A Decade of Choice: Tracking the German National Experience with Consumer Choice of Sickness Fund

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Introduction

Since the reforms of 1996, Germany has committed to a national health policy promoting individual and family choice among a large number of competing sickness funds offering a publicly regulated benefit package, operating under a common set of rules for provider contracting and premium setting. The purpose of this paper is to review some of the data on choice and pricing, emphasizing changes over time, and to comment upon the functioning of competition for enrollees among sickness funds in Germany.

In Germany, a social health insurance system provides mandatory health insurance to about 90% of the population, all but the highest income groups, some self-employed and some public enrollees (Buchner and Wasem, 2003). There are currently about 250 sickness funds, which differ in sponsorship for historical reasons. Not all funds operate in all regions. Sickness funds are non-profit, with regulations limiting their reserves to a narrow range, requiring essentially that they spend what they collect. The contribution to the funds is in the form of a percentage of labor earnings, split nearly equally between the worker and employer.

Contribution rates do not vary according to health risk, but go up proportionally with income, to a maximum threshold of earnings, 3,563 Euros per month in 2007. Dependants are included with no additional contribution. The benefit package is comprehensive and largely set by regulation; individual funds have little discretion to modify the services covered. The insured of all funds have essentially free choice of providers, and funds could until recently not engage in selective contracting.

We examine the effects of the introduction of competition among funds in 1996. We focus on demand-side aspects of competition rather than provider contracting issues. We first review consumer choice and features of the competitive environment in Germany and draw parallels with other countries. We then discuss the evidence on the effects of choice and competition on contribution rates and market structure. We are mainly concerned with the period before the current reforms, for which the data are not yet in. At the close of the paper we offer some comments on the current developments.

Consumer Choice in the German Statutory Health Insurance

The nature of competition among German sickness funds changed fundamentally in 1996 as consequence of a reform act.² Prior to the reform, fund membership was mostly based on geographic and job characteristics. The Health Care Structure Act of 1992 (*Gesundheitsstrukturgesetz*) introduced free choice of funds for the statutorily insured beginning in 1996. Initially members could switch during an annual enrolment period provided they gave three months notice. Since 2002 switching is allowed at any time

¹ For additional details of the German system, see Busse and Riesberg (2004, 2005), Buchner and Wasem (2003) and von Schulenburg (2005).

² This section draws on Busse and Riesberg (2004, 2005). Throughout those voluntarily insured in the statutory health insurance could choose between several funds at a two months notice.

during the year for a member enrolled at least 18 months. This restriction does not apply if the fund raises its contribution rate.

The 1996 reform also affected choices the funds could make. The reforms opened general regional (*AOK*) and substitute (*Ersatzkassen*) funds to all statutorily insured, whereas company (*BKK*) and guild-based (*IKK*) funds could choose to remain closed. By 2001 about half of the company-based funds and two-thirds of guild funds were open (Schut, Greß and Wasem, 2003). Currently between 60 and 90 funds are available to consumers, depending on their region of residence.³

In the 1990s, a number of higher income countries were implementing or trying to implement national health policy that combined the benefits of competition with compulsory comprehensive health insurance. The most notable failure in this regard was in the United States where President (Bill) Clinton's Health Care Reform initiative based on principles of "managed competition" suffered from lukewarm support from the public and active opposition from providers and private health insurance companies. National health policies based on managed competition were put into place in Israel (Chernichovsky and Chinitz, 1995), Puerto Rico (Alegria et al., 2001), Switzerland, Belgium, Netherlands, as well as in Germany (Laske-Aldershof et al., 2004).

Van de Ven et al. (2003, 76) characterize these reforms as being conducted with the objective of achieving "efficiency and client satisfaction in health care together with solidarity and the effective control of aggregate spending". In Germany a specific additional objective was to equalize contribution rates which historically had varied considerably across funds, implying that the same person would pay more or less for their health insurance, depending on the fund in which they were enrolled. Increasing choice would give more consumers the opportunity to join plans with lower contribution rates.

Regulatory Limits on Competition

The terms of competition among funds were limited by regulation to address concerns about solidarity and to minimize the incentive funds had to compete for good risks in ways that would undermine the value of insurance coverage. Although funds are paid by a risk adjustment formula paying more for enrollees expected to be higher costs, they are prohibited from charging more to higher cost enrollees and are required to accept any applicant. Moreover, regulation continues to restrict the domains of competition by limiting the possibilities to modify the benefit package or selectively contract with providers.

