contribution that

differs between sickness funds. If consumers switch to a lower priced sickness fund, they realize only 50 percent of the pecuniary benefits. However, German employers have strong incentives to influence the switching decision of consumers. This may enhance consumer mobility if price is the only parameter for competition. However, if consumers prefer to pay more for better quality services there is a conflict between consumer preferences and the incentives for employers to influence consumer choice. Employers have no incentives to influence consumer choice in Switzerland and in the Netherlands. In Switzerland, the financing of health insurance is independent of employment. In the Netherlands, the income-dependent part of the contribution is uniform for all sickness funds.

Price differences between sickness funds in Germany, Switzerland and the Netherlands reflect differences in efficiency as well as differences in the risk structure of their members. Absolute price differences – which are most important for consumers – are low in the Netherlands (Lamers, van Vliet et al. 2003) and high in Switzerland (Beck, Spycher et al. 2003). In Germany, absolute price differences are dependent on income. High-income consumers will realize higher savings by switching to a lower priced fund than low-income consumers. However, in Germany, incentives to switch are substantial even for low-income consumers. Price differences predominantly reflect differences in the risk structure of sickness funds. Since risk adjustment does not neutralize incentives for risk selection effectively so far, price differences prevail and constitute powerful incentives for consumers to switch. Therefore, both in Germany and Switzerland price differences between sickness funds should be substantial enough to offset the costs of switching for consumers. This is less obvious in the Netherlands. Price differences are smaller, since they do not reflect different risk structures of sickness funds as strongly as in Germany and Switzerland.

In the Netherlands and in Switzerland there is no strict separation between social (basic) health insurance and private (supplementary) health insurance. Although different legal entities are responsible for providing basic and supplementary health insurance in both countries, the difference is not obvious to consumers. In the perception of consumers, the borderline between the two insurance products blurs. In Germany the borderline is much clearer. Although sickness funds are allowed to cooperate with private health insurers that offer supplementary insurance German consumers are in a position to distinguish between basic and supplementary health insurance much clearer than in Switzerland and the Netherlands.

The last row of table 2 sums up the incentives for consumer choice in Germany, the Netherlands and Switzerland. Although there is open enrolment and an extraordinary switching right for consumers in case of an increase of contributions in all countries, a more thorough analysis reveals that some important differences between the three countries prevail. Although German consumers do not realize the full benefits of switching to a lower priced fund, incentives for consumer choice are high. This is mostly due to substantial price differences between sickness funds that should be sufficient to offset switching costs even for low-income consumers. Moreover, incentives for consumer mobility are enhanced by a strict separation of basic and supplementary health insurance and strong incentives for employers to influence switching decisions of employees. Compared to Germany, incentives for consumer mobility are less high in Switzerland. There are also substantial price differences between sickness funds. Moreover, most consumers realize the full benefits of switching to a lower priced sickness fund since contributions are community-rated. However, low-income consumers have no incentives to switch. Furthermore, incentives for consumer mobility in Switzerland and the Netherlands are decreased by the tie-in of basic and supplementary health insurance. Incentives for consumer mobility in the Netherlands are rather moderate, since price differences between sickness funds may be not sufficient to offset switching costs. However, in contrast to Germany and Switzerland, all consumers are able to realize the full benefits of switching.

Table 2: Incentives for Competition: Consumer Choice

	Germany	Netherlands	Switzerland
Open enrolment	+	+	+
Switching right for consumers after increase of contributions	+	+	+
Consumers realize full benefits of lower contributions	-	+	(+)
Incentives for employers to influence switching decisions	+	-	-
Substantial price differences between sickness funds	+	-	+
Strict separation of basic and supplementary health insurance	+	-	-
Incentives for consumer choice	High	Moderate	Moderate/High

+ Yes; - No; (+) Yes. Majority of the population

4. Instruments for Competition

Even if there were little incentives for sickness funds to select risks in a competitive environment and incentives for consumer choice were high, sickness funds would only be able to influence the efficiency of the provision of health care service if they had sufficient instruments do so. Otherwise, “...under competition dissatisfaction takes the form of ineffective flitting back and forth of groups of consumers from one deteriorating firm to another without any firm getting a signal that something has gone awry (Hirschmann 1970: 26).” In order to avoid this “ineffective flitting back and forth of consumers” sickness funds need to be able to develop innovative contractual arrangements with health care providers that take into account consumers’ preferences. They will only do so if they are able to gain competitive advantages in the sickness funds market. Accordingly, sickness funds must be able to decide with which providers they want to conclude a contract and must be able to negotiate freely about the content of those contracts.

