

14

Consumer-driven health insurance in Switzerland, where politics is governed by federalism and direct democracy

LUCA CRIVELLI¹

When compared with the other case studies analysed in this book, the role played by private health insurance in Switzerland may seem peculiar and perhaps corresponds only with the Netherlands post-2006 (see Chapter 11). The crux of the Swiss health sector is a system of federally established universal health insurance coverage with atypical characteristics lying somewhere between private and social insurance (OECD 2006; Leu et al., 2007).

Swiss statutory health insurance is run by competing private institutions called sickness funds. It is strongly reliant on consumer choice and mainly financed through non-income-related premiums. Consumers (not employers or the government) buy health insurance plans, pay the bulk of health care costs through insurance premiums, co-payments and out-of-pocket payments, and choose the size of the deductible and other characteristics of the plan according to their own needs and preferences. Health insurers, whose business providing basic coverage is framed by social law, are also entitled to make profits by selling voluntary supplementary and complementary coverage governed by private law.² From this perspective, health insurance in Switzerland conceptually belongs within the scope of private insurance.

¹ The author is very grateful to Iva Bolgiani and Massimo Filippini for their suggestions regarding a previous version of the chapter. My thanks also go to Mary Ries and Rebecca Tekula for their assistance in proofreading the English text. Responsibility for any remaining errors lies solely with the author.

² Insurers are only allowed to generate profits in the voluntary insurance sector. Within mandatory insurance, if the premium revenues of a sickness fund exceed the amount paid for health care services and administrative costs, the money left over must be used to increase the stock of actuarial reserves or to decrease premiums in the following year.

However, many features distinguish the Swiss case from classic private health insurance: since 1996 Swiss citizens have been mandated to purchase a comprehensive package of health care benefits; insurer activity in the domain of mandatory health insurance is managed in accordance with non-profit regulations; risks are adjusted between sickness funds by means of a risk equalization mechanism; premiums and enrolment are highly regulated by the state; and earmarked subsidies are designed to help people with a low income to pay their health insurance premiums. From this perspective the characteristics of the sector are similar to those of social insurance (Thomson et al., 2013).

The ambiguity of the Swiss health insurance system was highlighted in two articles published in the same issue of the *Journal of the American Medical Association* (Herzlinger & Parsa-Parsi, 2004; Reinhardt, 2004). Although considering the same set of facts, the two articles proposed radically different hypotheses and explanations of the (alleged) superior performance achieved by the health care sector in Switzerland when compared with the United States. According to Herzlinger and Parsa-Parsi, Switzerland's good performance is supposedly rooted in the significant role consumers play in paying for health care and the resulting high cost transparency, which leads to effective cost control and enables citizens to obtain what they consider to be good value for money. The interpretation offered by Reinhardt is diametrically opposite: he argues that the performance of the Swiss health care system must be ascribed to pervasive government regulation. Both articles, however, underestimate the importance of the particular political and social context in which the health sector in Switzerland is embedded.

This chapter aims to illustrate how the institutional peculiarities of the Swiss political system, combined with the hybrid health insurance model, result in a weakened role for both health insurance competition and state regulation. The organization of the Swiss health sector reflects at least three fundamental factors (Achtermann & Berset, 2006: 20): (i) a strongly decentralized political system, based on federalism, subsidiarity and the institutions of direct democracy; (ii) a liberal economic culture, which emphasizes freedom of choice and consumer-driven economic decisions; and (iii) a unique historical path for social security, in which non-profit institutions³ led to the creation of a voluntary insurance sector and continue to influence the current system of universal coverage.

³ On the role of private non-profit organizations in the Swiss social security system, see Rossini & Martignoni (2000).

The Swiss health insurance sector relies on the principles of regulated competition, which plays out within a national regulatory framework, but mostly at the cantonal (decentralized) level.