Here we briefly describe these regulations, and note their implications for how choice and competition will be manifest in the German sickness fund market.

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³ As of July 2006, the national market shares for the types of fund were about 36 percent AOK; 31 percent EK ANG; 20 percent BKK; 7 percent IKK; 2 percent EK ARB, and 3 percent for the farmers, sailors and miners funds combined. These figures include mandatory and voluntary members and pensioners, but not dependants (own calculations based on BMG 2006b).

Risk adjustment applies to fund payments, not to premiums charged to enrollees.

The risk adjustment system was introduced in 1994, two years prior to competition, to address historical differences in risk structure and incentives for risk selection. Funds can be thought of as paying into a centralized pool an amount based on the national average contribution rate for the income of their enrollees, and receiving from the pool an amount equal to the standardized national average expenditure for a population with their risk characteristics (measured by age, gender and several other factors). The difference between their "financial power" and "financial need", so defined, determines their net transfer from the pool (Busse and Riesberg, 2004; McGuire, 2007).

Sickness funds set a contribution rate which is the only dimension of "price" a fund can choose. In an unregulated market, an insurer would require a higher price to accept an enrollee the insurer anticipates to be higher cost, for example, based on age, disability status, or other observable characteristics. Although funds cannot charge more to higher risk enrollees, funds must still be paid more for the higher risk enrollees in order to cover expected cost. This is the function of risk adjustment of the premium payment to plans.

Requiring a plan to set a contribution rate as a proportion of income finances statutory health insurance by the equivalent of a proportional earnings tax, but creates a problem: without further regulation, funds would seek to compete for high income enrollees who pay higher premiums. The financial power/financial need formula is designed to address the incentives associated with fund tendencies to compete for those who pay high premiums (higher income) or have low expenses (the good risks). There is a distinction, however, in how successful the transfer system is with respect to income and health risk, with implications for tracking fund competition.

With respect to income differences across plans, the transfer system effectively neutralizes funds' incentives to compete for higher income enrollees, meaning that it almost fully removes any gain to a plan to having a higher rather than low income enrollee elect the plan. Since income is observable, the transfer formula can completely compensate for differences in financial power across sickness funds. Because of the transfer formula, replacing a low-income person with a high-income person has no effect on net revenues to a fund. As long as the health costs are the same for these two individuals, the low-income enrollee is just as attractive to the fund as the high-income enrollee. For health care costs included within the transfer system, the effect of the formula is to give funds revenue equal to what the fund would collect with its chosen contribution rate for the national average income. This implies that fund revenues are independent of the actual income of enrollees and the fund has no incentive to seek higher income enrollees.

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⁴ Buchner and Wasem (2003) suggest that risk adjustment removes 92 percent of income differences. The adjustment for income is not fully complete because not all expenditures are recognized in the transfer system, such as administrative costs and some additional benefits (BVA, 2005). The income adjuster accounts for about 70 percent of transfers between sickness funds. See also Busse and Riesberg (2005).

The situation is different with respect to adjustment for health cost risk. The risk adjustment formula is itself in the process of reform, based on research showing that incorporating previous years' diagnosis information can improve the explanatory power of the risk adjustment formula (Reschke et al., 2005). From 2009 the system will be morbidity-based.⁵ Nonetheless, the risk adjustment formula is only *an approximation* to expected health care costs, leaving some part of expected costs not dealt with by the transfer formula. Individuals will vary in health care costs in ways not picked up in the risk adjustment formula. If a low-risk person (low risk in ways not captured by the formula) leaves the fund and is replaced by a high-risk person, funds costs will go up and these will not be compensated for by the formula. The transfer system thus only partially protects a fund against attracting an unfavorable distribution of health care risk.

The implication is that funds have an incentive to compete for healthier enrollees, though not for higher income enrollees. Later in this paper we consider how this might be done in the German context.

Regulated coverage and provider contracting.