Accordingly, in order to assess the instruments for competition in Germany, the Netherlands and Switzerland, the following questions need to be answered:

Are sickness funds able to contract selectively with health care providers?

If sickness funds are not able to contract selectively with health care providers they will not be able to gain competitive advantages. The potential for developing innovative arrangements for the provision of health care will be rather small when sickness funds are obliged to contract collectively – i.e. with every willing licensed health care provider.

Are sickness funds able to negotiate prices and budgets freely with health care providers?

Even if sickness funds are able to contract selectively, contractual freedom can be diminished by public regulation intended to contain costs. However, public regulation to contain costs (restrictions on prices, budgets and other contract parameters) may severely restrict the contractual freedom of sickness funds and health care providers.

Are sickness funds able to influence hospital planning?

Traditionally, in many countries hospital planning is considered to be a task of either central or local government. This is the case not only in NHS-like tax-financed countries such as the United Kingdom or Sweden but also in many social health insurance countries. As a consequence, government decides on hospital planning while sickness funds need to finance

at least the running costs of those hospitals. Moreover, the rationale to build and maintain hospitals may be different concerning governments and sickness funds.

Instruments for competition for sickness funds are limited in Germany, the Netherlands and Switzerland (see table 3). There is some opportunity for sickness funds to contract selectively with health care providers in all three countries. However, these opportunities are very limited. Only in the Netherlands selective contracting is the legal norm for contracts between sickness funds and ambulatory care providers (i.e. general practitioners, specialists and physiotherapists). As a consequence, sickness funds are legally allowed to choose providers of ambulatory care. However, collective contracting prevails over contracting between sickness funds and hospitals. In contrast to the Netherlands, collective contracting is still the legal norm in Germany and in Switzerland for ambulatory care as well as for hospital care. Yet there are exceptions from this norm in both countries. In Germany, sickness funds are allowed to contract selectively with general practitioners in order to offer gatekeeping models for their insured. Moreover, the legislator recently earmarked one percent of overall budgets of ambulatory care and hospital care for integrated care projects. Sickness funds are free to determine their contractual partners for these projects. In Switzerland, sickness funds are only allowed to contract selectively with health care providers if their insured enrol in managed care tariffs.

Sickness funds and health care providers are only free to negotiate prices and budgets of contracts in Switzerland. This is true for ambulatory care and hospital care as well. However, if sickness funds intend to raise their contributions they need to get approval from a governmental agency. In the Netherlands, a governmental agency determines maximum tariffs for prices in ambulatory care and hospital care. Moreover, budgets for hospitals are fixed ex ante. Thus, there is little leeway for the contractual partners. There is a similar situation in Germany. Sickness funds and health care providers determine prices and budgets on a collective level. In fact, the legislator has set maximum prices by determining that budgets of providers may not grow faster than the income of sickness funds. This restriction does not apply to integrated care projects. The respective legislators have implemented approval of contribution increases (Switzerland), maximum prices (Netherlands) and restricted growth of budgets (Germany) as strategies to contain raising health care costs.

There are little differences with regard to hospital planning in Germany, the Netherlands and in Switzerland. Individual sickness funds have no direct influence on hospital planning in any of the three countries. Regional governments (Germany, Switzerland) or the central

government (Netherlands) decide about the planning, building and maintaining of hospitals. In Germany and in Switzerland regional governments have to finance fixed hospital costs (building and maintenance) while sickness funds have to finance variable hospital costs. In the Netherlands, sickness funds have to finance all hospital costs. Since they cannot influence fixed hospital costs at all, proportional risk sharing reimburses 95 percent of all fixed hospital costs.