To better understand this puzzle, the chapter is organized as follows: the second section presents some discussion of the history of the Swiss health insurance system; the third section describes the principal changes introduced by the 1996 Federal Health Insurance Act [*Krankenversicherungsgesetz* (KVG)]. The fourth section assesses the performance of the present system, focusing on market structure, premium growth, financial sustainability, risk pooling, switching behaviour, risk selection and innovation. The chapter ends with analysis of the role played by direct democracy in defining the particular dynamics of reform pursued by the health insurance sector in Switzerland and outlines future scenarios.

Historical development of statutory health insurance in Switzerland

In order to understand why the Swiss model of health insurance is so different from the global pattern it is necessary to consider the particular role played by Swiss social culture and political institutions since the 19th century. In this context the relevance of federalism⁴ and the significance of the institutions of direct democracy⁵ and a solid tradition

⁴ Switzerland is a small federal state (8.4 million inhabitants in 2016) of 26 cantons. Article 3 of the Swiss Constitution grants a high degree of autonomy to the cantons, stating that “The cantons are sovereign insofar as their sovereignty is not limited by the Federal Constitution; they shall exercise all rights which are not transferred to the Confederation.” The precept of Swiss decentralization is that public policies and their implementation should be assigned to the lowest level of government capable of achieving the objectives.

⁵ In the Swiss political system (both at cantonal and federal level) the citizen has the chance to participate directly in every state decision by means of direct democracy. For example, federal laws and generally binding decisions of the Confederation are subject to an optional referendum; in this case, a popular ballot is held if 50 000 citizens so request. The referendum is similar to a veto and has the effect of delaying and safeguarding the political process by blocking amendments adopted by parliament or the government or delaying their effect. The referendum is therefore often described as a brake applied by the people. A second way for citizens to induce a change is called popular initiative. If at least 100 000 signatures are collected within 18 months to

of mutual benefit organizations in civil society must be borne in mind. From the beginning of the 19th century various examples of mutuality and cooperation among citizens sprang up, leading to the spontaneous formation of numerous mutual support groups. The assessment of these initiatives by social scientists is not conclusive. In similar initiatives all over the world many authors see the principles of reciprocity and solidarity of the cooperative movement and civil economy at work (Bruni & Zamagni, 2007), with citizens organizing themselves from the bottom up to face emerging problems of unemployment, disability and sickness collectively. However, other authors interpret these initiatives as the adulteration of what began as an instrument of political and trade union struggle into a powerful means of promoting “a pedagogy of providence able to guarantee the integrity of an economically liberal social order” (Muheim, 2003: p.22). What is not contested is that the existence of these mutual support groups strongly conditioned the fundamental choices of the Swiss welfare system, which was coming into being (Gilliand, 1986: pp.247–60).

At the beginning of the 20th century four kinds of mutual support groups could be clearly distinguished in Switzerland, and their origins are still recognizable in the names of some of today’s sickness funds:

- *professional funds*, linked to the trade union world and therefore limited to trade union members;
- *company funds* (*Betriebskrankenkassen*), realized by the initiatives of philanthropic capitalists, intended for the employees of a given firm;
- *confessional funds*, promoted within Catholic confraternities and inspired by the social doctrine of the Church;
- *public funds* (the *öffentliche Krankenkasse*), created by a canton, a regional district or a municipality (*Dorfkrankenkassen*, *Bezirkskrankenkassen*).

While membership of the first three types of funds was restricted to people belonging to a particular category, in public funds affiliation was theoretically open and linked only to place of residence. However, even in the public funds, membership was often subordinated to the

propose a constitutional amendment, then a popular ballot must be held. The outcome will be binding, provided a majority of voters and cantons support the proposal.

moral integrity of the person and to his/her favourable personal situation (good health status, not too old).