Prior to the most recent reforms in 2006, sickness funds were strictly limited in their ability to change the services and coverage they offer, and hence in their ability to attract good risks. The benefit structure was largely mandated, with only about 5 % of the benefit package remaining at the discretion of the sickness funds (Buchner and Wasem, 2003, 24). Reviewing these additional services there are no patterns that suggest funds are using this tool to target low-risk consumers (McGuire, 2007; Nuscheler and Knaus, 2005). Similarly, sickness funds traditionally had very limited opportunities for selective contracting and members of all funds can choose freely among most providers.

While this limited flexibility reduces the scope for plan-side selection, it also restricts the scope for differentiation that may serve consumer interests and efficient cost-reducing activities, such as alternative forms of contracting. The recent health reforms may change this balance by allowing plans to offer a wider variety of plans and tariffs, including refunds, integrated care schemes, selective contracting with providers and supplemental insurance in cooperation with private insurers. As with disease management programs, which have been certified since 2003, funds may attempt design these programs as low-quality, or seek to enroll "healthy chronically ill" to save costs (Wille, Ulrich and Schneider, 2007). These possibilities have not yet been investigated empirically to our knowledge.

Effects of Choice and Competition

The limits set by the risk adjustment system and the restrictions on the benefit package and provider networks leave open the possibility of competing on price. In principle, consumers should respond even to small differences in the contribution rates since

⁵ Other changes to the formula include the introduction of a high risk pool in 2002 and adjustments for disease management programs in 2003.

regulations on the benefit package and contracting imply that the sickness funds are near perfect substitutes (Tamm et al., 2006). Some research has been conducted on consumer response to price differences in Germany. Higher-income consumers have been found to be more responsive to contribution rate differences than lower-income consumers, and this response appears to be greater than found in other European countries (e.g. (Schut, Greß and Wasem, 2003; Buchner and Wasem, 2003; Laske-Aldershof, 2004; Frank and Lamiraud, 2007). The larger response among the higher income group may have a simple explanation. A given percentage contribution rate difference means more to a high income consumer in Euro terms. For the highest income consumers, a two-percentage point difference in contribution rates translates into a difference of about 35 Euros per month. Higher mobility in Germany may also be due to the large number of funds to choose from, though Frank and Lamiraud (2007) compare markets among cantons in Switzerland and find that consumers are more likely to switch when they have fewer rather than more options.

Any demand response to contribution rate differences means that funds will have at least some incentive to set rates low to attract enrollees. One effect of choice and competition that we examine is the effect on the spread of contribution rates.

Introduction of choice also changed the competitive landscape facing sickness funds, putting more pressure on funds to be efficient, at least in terms of keeping administrative costs low, and creating new incentives for combining with other funds. The number of funds operating in Germany has fallen by 86% since 1970, a trend that has been affected by the 1996 reforms.

We next discuss some evidence on the effect of the competition reforms on contribution rates and the market structure of fund supply.

Effects on contribution rates

One key goal of the 1996 reforms was to use competition to reduce the variation in contribution rates. Choice would allow consumers to switch from high-rate to low-rate funds. This would reduce contribution rates for consumers directly by the reduction in contribution for the consumer who switches, and indirectly by giving more market reward to funds with low rates, thereby encouraging higher contribution rate funds to reduce the contribution. Furthermore, the consolidation of funds we discuss in the next section would also tend to lead to a convergence of contribution rates, especially through combinations of high and low-rate funds.

Figure 1 shows the average contribution rates of the major types of funds since 1991. The convergence in the rates is striking: the difference in rates across types drops from

⁶ Since the rate is split between firms and employees, the firm realizes the other half of the savings.

⁷ Frank and Lamiraud (2007) interpret the persistence of premium differences in Switzerland with concepts from behavioral economics, such as cognitive overload (making choices becomes more costly to individuals when the choice set increases) and status quo bias (individuals exaggerating the value of the plan they are enrolled in, relative to the value of the same plan if they were not enrolled).

1.63 percentage points in 1991 to 0.47 percentage points in 2005. The figure gives the impression that the reduction in the spread was more rapid after 1996 than before. The apparent rate drop since 2005 is due to a law change that moved 0.9 percentage points of the "general" rate to a "supplemental" rate of equal value.