The last row of table 3 sums up the instruments for competition of individual sickness funds in Germany, the Netherlands and in Switzerland. In all three countries, individual sickness funds have only few instruments for competition. The differences between the countries reveal two different approaches of the legislator to enhance the ability of individual sickness funds to contract selectively. In Germany and Switzerland, the norm of selective contracts prevails. However, the legislator has introduced exceptions from the norm in both countries. Sickness funds in Switzerland may contract selectively with providers in order to offer their insured managed care tariffs. In Germany, sickness funds are also allowed to do so in order to establish integrated care projects. In the Netherlands, the legislator chose to follow a different approach by changing the norm of contracting in one health care sector (ambulatory care). However, the norm did not change in other health care sectors. Therefore, individual sickness funds have some instruments for competition in all three countries, but severe restrictions still apply.

Table 3: Instruments for Competition

		Germany	Netherlands	Switzerland
Selective contracting...	... with individual providers of ambulatory care	(-)	+	(-)
	... individual hospitals	(-)	-	(-)
Prices and budgets can be freely negotiated between individual sickness funds and individual providers of ambulatory care	(-)	-	+
	... individual hospitals	(-)	-	+
Can an individual sickness fund influence hospital planning?		-	-	-
Instruments for competition		Few	Few	Few

+ Yes; - No; (-) No. Exceptions under specified circumstances are possible.

5. Effects of Competition

The analysis so far has assessed *incentives and instruments* for competition in social health insurance in Germany, the Netherlands and in Switzerland. The *effects of competition* are measured by evaluating whether the basic assumptions of health care reforms in those countries have been fulfilled in practice. Health care reforms in Germany, Switzerland and the Netherlands have been based on three assumptions.

1. Sickness funds compete with each other via price and quality of services without having permanent monopoly power.
2. Consumers have free choice between insurers and exercise their right to choose – or at least threaten to do so.
3. Non-effective and/or non-efficient providers are induced by insurers to work more effectively and efficiently and provide good quality.

The first assumption presumes that sickness funds compete with each other via price and quality of services without having permanent monopoly power. This also implies that it is more profitable for sickness funds to manage health care services than to select risks. In Switzerland and Germany the second part of this assumption clearly does not hold in practice (see table 4). While sickness funds in Switzerland apply risk selection strategies actively and openly (Beck 2003), German sickness funds do so more diffidently by selective marketing and other “weak” selection strategies. However, in both countries risk selection is still profitable for sickness funds because of incomplete risk adjustment mechanisms – in Switzerland more than in Germany (van de Ven, Beck et al. 2003). There is no evidence of risk selection strategies in the Netherlands (van de Ven, van Vliet et al. 2004). Therefore, the prevalence of selection strategies in Germany, the Netherlands and in Switzerland confirms the analysis of incentives for risk selections (see section 1).

While it is not very profitable for sickness funds in the Netherlands to apply risk selection strategies, this does not mean that sickness funds in the Netherlands in fact manage health care services actively. Instead, the main instrument of competition of Dutch sickness funds is supplementary insurance (Greß and Groenewegen 2004). Although legally sickness funds are not allowed to offer supplementary insurance they do so via private subsidiaries. Consumers are unable to differentiate between these different legal entities. Sickness funds link basic health insurance and supplementary health insurance in order to attract new enrolees. Since

they are allowed to realize profits from supplementary health insurance, sickness funds in the Netherlands focus their business strategies on this field instead of managing health care services in basic health insurance. This is also true for sickness funds in Switzerland. However, the primary instrument of competition of sickness funds in Switzerland is risk selection (Kocher, Greß et al. 2002). Since consumers are well informed and price differences are considerable in Germany, the contribution rate is the primary instrument of competition of sickness funds in this country (Greß 2002a). However, price differences do not reflect different levels of efficiency in the provision of health care services but mostly differences in risk structure of sickness funds (Jacobs, Reschke et al. 2002).