A census held in 1903 counted 2006 mutual support groups, to which 14% of the population were affiliated (about 500 000 people).⁶ Half of the groups had fewer than 100 members and grouped together the inhabitants of one municipality. The risks they attempted to guard against were not limited to sickness (nine mutual groups out of ten offered cover against health risk, usually in the form of a daily cash benefit),⁷ but also included death (assistance to widows and orphans) and long-term unemployment. Years earlier, in 1899, the federal assembly had approved a draft bill (Lex Forrer) which envisaged setting up a decentralized system of public funds, jointly financed by the insured and employers and organized on a territorial basis starting from a minimum number of 1500 insured (Knüsel & Zurita, 1979; Gilliland, 1990). Undoubtedly it was a more modern and rational system of health insurance, following the Bismarck model. However, a referendum was launched against it and it was clearly rejected in a popular ballot in May 1900.

From the ashes of that ballot, the first federal Law on Sickness and Accident Insurance (*Kranken- und Unfallversicherungsgesetz* (KUVG)) developed a decade later. It was accepted by parliament in 1911 and approved by the people in 1912. The legislature realized that to overcome the obstacle of direct democracy and introduce a federal law on the subject of health insurance it was necessary to leave the management of the sector in the hands of private institutions and respect the cantonal autonomy that is particular to federalism. This lesson, as we will see below, lasted throughout the entire 20th century and still casts its shadow on present-day political choices.

Unlike the model set up by Bismarck in Germany, with the KUVG the Swiss legislature relinquished the idea of making health insurance compulsory on a national scale, leaving the cantons to decide whether to make it compulsory at cantonal level.⁸ Instead, they opted for

⁶ These mutual support groups were not uniformly spread throughout the territory. They reached greater levels of concentration in the urban, industrialized areas of the German-speaking cantons and were less prevalent in the Latin cantons (Muheim, 2003).

⁷ The total coverage of expenses for medical care and medicines was guaranteed only in a few cases. In many cases benefits were interrupted after 3 or 6 months.

⁸ It is important to point out that six cantons made affiliation to a sickness

voluntary individual affiliation by citizens and flat-rate premiums not related to income, whose values were established by each sickness fund and adjusted for age and gender. To reduce the financial fragility of the sickness funds and to stimulate voluntary affiliation the state decided to participate in the financing of premiums with public money, by transferring a lump-sum per person subsidy to the sickness funds.⁹ In order to qualify for subsidies, sickness funds had to: accept any national below a certain age limit (usually 55 years), regardless of health status and sex; allow a change of sickness fund if justified (for example, by marriage or change of domicile); and limit the premium surcharge for female members (compared with males of the same age) to 25%¹⁰ (Zweifel, 1990: p.80). Finally, to encourage the early enrolment of the young, the KUVG obliged sickness funds to rate premiums on the basis of member age at the time of enrolment. Those who joined the fund at the age of 25, and thus contributed to the insurance fund from an early age, would continue to pay the premiums reserved for this age class for the rest of their lives provided they did not switch funds. The earliest statistics available show that about half the population was insured in 1945, while nearly universal coverage was achieved between 1985 and 1990. By this time premiums had lost any reference whatsoever to the actual age and risk profile of the insured, making switching to another insurer somewhat expensive for older people who had joined the sickness fund when young.¹¹

The strong corporative organization of sickness funds¹² led to the adoption of important restrictions to market competition in the health

fund compulsory for the whole population before 1994; twelve cantons made affiliation compulsory for special social groups such as people with a low income and foreigners; and four cantons delegated the decision for a mandate to each municipality (Alber and Bernardi-Schenkluhn 1992: 210).

⁹ Despite these subsidies the financial status of sickness funds remained precarious until the partial revision of the law in 1964 (Alber and Bernardi-Schenkluhn, 1992: 184–91).

¹⁰ This was 10% after the 1964 partial revision of the law.

¹¹ For newly enrolled people the KUVG permitted health insurers not to cover known pre-existing diseases at the time of enrolment for a maximum of five years, making a change of sickness funds even more costly for sicker and older people.