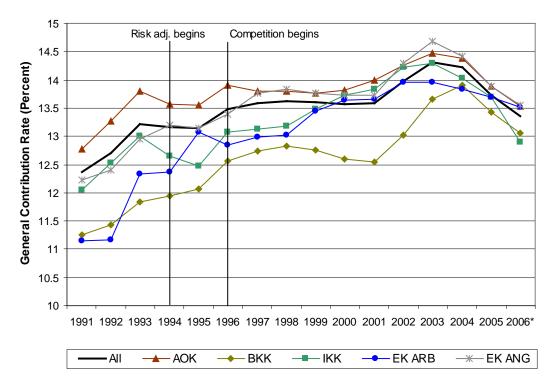


Figure 1: Average General Contribution Rate by Sickness Fund Association, 1991-2006

Notes: 2006 value for August only. EK ARB and EK ANG are substitute funds for workers and employees, respectively. Omits farmers, sailors and miners funds. From July 2005, the "general rate" (split between employers and employees) was reduced by 0.9 percent, and a "supplemental rate" of 0.9 percent on employees only was re-introduced.

Source: BMG (2006a)

Convergence of contribution rates can also be observed within fund types, though a much shorter time series supports this statement. Table 1 shows the contribution rate spans within the major types of funds from 2004 to 2006. The AOK funds operate in separate regions with different revenue and cost structures, and do not compete directly with one another. The spread in their contribution rates is probably primarily driven by regional differences in cost structure, patterns of practice, and risk characteristics not picked up by the risk adjustment system. It is not surprising that we see no trend in convergence for these plans. For two other large groups of funds, the BKK and the IKK, convergence is evident, particularly in the BKK funds.

Table 1: Contribution Rate Span (Max – Min Rate within Fund Type) by Sickness Fund Association, 2004-2006

	2004	2005	2006
All	5.5	4	3.3
AOK	2.6	2.6	2.6
BKK	5.2	3.8	3.2
IKK	3	2.1	2.7
EK ARB	1	1.7	1.2
EK ANG	1.2	1.2	1.7

Note: Rate ranges for first day of April 2004, July 2005 and July 2006.

Source: VdAK (2004, 2005, 2006)

There is some question as to what has caused the convergence of contribution rates. An improved risk adjustment is one possibility. If a fund's enrollees tended to be higher costs and it had a high contribution rate as a result, an improvement in the risk adjustment formula would tend to reward this fund, allow for a lower contribution, and thereby contribute to rate convergence. Several payment modifications were introduced since 1996, such as the uniform East/West contributory income levels in 1999; the uniform risk adjustment for East and West Germany in 2001; a high risk pool in 2002; and adjustments for disease management programs in 2003 (Busse and Riesberg, 2004, 64). However, these improvements may have had only a modest effect on transfers between funds. The *Bundesversicherungsanstalt* estimates that the effect of the risk pool and disease management programs was at most 0.05 percentage points of average contribution rates for the major fund types in 2005; even in 2003 the effect of the risk pool was below this value (BVA 2004, 2006).

Movement of consumers from high to low contribution rate plans may or may not contribute to convergence. Given the pricing structure in Germany, a lower contribution rate fund is attractive to all health cost risk types, the high and the low. It is conceivable that after more choice and switching, risk groups are more rather than less segmented. Busse and Riesberg (2004, 63-4) observe that through 2003, transfers rose steadily to reach 10.9% of total SHI spending, implying that either income or health risk was not being equalized by movement among the funds. No research that we know of establishes what role plan switching is playing in equalizing the distribution of risks across funds.

⁸ The high risk pool covered 60 percent of expenditures above 20,450 Euros per insured and year in 2002 and 2003 (Busse and Riesberg, 2005, 78). The small effects for the fund types are partly because the fund associations represent a large risk pool. Individual funds experienced effects between 0.4 (savings) and 0.3 (burden) percentage points of contribution rates for disease management programs. The effect of the risk pool on individual funds was small for most funds (BVA 2006).