Formally consumers indeed have free choice in all three countries. Incentives to exercise their right to do so are high in Germany and Switzerland and moderate in the Netherlands (see section 2). Consumers in fact are very sensitive to price differences in Germany, less so in Switzerland and the Netherlands (Beck, Spycher et al. 2003; Schut, Greß et al. 2003). It is quite surprising that consumers in Switzerland are very reluctant to switch to lower priced sickness funds, since incentives to switch are high. This might be partly explained by bad consumer information (Beck, Spycher et al. 2003). However, it is not surprising that consumer price sensitivity is higher in Germany than in the Netherlands. This finding is in line with the analysis of incentives for consumer mobility in Germany and the Netherlands. Unfortunately, the analysis of incentives for consumer mobility does not explain why healthy consumers switch more often than less healthy consumers in all three countries – in Germany and Switzerland more than in the Netherlands (Greß, Groenewegen et al. 2002). Since sickness funds do not calculate risk-related premiums, price differences are the same for healthy and less healthy consumers. Moreover, open enrolment applies to all consumers. Different switching behavior of different risk groups therefore points to risk selection of sickness funds.

The third assumption implies that non-effective and/or non-efficient health care providers are induced by sickness funds to work more effectively and efficiently and provide good quality. So far in all three countries there is very little evidence that this assumption holds. This is partly due to the fact that individual sickness funds lack instruments to induce providers to work more effectively and more efficiently (see section 3). However, this analysis has also shown that in all three countries there are at least some opportunities for individual sickness funds to manage health care services actively. German sickness funds are allowed to initiate managed care projects. Swiss sickness funds may offer managed care products and Dutch sickness funds may contract selectively with individual general practitioners and specialists.

Sickness funds so far have not used these opportunities extensively (Greß 2002b; Greß 2002a; Greß, Kocher et al. 2004). This is mostly due to the fact that risk selection is far more profitable than managing care. In Germany and Switzerland it may even be hazardous for sickness funds to offer innovative health care arrangements, since these innovations may attract more bad risks and this in turn will decrease the financial position of these sickness funds even further. Moreover, the health care system in all three countries is still dominated by governmental regulations in order to contain health care costs. Sickness funds have little leeway to escape regulations of prices and capacities. Therefore, efficiency and effectiveness of health care services has not improved for consumers. Accordingly, the ultimate objectives of competitive health care reforms in Germany, Switzerland and the Netherlands still need to be achieved. These objectives of competitive health care reforms can only be reached if incentives and instruments for competition consistently support competitive behavior of market actors.

Table 4: Effects of Competition

		Germany	Netherlands	Switzerland
Assumption I	Primary instrument of competition for sickness funds	Contribution rate	Supplementary insurance	Risk selection
	Risk selection of health insurers	High	No evidence	Very high
Assumption II	Consumer choice	High	Low	Moderate
Assumption III	Improvement of cost/quality ratio of health care services	No evidence	No evidence	Little evidence

6. References

- Balthasar A (2001) Die sozialpolitische Wirksamkeit der Prämienverbilligung in den Kantonen: Monitoring 2000. Interface, Luzern.
- Beck K (2003) Influence of risk adjustment on the incentives of insurer and insured. Paper presented at the Risk Adjustment Network Conference, April 10, 2003, Berlin.
- Beck K, Spycher S, Holly A, Gardiol L (2003) Risk adjustment in Switzerland. *Health Policy* 65: 63-74.
- Behrend C, Greß S, Holle R, Reitmeir P, Tolksdorff K, Wasem J (2004) Zur Erklärungskraft des heutigen soziodemografischen Risikostrukturausgleichsmodells. Ergebnisse empirischer Analysen an Prozessdaten einer ostdeutschen Regionalkasse. *Journal of Public Health* 12: 20-31.
- Enthoven A (1978) Consumer-Choice-Health-Plan: A national health-insurance proposal on regulated competition in the private sector. *New England Journal of Medicine* 298: 709-720.
- Enthoven A (1988) Theory and practice of managed competition in health care finance. North Holland, Amsterdam.
- Greß S (2002a) Freie Kassenwahl und Preiswettbewerb in der GKV– Effekte und Perspektiven. *Vierteljahreshefte für Wirtschaftsforschung* 71: 490-497.
- Greß S (2002b) Krankenversicherung und Wettbewerb - Das Beispiel Niederlande. Campus, Frankfurt/New York.
- Greß S, Groenewegen P (2004) Die Plombe ist Privatsache. *Gesundheit und Gesellschaft* 7: 36-41.
- Greß S, Groenewegen P, Kerssens J, Braun B, Wasem J (2002) Free choice of sickness funds in regulated competition: evidence from Germany and the Netherlands. *Health Policy* 60: 235-54.
- Greß S, Kocher R, Wasem J (2004) Wettbewerbsorientierte Reformen im Gesundheitssystem der Schweiz - Vorbild für regulierten Wettbewerb in der deutschen GKV? *Perspektiven der Wirtschaftspolitik* 5: 59-70.