¹² The history of the Swiss Sickness Funds Association (*Konkordat der Schweizerischen Krankenkassen*) goes back to 1891. In 1985 the Swiss-German *Konkordat* was merged with the Swiss-French and Swiss-Italian

insurance sector (Swiss Antitrust Commission, 1993: pp.77–85). Explicit comparisons of benefits and premiums among insurers, as well as poaching customers from other members of the Sickness Funds Association, were forbidden. Moreover, provider fees were established by collective contracting as a result of bargaining at cantonal level between the medical association and the federation of sickness funds. As sickness funds could not differ in the set of contracted doctors and hospitals nor in the level of fees, there were limited opportunities for a single sickness fund to widen its own market. Just one strategy was left open to them: to compete on the basis of the size of the benefit package. Because the benefit package was not defined in the form of a positive list, insurers started to enlarge the range of covered services beyond the minimum standard established by the 1964 revision of the law (Sommer, 1987: pp.51–3; Alber & Bernardi-Schenkluhn, 1992: pp.213–17). Another form of competition was the promotion of collective insurance contracts for members of specific organizations, particularly companies employing low-risk workers.¹³

Competition among insurers became particularly pernicious at the beginning of the 1990s, when some new companies began to attract younger cohorts by exploiting the premium-setting regulations. Seventy-five years after the introduction of the KUVG a large portion of the clientele of the old sickness funds consisted of people who had been paying contributions for decades (Sommer, 1987: pp.54–7). New companies began to cream-skim through full-scale promotion of their own products at particularly convenient youth-oriented premiums.¹⁴ Not all

federations and in 2002 the national association and the different cantonal federations were merged into a new body called *santésuisse*. In 2013, four large health insurers, which together account for about 41% of all insured, left *santésuisse* and founded *curafutura*. The reason of the divorce was a substantial disagreement with respect to the governance of *santésuisse*, which was (and is today) strongly in the hands of the emerging health insurer *Group Mutuel*.

¹³ Between 1979 and 1989 the diffusion of collective insurance contracts rose from 13% to 18% (Swiss Antitrust Commission, 1993: p.66). In 2015 the Swiss Financial Market Supervisory Authority introduced a more binding regulation of discounts offered by means of collective insurance contracts. Starting from 2017, a formal approval of the authority, based on actuarial data, will be necessary if the offered discount exceeds 10%.

¹⁴ The most prominent example of successful cream-skimming was that of Artisana. The expansion of this company was abruptly stopped by the

younger citizens could resist the temptation of fleeing the burdensome solidarity required by the old sickness funds, in which they were required to subsidize the health care cost of older people. Following this exodus of the young, the average risk profile in the historical funds worsened, forcing administrators to increase premiums generally, so pushing more and more low-risk individuals out of these funds (Sommer, 1987: pp.55–9; Beck & Zweifel, 1998). In 1993, acting with the right of emergency powers, the federal government took remedial action to prevent an insurance death spiral, which would have completely segregated the high-risk insured. These new regulations mandated the sickness funds' participation in a risk-adjustment mechanism based on age, gender and canton of residence (Beck, 2000; Beck et al., 2003), thus halting the segmentation of risks.¹⁵

The Federal Health Insurance Act (KVG) was approved following a referendum in 1994¹⁶ and came into force in January 1996. The next section describes this new legal framework.

Organization of health insurance in the 1996 Federal Health Insurance Act

The introduction of the KVG in 1996 marked a turning point for the Swiss health care system; not only was this the first radical reform at federal level after more than 80 years of immobilization (Table 14.1), but the Act also had enormous implications in terms of both inter-governmental task-allocation and the role of competition in the Swiss health insurance sector. The reform objectives, laid out in the Federal Council's bill of 8 November 1991, could be grouped into four broad categories: (i) strengthening solidarity (in relation to the previous legal framework); (ii) enhancing healthy competition among sickness funds; (iii) filling existing gaps in the benefit package by guaranteeing

introduction of risk adjustment in 1993, which forced it to merge with one of the largest sickness funds in Switzerland (Helvetia) a few years later to avoid insolvency.