Competition might improve efficiency, for example, through lower administrative costs per member (Wille, Ulrich and Schneider, 2007, 42), and this could have a small impact on the level of the contribution rates. Figure 2 shows the average administrative costs as fraction of total expenditures for each major type of fund. While the data are available only from 2001 and there is no adequate counterfactual (cost trends without the competition), the figure shows a relative increase in the BKK share which coincides with the increase in the BKK contribution rate in the previous figure. There has also been some convergence in these cost shares over time. ¹⁰

8 Net Admin Costs in Total Expenditures (Percent) 7.5 7 6.5 6 5.5 5 4.5 4 3.5 3 2.5 2 2001 2002 2003 2004 2005 2006 ·ΑΙΙ ▲ AOK **BKK** - IKK EK ANG -EK ARB

Figure 2: Net Administrative Costs as Fraction of Total Expenditures by Sickness Fund Association, 2001-2006

Notes: Calculated from per-member cost. Final figures for 2003, 2004; preliminary figures for 2001, 2002, 2005, 2006. Total expenditures excludes transfers from/to risk adjustment

Source: Own calculations based on BMG (2001-2006)

Effects on market structure

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⁹ The BKK average net administrative costs have increased from 86.22 Euros in 2001 to 127.51 Euros in 2006 (nominal values).

The convergence may be partly driven by regulation (SGB V § 4) which pegged a fund's administrative costs to the average across all funds (2003-2006) and to changes in earnings (2004-2007).

Competition may also affect features of the sickness fund market such as consolidation and market shares. As Busse and Riesberg (2005) point out, the consolidation of sickness funds was underway prior to the 1996 reforms, but it was the time between the passage of the law in 1992 and the full implementation of the law in 1996 that saw the big changes, leaving open the possibility that funds were anticipating the economics of the new regime. Figure 3 shows the large decrease in the number of sickness funds in the mid-1990s, especially as the AOKs and IKKs consolidated rapidly.

AOK consolidation was essentially completed as the 1996 reforms went into place, with one AOK operating within each region. BKK and IKK consolidation was most rapid in the years leading up to 1996, but a downward trend in the number of these funds continues to the present.

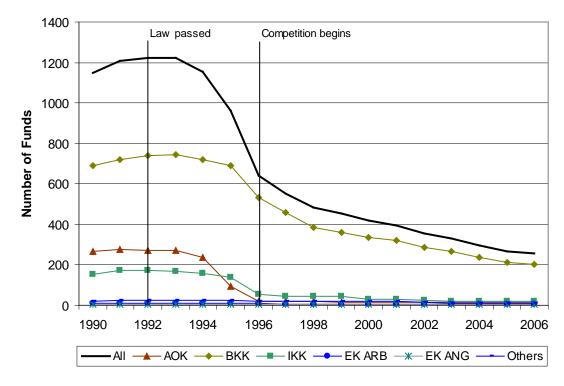


Figure 3: Number of Sickness Funds by Sickness Fund Association, 1990-2006

Notes: Numbers as of January 1 in each year. West-Germany only prior to 1991. "Others" calculated as residual, includes farmers, sailors and miners funds. Of the 256 funds in 2006, 16 were AOKs, 201 BKKs, 18 IKKs, 3 EK ARB, 7 EK ANG and 11 others.

Sources: BMG (2001), VdAK (2006), Busse and Riesberg (2004)

The enormous drop in the number of sickness funds operating in Germany over this period is one of the central facts about the German health insurance market. One set of

reasons for consolidation comes from the cost side. Health insurance is subject to economies of scale, because of risk and administrative operations. Small funds might be ineffective competitors in a new choice-based system and be forced to consolidate in order to survive.

Another set of forces encouraging consolidation might come from the revenue side. A newly consolidated fund must set a single contribution rate, which would roughly be the weighted average of the contribution rates of the funds comprising the new combination. From the standpoint of revenue, the new fund can set one price, whereas the two funds separately could have set two prices. A combination can be interpreted as restricting the extent of "price discrimination." Assuming there is no effect of consolidation on the cost side, in normal circumstances, two business units who can set their prices independently can always do at least as well as two business units who must set a common price, since the common price would be one of the options of the independent decisions.

A common price with more market power is one possible revenue side reason for consolidation. Conventional measures of market power such as the number of firms operating in a market or a Herfindahl index would depict the German health insurance market as highly competitive. Furthermore, the product is homogenous, enhancing the degree of substitutability among the funds. However, the empirical observation of a relatively low price (contribution rate) elasticity of demand in Germany and other European health insurance markets is relevant here. Demand inelasticity is in principal the fundamental measure of market power, and the evidence on this would appear to contradict the structural measures just mentioned.