- Hirschmann A (1970) Exit, voice and loyalty - Responses to decline in firms, organizations and states. Harvard University Press, Cambridge.
- Jacobs K, Reschke P, Cassel D, Wasem J (2002) Zur Wirkung des Risikostrukturausgleichs in der Gesetzlichen Krankenversicherung - Eine Untersuchung im Auftrag des Bundesministeriums für Gesundheit: Endbericht. Nomos, Schriftenreihe des Bundesministeriums für Gesundheit, Band 140, Baden-Baden.
- Kocher R, Greß S, Wasem J (2002) Das KVG - Vorbild für einen regulierten Wettbewerb in der deutschen Krankenversicherung? Soziale Sicherheit CHSS: 299-307.
- Lamers LM, van Vliet RCJA, van de Ven WPMM (2003) Risk adjusted premium subsidies and risk sharing: Key elements of the competitive sickness fund market in the Netherlands. Health Policy 65: 49-62.
- Reiners H (1993) Das Gesundheitsstrukturgesetz - Ein "Hauch von Sozialgeschichte"? - Ein Werkstattbericht über eine gesundheitspolitische Weichenstellung. WZB-Arbeitspapier 93-210, Wissenschaftszentrum Berlin, Berlin.
- Schut FT, Greß S, Wasem J (2003) Consumer price sensitivity and social health insurer choice in Germany and the Netherlands. International Journal of Health Care Finance and Economics 3: 117-38.
- Spycher S (1999) Wirkungsanalyse des Risikoausgleichs in der Krankenversicherung. Beiträge zur Sozialen Sicherheit 1/99, Bundesamt für Sozialversicherung, Bern.
- van de Ven WPMM, Beck K, Buchner F, Chernichovsky D, Gardiol L, Holly A, Lamers LM, Schokkaert E, Shmueli A, Spycher S, van de Voorde C, van Vliet RCJA, Wasem J, Zmora I (2003) Risk adjustment and risk selection on the sickness fund insurance market in five European countries. Health Policy 65: 75-98.
- van de Ven WPMM, Ellis R (2000) Risk Adjustment in competitive health plan markets. In: Culyer AJ, Newhouse JP (ed) Handbook of Health Economics. Amsterdam, Elsevier North Holland, pp 755-845.
- van de Ven WPMM, van Vliet RCJA, Lamers LM (2004) Health-Adjusted Premium Subsidies In The Netherlands. Health Affairs 23: 45-55.
- Wasem J, Greß S (2004) The regulation of private health insurance markets. In: Saltman R, Busse R, Figueras J (ed) Social health insurance in Western Europe. London, Open University Press, pp in print.

Wysong JA, Abel T (1996) Risk equalization, competition and choice: a preliminary assessment of the 1993 German health reforms. *Sozial- und Präventivmedizin* 41: 212-23.