¹⁵ Risk compensation was anchored in the federal law on sickness insurance in 1996, but for a limited time (10 years). The regulation had been prolonged until the end of 2011 and then prolonged again until the end of 2017, with a substantial improvement in the risk equalization formula starting from 2012.

¹⁶ Only a narrow majority of 51.8% voted in favour of the new law.

high-quality services; and (iv) containing health spending.¹⁷ These objectives were pursued with a mixed strategy, strengthening the role of competition and giving major recourse to planning and regulatory interventions by virtue of a bill that underwent several adjustments to overcome the obstacle of a referendum.¹⁸

Table 14.1 *History of popular ballots and legislative reforms in the field of federal health insurance in Switzerland, 1900–2014*

Year	Ballots and legislation
1900	Law Forrer rejected in referendum (by 70% of voters) Participation rate: 66.7%
1912	Federal law of Sickness and Accident Insurance (KUVG) accepted in referendum (by 54.5% of voters) Participation rate: 64.3%
1964	Partial revision of the KUVG (the minor changes were accepted without popular ballot)
1974	Failure of the popular initiative social health insurance (rejected by 70% of voting people and all cantons) and rejection of the counter-proposal (by 61% of voting people and all cantons) Main aim: to make health insurance (limited to hospital treatments and costly interventions) compulsory and to fund the coverage through wage-dependent premiums and State contributions Participation rate: 39.2%
1987	Law amendment rejected in referendum (by 71% of voters) Main aim: to enable a better control of health insurance spending (for example, by means of a stronger price control and a more binding planning of hospital capacity) and to expand the coverage of maternity insurance Participation rate: 47.6% Start of the preparatory work for the KVG

¹⁷ In 1996 Switzerland experienced concurrently the three classical reform waves identified by Cutler (2002): (i) universal coverage and equal access; (ii) control, rationing and expenditure caps; and (iii) incentives and competition.

¹⁸ See OECD (2006, 2011), Leu et al. (2007) and De Pietro et al. (2015), for an exhaustive presentation of the Swiss system.

Table 14.1 (cont.)

Year	Ballots and legislation
1992	Failure of the popular initiative “for a financially bearable health insurance” (rejected by 60% of voting people and all but one of the cantons) Main aim: to establish cantonal earmarked premium subsidies on top of the general federal contribution to health insurance funding Participation rate: 44.4%
1993	Urgent federal decree accepted in referendum (by 80% of voters) Main aims: to freeze health care tariffs and prices on the one hand, and premiums on the other until the planned complete revision of the Health Insurance Act comes into force; to set equal premiums for men and women; to slim down the benefit basket and further strengthen cantonal planning Participation rate: 39.8%
1994	Failure of the popular initiative “for a healthy health insurance” (rejected by 76% of voting people and all cantons) Main aim: to make premiums wage-dependent (equal contribution of employer and employee) KVG accepted in referendum by 51.8% of voters Participation rate: 43.8%
2000	Failure of the popular initiative “for lower hospital costs” (rejected by 82% of voting people and all cantons) Main aim: to limit mandatory health insurance entitlement to hospital costs Participation rate: 41.7%
2001	First revision of the KVG (no popular ballot requested)
2003	Failure of the popular initiative “health care has to remain payable” (rejected by 73% of voting people and all cantons) Main aim: to establish a new funding mechanism for mandatory health insurance, using value added tax and income-dependent as well as wealth-dependent premiums. Participation rate: 49.7% Failure in the parliament of the second revision of the KVG
2004	Start in the parliament of a new approach to the second revision of the KVG (unbundling strategy)
2007	Failure of the popular initiative “for a single, social sickness fund” (rejected by 72% of voting people and 21 cantons) Main aim: to establish a single health insurer and to introduce income-dependent premiums Participation rate: 45.9%

Table 14.1 (cont.)