A second revenue-side reason for consolidation may stem from the limits on reserves in the German system. If, for example, a fund has a low cost structure and sets its contribution rate as high as it can, it is limited by regulation to not set contribution rate any higher, though it would like to do so. This fund may benefit by combining with another fund with a higher cost structure, permitting it to raise its contribution rate, and increasing the revenue-cost gap in its business unit.

Consolidations driven by revenue-side considerations would lead to convergence of contribution rates. It should be noted that until recently funds were not allowed to merge across fund types, where at least some of the rate differences are. This could also explain why rate variation persists within types (table 1) whereas it decreases across types (figure 1): consolidation is beneficial to funds if the resulting rate lowers both funds cost structure. Once the potential of within-type consolidation to achieve lower rates is exhausted, funds will no longer merge and a rate variation remains. The restrictions on mergers effectively constrain the reduction in rate variation. In this light it is not surprising that the within-type rate span decreased relatively steeply from 2004 to 2006 for the BKKs since these funds still have a large number of potential partners to merge with. This effect may change after April 2007 when funds are allowed to merge across types.

Regulation has sharply limited the ways in which sickness funds in Germany could seek good risks. One way they can do so is through geographically targeted entry and marketing. For reasons due at least in part to provider practice patterns, the health care costs of caring for comparable people vary across regions. Furthermore, the risk adjustment system will not pick up all factors that distinguish population risk factors geographically. Contribution rates at the regionally based AOK funds are a good guide to local cost and risk factors, so a fund considering expansion could know which *region* is most likely to be profitable. Enrollment of consumers from low-cost regions would lower a funds' overall cost structure and permit lower contribution rates, allowing it to increase enrollment in its existing markets (Wasem et al., 2007, 21). This theory could be tested by examining the pattern of geographic competition in Germany: low-cost regions are predicted to be subject to greater marketing and entry than high-cost regions.

Another empirical implication of the existence of regional differences can be readily tested with existing data. Competition and choice can be expected to generate a negative correlation between the contribution rate and the market share of a fund. A large gap between contribution rates should induce consumers to switch funds. The early switching studies confirm the price responsiveness of consumers, and provide microevidence for a correlation. Tamm et al. (2006) examine the effect of contribution rates on market shares in a panel of fund enrolment and find that higher rates are associated with smaller market shares, especially in the long-run.

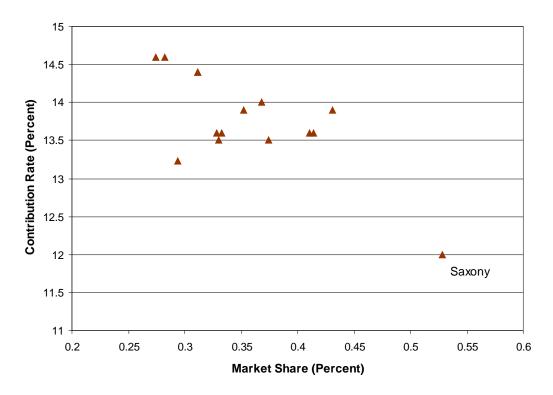
In Germany, competition may also create such a negative correlation between the rate and market shares of regional funds (see also Wasem et al., 2007, 21). Some funds operate on a regional basis while others are available in several regions or nationally. The uniform contribution rate for the latter funds is based on a mixed calculation across their regional markets. As cross-regional funds become available, people in high-rate regional funds have a strong incentive to leave their original funds for the mixed-rate which will tend to be lower. Those in low-rate regional funds however will have fewer financial incentives to switch. In this scenario, the benefits of competition are likely to vary across regions, with people in high-rate regions benefiting most from competition. Low-cost regions on the other hand would benefit less, as the rates offered by cross-regional funds would at best be the rate of a regional fund.