Discussion Papers since 1995

- 85 **Kempa, B.; Nelles, M.; 1995:** Interest Rate Differentials in a Target Zone - Model with Heterogeneous Expectations. Essen
- 86 **Westerhoff, Dr. H.-D.; 1995:** Maximum-Likelihood Schätzer für Poisson Lags. Essen
- 87 **Brüggelambert, G.; 1995:** Determinanten der Erwartungs- und Entscheidungsbildung an politischen Börsen. Essen
- 88 **Schiess, H.-F.; 1995:** Die theoretische Relevanz der ECU für die externe Unternehmensfinanzierung. Essen
- 89 **Nibbrig, B.; 1995:** Anlagebetrug - Anlegerschutz - ein bedeutsames (noch weiterhin) vernachlässigtes Thema in der wirtschaftlichen Bildung. Essen
- 90 **von der Lippe, P.; 1995:** Statistische Wohlfahrtsindikatoren - Die Messung des Lebensstandards - Essen
- 91 **von der Lippe, P.; Zwick, M.; 1996:** Die Lebensqualität von Gemeinden. Einige Anmerkungen zum Lebensqualität-Atlas von Korczak aus der Sicht der Statistik. Essen
- 92 **von der Lippe, P.; 1996:** Szenarien für eine künftige EU-Intrahandelsstatistik. Essen
- 93 **Kladroba, A.; 1996:** Zeitvariable Parameterschätzungen mit „Flexible Least Squares“, Essen
- 94 **Spaetling, D.; 1996:** Anmerkungen zum Duopolgleichgewicht auf einem vollkommenen Markt bei isoelastischer Marktnachfrage. Essen
- 95 **Moritz, K.-H. / Ohnsorge, F.; 1996:** Arbeitnehmermitbestimmung aus der Sicht der Property-Rights-Theorie. Essen
- 96 **Moritz, K.-H.; 1996:** Komparativ-statische Analyse von Haushaltsgleichgewichten: eine alternative Vorgehensweise. Essen
- 97 **Brüggelambert, G.; 1996:** About Institutions and Efficiency in Political Stock Markets: Views from some Spin-Offs. Essen
- 98 **Lippe v.d., P.M.; 1997:** Die Rolle der amtlichen Statistik in einer Marktwirtschaft und die deutschen Erfahrungen beim Übergang zu einer marktwirtschaftlichen Statistik. Essen

- 99 **Lippe v.d., P.M.; 1997:** Einige Grundsätze der Preisstatistik und Preisindextheorie. Essen
- 100 **Lippe v.d., P.M.; 1997:** Preisindizes für Zwecke der Deflationierung (Arten der Deflationierung, indextheoretische Probleme). Essen
- 101 **Peschel, P.; 1997:** Arbeitsmarkterfahrungen junger Wirtschaftswissenschaftler - Ergebnisse der Essener Absolventenbefragung. Essen
- 102 **Jennes, B.; 1998:** Ein alternativer Indikator der deutschen Geldpolitik - Untersuchung im Rahmen eines VAR-Modells. Essen
- 103 **Lippe v.d., P.M.; 1998:** Die amtliche Statistik in Deutschland, kein zu privatisierender Betrieb. Essen
- 104 **Lippe v.d., P. M.; 1998:** The political role of official statistics in the former GDR (East Germany). Essen
- 105 **Lippe v.d., P. M.; 1998:** Zwei Beiträge zum Verhältnis zwischen „Statistik“ und „Demokratie“: „Einführung eines TES-Seminars“ und „Die politische Rolle der amtlichen Statistik in der ehemaligen DDR“. Essen
- 106 **Kladroba, A.; 1998:** Der Kalman-Filter bei fehlerhafter Hyperstruktur - eine Simulationsstudie. Essen
- 107 **Westerhoff, H.-D.; 1998:** Erweiterung und Reform der EU. Essen
- 108 **Dewenter, R.; 1999:** Messung von substitutionalen Beziehungen mithilfe von Kreuzkorrelationsfunktionen - Eine alternative Methode der Marktstrukturanalyse Essen
- 109 **Westerhoff, H.-D.; 1999:** Kondratieff-Zyklen - Zum Stand der Diskussion -
- 110 **von der Lippe, P.; 1999:** Volkswirtschaftliche Gesamtrechnung(en) in Deutschland nach neuen internationalen Vorschriften. Essen
- 111 **Kladroba, Andreas; 1999:** Schumacher oder Häkkinen: Wer war der „wahre“ Formel 1 Weltmeister 1998? Einige Anmerkungen zum Aggregationsproblem bei der Erstellung von Rankings. Essen
- 112 **Jörges, Katharina; Süß, Stefan; 2000:** Das idealtypische Menschenbild virtueller Unternehmen und seine Konsequenzen. Essen
- 113 **Nienhüser, Werner / Becker, Christina / Jans, Manuel; 2000:** Studentische Erwerbstätigkeit und Teilzeit-Studium – Erste Ergebnisse einer schriftlichen Befragung aller Studierenden der Wirtschaftswissenschaften an der Universität GH Essen
- 114 **Weinem, Michael / Carstens, Stefan; 2000:** Incentive Compatibility of Dual Transfer Pricing
- 115 **Brüggelambert, Gregor; 2000:** Nachteile von Gründungen in jungen Märkten beim Umgang mit Behörden und bei der Kreditaufnahme. Essen