Year	Ballots and legislation
2008	Failure of the referendum on the counter-proposal to the withdrawn popular initiative “for lower insurance premiums” (rejected by 69.5% of voting people and all cantons) Participation rate: 43.7%
2009	Accepted referendum on the counter-proposal to the withdrawn popular initiative “yes to complementary medicine” (accepted by 67% of voting people and all cantons) Main aim: to include specific alternative medicines in the mandatory health insurance coverage – previously only covered by voluntary health insurance Participation rate: 38.8%
2012	Failure of the referendum on an amendment of the KVG (rejected by 76% of voting people and all cantons) Main aim: to promote integrated networks of care with budget responsibilities by means of financial incentives for the insured, such as lower co-payment rate Participation rate: 38.7% Start of the new hospital financing and of the improved risk adjustment formula (hospitalization of three or more days in the previous year was added as a new criterion, next to the previous factors of age and sex)
2014	Accepted referendum on the counter-project to the withdrawn popular initiative “yes to a family doctor medicine” (accepted by 88% of voting people and all cantons) Main aim: to commit both cantons and the federal government to promote high-quality primary care that is easily accessible to all Swiss citizens Failure of the popular initiative “for a public health insurer” (rejected by 61.8% of voting people and 21 cantons) Main aim: to replace the current pluralistic system, based on health insurer competition, with a single, public health insurer Participation rate: 47.2% Federal Law on the Supervision of Mandatory Health Insurance (KVAG/LSAMal), which came into force without popular ballot and introduced a stronger control by the Federal Office of Public Health on premiums proposed by insurers and a clearer separation between the mandatory and voluntary health insurance schemes issued by the same insurer

Source: Author.

Note: Initiatives and referendums passed are in bold.

Strengthening competition among health insurers

With the aim of strengthening competition, the Swiss legislature drew inspiration from the model of managed competition.¹⁹ To enforce such a system, the role of the exit reaction mechanism²⁰ was reinforced by making the switch from one health insurer to another even easier than it has been in the past. One of the major changes introduced in 1996 was the establishment of a uniform statutory health insurance contract at national level. The contract obliged each health insurer to:

- guarantee the same benefit package (quite comprehensive in comparison to other OECD countries)²¹ to all people living in Switzerland;²²
- openly enrol anyone unconditionally and define premiums based on community rating at the regional level (all people aged more than 25, living in a given region and insured by a given sickness fund would pay the same premium);
- establish the same minimum amount of financial risk to be borne by the insured; since 2004 there has been a minimum annual deductible of 300 Swiss francs (Sw.fr.) (around €275)²³ and, for yearly health expenditure exceeding the deductible there is co-insurance of 10% up to a maximum amount of Sw.fr.700 (around €640) per year;²⁴
- offer homogeneous quality of health care services because the law (as in the previous legislation) forces each health insurer to contract with all hospitals and physicians operating in the market (compulsory contracting).²⁵

As a result of contract standardization, basic health insurance offered by each sickness fund can be assumed to be completely homogeneous,

¹⁹ This concept defines the mechanism of restricted competitive regulation proposed for the first time by Enthoven (1993, 2003). See also Zweifel (2000).

²⁰ This terminology stems from Hirschman (1970).

²¹ See Polikowski & Santos-Eggimann (2002).

²² Since the benefit package is established by federal law, no differences can exist in the coverage offered by the different competing sickness funds or for people living in different cantons.

²³ We consistently use the 2016 average annual exchange rate of Sw.fr.1 = €0.91.

²⁴ In other words, for people with the minimum deductible the maximum co-payment per year totals Sw.fr.1000 (€915).