Here we examine recent cross-sectional data on rates and enrolment across regions. In aggregate data the only type of fund that is purely regional is the AOK. ¹¹ Figure 4 plots AOK rates against the AOK market share in most states. The implicit comparison is with a cross-regional fund that offers a uniform rate in all regions and is available as exit option for consumers. ¹²

¹¹ Wasem et al. (2007, 47) estimate that about 70 percent of insured in BKKs and 50 percent of insured in IKKs are in cross-regional funds; the substitute, sailors, miners and farmers funds are fully cross-regional. ¹² This comparison presumes the AOKs rates are not much affected by the competition, e.g. through changes in their risk structures that are not eliminated by the risk adjustment. Wasem et al. (2007, 48) show the proportion of members in cross-regional funds by region, which mirror the pattern in figure 4.

The figure suggests a negative relationship between the regional fund's contribution rate and its market share. The correlation coefficient is -0.73 and statistically significant (p < 5 percent), but the Saxony observation is a powerful negative pull on the correlation coefficient. The negative relation is clearly not uniform across the data. Other factors not addressed in this simple analysis would also affect market share. The process of adjustment may be ongoing as some of the literature studying demand response suggests. A question for further research is what are the other factors explaining AOK share, and whether the contribution rate-share relationship becomes more robust over time.

Figure 4: Contribution Rates and Market Shares for AOK State Associations (Landesverband), Mid-2006



Notes: Contribution rates as of August 1, 2006. Market shares as of July 1, 2006; includes mandatory and voluntary members, and pensioners. Excludes Hamburg.

Sources: Own calculations based on BMG (2006a, 2006b)

Looking Forward

Health policy in Germany is moving to allow sickness funds to compete in new ways, by relaxing the regulatory limits in terms of financing and the products funds can offer. From January 2009 a new "health fund" will centrally collect a uniform premium for all sickness funds (BMG, 2007). Funds that can operate with less revenue can refund their members. Funds that require more revenue have to charge an explicit "supplemental" contribution which can be in form of a proportional or flat fee, and is not to exceed one

percent of a member's earnings. Members of these funds will be able to switch without the usual restrictions. Dependants will not have to pay this charge, and government agencies will pay for recipients of social security. This new financing mechanism will likely alter the nature and effects of competition. For example, low-income members are largely insulated from rate differentials because of the cap and government assistance. Because the supplemental charges and refunds apply only to individuals (and are not split with firms), high income members will reap the full benefits from switching. It can thus be expected that the high and low income group's price responsiveness will diverge further. New pressures are created to make risk structures more homogenous.

The Competition Strengthening Act of 2007 (*GKV-Wettbewerbsstaerkungsgesetz*) also changes the nature of products that funds can offer through the introduction of new forms of provider contracting and managed care. The new regulation permits funds to charge different rates for gatekeeper and integrated care schemes, and higher-deductible and rebate plans (BMG, 2007). Furthermore, since 2004 funds may offer supplemental insurance in cooperation with private insurers (von Schulenburg, 2005). These developments may allow funds to align their products with consumer preferences but also open the door to various selection mechanisms.

Forward looking policy should be based on an understanding of the experience of choice and competition in the evolution of the German system so far. Research has contributed to our understanding of consumer behavior, the workings of the risk adjustment system, and the effects of geographic competition and consolidation. A more full understanding of choice and fund behavior is needed to guide regulation and serve as a basis for evaluating current policy reforms.

References

- Alegria, M., McGuire, T., Vera, M., Canino, G., Matias, L. and Calderon, J. (2001). Changes in Access to Mental Health Care among the Poor and Nonpoor: Results from the Health Care Reform in Puerto Rico. *American Journal of Public Health*, *91*(9), 1431-1434.
- BMG. (2001). Statisches Taschenbuch Gesundheit: Bundesministerium fuer Gesundheit.
- BMG. (2001-2006). *Rechnungsergebnisse der Gesetzlichen Krankenversicherung*: Bundesministerium fuer Gesundheit.
- BMG. (2006a). *GKV Allgemeiner Beitragssatz 1991 bis 2005*, *August 2006*: Bundesministerium fuer Gesundheit.
- BMG. (2006b). Mitgliederstatistik KM6: Bundesministerium fuer Gesundheit.
- BMG. (2007). Fragen und Antworten zur Gesundheitsreform 2006/2007: Bundesministerium fuer Gesundheit.