- 116 **Nienhüser, Werner; 2001:** Studentische Erwerbstätigkeit und Probleme im
Studium - Eine empirische Analyse geschlechtsspezifischer Unterschiede. Essen
- 117 **Kladroba, Andreas / von der Lippe, Peter; 2001:** Die Qualität von
Aktienempfehlungen in Publikumszeitschriften. Essen
- 118 **Westerhoff, Horst-Dieter; 2002:** Globalisierung und Bilanzrecht – Einige
ordnungspolitische Bemerkungen. Essen
- 119 **Clausen, Volker / Wohltmann, Hans-Werner; 2002:** Monetary and Fiscal
Policy Dynamics in an Asymmetric Monetary Union. Essen
- 120 **Hayo, Bernd / Seifert, Wolfgang; 2002:** Subjective Economic Well-being in
Eastern Europe. Essen
- 121 **Hayo, Bernd / Doh Chull Shin; 2002:** Popular Reaction to the Intervention by
the IMF in the Korean Economic Crisis. Essen
- 122 **Jans, Manuel; 2002:** Überlegungen zur Güte der
transaktionskostenökonomischen Erklärung betrieblicher Personalstrategien.
Essen
- 123 **Kladroba, Andreas; 2002:** Die Qualität von Aktienempfehlungen in
Publikumszeitschriften (Teil 2). Essen
- 124 **Wohltmann, Hans-Werner / Clausen, Volker; 2002:** Foreign Price Shocks and
Monetary Policy in an Asymmetric Monetary Union. Essen
- 125 **Westermann, Michael / Dewenter, Ralf; 2003:** Cinema Demand in Germany.
Essen
- 126 **Von der Lippe, Peter; 2003:** Zur Interpretation gesamtwirtschaftlicher
Produktions- und Einkommensgrößen der deutschen Volkswirtschaftlichen
Gesamtrechnung nach dem SNA 93/ESVG 95. Essen
- 127 **Von der Lippe, Peter; 2003:** Das Identifikationsproblem in der Ökonometrie.
Essen
- 128 **Jans, Manuel; 2003:** Sozialkapitalkonzepte und ihre Brauchbarkeit in der
Personal- und Organisationsforschung. Essen
- 129 **Kempa, Bernd; 2003:** An oversimplified inquiry into the sources of exchange
rate variability. Essen
- 130 **Wasem, Jürgen / Greß, Stefan / Hessel, Franz; 2003:** Hausarztmodelle in der
GKV - Effekte und Perspektiven vor dem Hintergrund nationaler und
internationaler Erfahrungen. Essen
- 131 **Kladroba, Andreas; 2003:** Das neue Datenschutzrecht in der betrieblichen
Praxis. Essen
- 132 **Emami Namini, Julian; 2004:** International business cycle transmission in a
dynamic multi-sectoral Heckscher-Ohlin model
- 133 **Westermann, Michael / Krol, Bianca; 2004:** Zur Wirksamkeit von Practice
Tests am Beispiel der Klausur Deskriptive Statistik

Behrend, Corinne / Buchner, Florian / Happich, Michael / Holle, Rolf / Reitmeir, Peter / Wasem, Jürgen; 2004: Risk-Adjusted Capitation Payments: How Well Do Principal Inpatient Diagnosis-Based Models Work in the German Situation? Results From a Large Data Set