²⁵ There are some exceptions, such as the voluntarily chosen managed care plans, which are based on selective contracting.

such that competition between health insurers should play out at the level of the quality of administrative services provided (time taken to reimburse bills, client support, etc.) and based on the price of the policy (the flat-rate premium established by each insurer in a particular canton). In order to facilitate switching between sickness funds, the insured have the opportunity to change insurer twice a year (on 1 January and 1 July).²⁶

Beside this form of radical exit (that is, switching between sickness funds), the federal law also facilitates two methods of partial exit (Gerlinger, 2003; Crivelli & Bolgiani, 2009). First, the insured can choose to bear a higher amount of risk, by selecting a higher deductible, in exchange for a premium discount. Choice of deductible is considered to be an instrument to limit moral hazard and increase individual responsibility. To reduce risk selection, the Swiss law establishes a maximum annual deductible of Sw.fr.2500 (about €2288) and maximum premium discounts associated with different deductible levels. Second, insurers can complement the ordinary policy by designing alternative managed-care-style insurance contracts, which limit choice of provider: Health Maintenance Organizations (HMO), Preferred-Provider Organizations (PPO) and Independent Practice Associations (IPA), which are networks of family doctors.²⁷ In exchange for a discount on the flat-rate premium, insured people can exit from the classic contract and select a managed-care insurance contract. In theory these alternative forms of insurance, while reimbursing the same range of services, should contribute to bringing health care costs under control through instruments such as selective contracting, gatekeeping, the use of guidelines, the introduction of bonus–malus systems,²⁸ and disease

²⁶ Some restrictions on changing insurers exist for special forms of insurance. For example, those who have chosen a higher deductible than the compulsory one may change sickness fund only once a year (1 January), whereas those who have opted for the no claims bonus model (Zweifel, 1992) only every 5 years.

²⁷ For more about the organization of managed care in Switzerland see Zweifel (1998). Beck (2000), Lehmann (2003), Baur (2004), Berchtold & Peytremann-Bridevaux (2011) and Berchtold & Peier (2012). To know more about the impact of such contracts on efficiency, see Lehmann & Zweifel (2004), Grandchamp & Gardiol (2011), Reich, Rapold & Flatscher-Thöni (2012) and Trottmann, Zweifel & Beck (2012).

²⁸ That is, a system that adjusts the premium paid by insured clients according to their individual claim histories.

and case management programmes. The 1996 reform was based on the assumption that over time the insured would become more sensitive to differences in premiums and, therefore, more mobile. It also expected that greater use of the exit mechanism would encourage insurers to invest more in controlling moral hazard by developing and advertising these new insurance products.

Separation of two realms of activity: social (statutory) versus private (voluntary) insurance

From the beginning of health insurance in Switzerland statutory cover by the sickness funds was offered alongside private insurance policies. Sickness fund cover was governed by the Social Insurance Law, within the framework of the KUVG, and controlled by the Federal Social Insurance Office, while private insurance policies were sold by companies operating in the life or non-life insurance sectors, governed by private law and subject to less strict control by the Federal Office of Private Insurance.

Historically, two types of quite distinct institutions operated within the field of health insurance: one of a non-profit nature (with the benefit of direct public subsidies and tightly controlled) and the other of a for-profit nature with decidedly less rigid legal constraints. Under KUVG regulation the legal status of most of the sickness funds was that of an association, foundation or cooperative, or they were local public institutions.²⁹ The enactment of the KVG in 1996 brought about a profound change in this traditional distinction. Instead of distinguishing institutions on the basis of legal status (non-profit versus for-profit), the new system differentiates two realms of activity: social insurance and private insurance. Accordingly, since 1996 social insurance (which includes statutory health insurance and voluntary cash benefit insurance) can be provided by any institutional form. All institutions operating in the compulsory social insurance sector come under the tight control of the Federal Office of Public Health and are obliged to comply with

²⁹ In 1966, 215 of the circa 900 existing sickness funds were public bodies integrated into local or cantonal public administration or managed as independent institutions of public law. The last public insurer was transformed into a stock company in 2009.

the more restrictive regulations of the KVG.³⁰ Conversely, institutions offering voluntary insurance products are rooted in the private Law on Insurance Contracts (*Versicherungsvertragsgesetz*) and supervised today by the Swiss Financial Markets Supervisory Authority.