- Buchner, F. and Wasem, J. (2003). Needs for Further Improvement: Risk Adjustment in the German Health Insurance System. *Health Policy*, 65, 21-35.
- Busse, R. and Riesberg, A. (2004). *Health Care Systems in Transition: Germany*. Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies.
- Busse, R. and Riesberg, A. (2005). *Gesundheitssysteme im Wandel: Deutschland*. Kopenhagen: WHO Regionalbuero fuer Europa im Auftrag des Europaeischen Observatoriums fuer Gesundheitssysteme und Gesundheitspolitik.
- BVA. (2004). *Kurzbericht ueber den Jahresausgleich 2003 im Risikostrukturausgleich*: Bundesversicherungsamt.
- BVA. (2005). Taetigkeitsbericht 2005: Bundesversicherungsamt.
- BVA. (2006). *Kurzbericht ueber den Jahresausgleich 2005 im Risikostrukturausgleich*: Bundesversicherungsamt.
- Chernichovsky, D. and Chinitz, D. (1995). The Political Economy of Health System Reform in Israel. *Health Economics*, 4, 127-141.
- Frank, R. G. and Lamiraud, K. (2007). *Choice, Price Competition and Complexity in Markets for Health Insurance*. Unpublished manuscript.
- Laske-Aldershof, T., Schut, E., Beck, K., Greß, S., Shmueli, A. and Van de Voorde, C. (2004). Consumer Mobility in Social Health Insurance Markets: A Five-Country Comparison. *Applied Health Economics & Health Policy*, *3*(4), 229-241.
- McGuire, T. G. (2007). Risk Adjustment Systems in Competitive Health Insurance Markets: Lessons from the United States. In E. Wille, V. Ulrich and U. Schneider (Eds.), Wettbewerb und Risikostrukturausgleich im Internationalen Vergleich. Erfahrungen aus den USA, der Schweiz, den Niederlanden und Deutschland. Baden-Baden: Nomos.
- Nuscheler, R. and Knaus, T. (2005). Risk Selection in the German Public Health Insurance System. *Health Economics*, 14(12), 1253-1271.
- Reschke, P., Sehlen, S., Schiffhorst, G., Schraeder, W. F., Lauterbach, K. and Wasem, J. (2005). *Models for the Classification of Insured Persons in the Risk Adjustment Scheme: Final Report Summary*: Bundesministerium fuer Gesundheit.
- Schut, F. T., Greß, S. and 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*(2), 117-138.

- Tamm, M., Tauchmann, H., Wasem, J. and Greß, S. (2007). Elasticities of Market Shares and Social Health Insurance Choice in Germany: A Dynamic Panel Data Approach. *Health Economics*, 16(3), 243-256.
- van de Ven, W. P. M. M., Beck, K., Buchner, F., Chernichovsky, D., Gardiol, L., Holly, A., et al. (2003). Risk Adjustment and Risk Selection on the Sickness Fund Insurance Market in Five European Countries. *Health Policy*, 65(1), 75.
- VdAK. (2004). Ausgewaehlte Basisdaten Gesundheit: Verband der Angestellten-Krankenkassen.
- VdAK. (2005). Ausgewaehlte Basisdaten Gesundheit: Verband der Angestellten-Krankenkassen.
- VdAK. (2006). Ausgewaehlte Basisdaten Gesundheit: Verband der Angestellten-Krankenkassen.
- von Schulenburg, J.-M. G. (2005). German Health Care System in Transition. The Difficult Way to Balance Cost Containment and Solidarity. *European Journal of Health Economics*, 6(2), 183-187.
- Wasem, J., Buchner, F., Lux, G., Manouguian, M.-S. and Schillo, S. (2007). Die Regionaldimension in der Gesetzlichen Krankenversicherung vor dem Hintergrund des GKV-WSG. Gutachten fuer das Land Baden-Wuerttemberg. Diskussionsbeitrag aus dem Fachbereich Wirtschaftswissenschaften Universitaet Duisburg-Essen Campus Essen, 153.
- Wille, E., Ulrich, V. and Schneider, U. (2007). Die Weiterentwicklung des Krankenversicherungsmarktes: Wettbewerb und Risikostrukturausgleich. In E. Wille, V. Ulrich and U. Schneider (Eds.), Wettbewerb und Risikostrukturausgleich im Internationalen Vergleich. Erfahrungen aus den USA, der Schweiz, den Niederlanden und Deutschland. Baden-Baden: Nomos.