As of 1996, therefore, sickness funds have been authorized to operate in the profit-oriented voluntary insurance sector as well. In the meantime, several mandatory health insurers created independent branches to operate with more leeway in the market for voluntary health insurance. In 2016, 30 mandatory health insurance companies (party directly, partly through independent branches) offered supplementary voluntary health insurance, whereas the number of insurance companies exclusively offering voluntary health insurance was 26. The possibility given to so-called social insurers to offer contracts under private law creates major problems in terms of patient mobility and risk selection, particularly for those who have or wish to buy voluntary insurance.³¹ According to a comprehensive analysis of the sector (Hefti & Frey, 2008), in 2007 about 70% of the sickness funds (mainly small and operating at the regional level) had maintained their initial legal status. The remainder had become stock companies;³² these are mostly active across the whole country and together cover two thirds of the population.³³ Table 14.2 summarizes the most important differences between compulsory social and voluntary private insurance contracts.

³⁰ Since 1996 only one private insurer has moved into the realm of social insurance (Winterthur in 1997). However, in 2005 it left the KVG sector as it was sold to a non-profit private health insurer.

³¹ Although tie-in practices are forbidden and voluntary health insurance is offered by independent branches, the ambivalent character of contractual relations with the health insurer (who offers, alongside statutory insurance, private voluntary cover in a less regulated market) raises serious difficulties for the insured in understanding the distinction between the two types of contract. If, in the mind of insured people, the two types of contract cannot be clearly separated, the contents of voluntary insurance may influence the choice of basic insurance.

³² These are not public companies listed on the stock exchange. With just one exception, the owners of the stocks are not private individuals but the foundations or associations who historically started running social health insurance in Switzerland. As of 2007, 96% of the population was covered by a sickness fund owned by an association or a foundation (Hefti & Frey, 2008: pp.18–21).

³³ The exact market composition as of 1 January 2016 was (own computation based on FOPH, 2016b): four co-operatives and 14 associations (mostly regional or cantonal, with 11 500 members on average); nine foundations

Table 14.2 *Main differences between statutory health insurance and private voluntary insurance in Switzerland*

Statutory health insurance (KVG)	Voluntary health insurance (VVG)
Compulsory insurance with open enrolment	Free contract between insurer and insured
Fixed benefit basket	Freedom in the definition of the services included (beyond the basic benefit basket)
Community rating	Risk-adjusted premiums (at individual or group level)
Unlimited duration of the contract	Possibility to limit the duration of the contract
No coverage restriction to people entering the contract or switching health insurer	Possibility to restrict coverage and waive payment of care related to diseases existing at the time of enrolment

Source: Brunner, Cueni & Januth (2007).

The domain of voluntary insurance can be divided into three distinct product lines, each one accounting for about one third of premium revenues:

- supplementary hospital insurance, which offers free choice of hospital across all cantons,³⁴ free choice of physician in public hospitals and higher standards of hotel comfort in private and semi-private wards
- cover of services not included in the compulsory benefit package (for example, complementary medicine performed by (non-physician) therapists, dental care and home care beyond the standard covered by compulsory social insurance)
- daily cash benefits insurance.

(four of which operate at the national level, with 33 000 members on average); 31 stock companies (all nationally active, with 250 000 members on average).

³⁴ In 2012, free hospital choice across cantons was introduced in mandatory health insurance plans. However, because inpatient care in other cantons is covered by mandatory health insurance only up to the diagnosis-related group tariff applying in the canton of residence, this voluntary health insurance product line continues to have some value for patients, although it is far less than in the period before 2012 (for this reason the Swiss Financial Markets Supervisory Authority recently forced companies to reduce premiums for this voluntary health insurance product line).

As far as supplementary hospital insurance is concerned, in 2014 12% of the population owned a policy sold by a sickness fund operating in the mandatory health insurance sector and covering access to private or semi-private wards.³⁵ The first two product lines are dominated by sickness funds, whereas private insurers have a significant market share in the more complex daily cash benefits and voluntary group insurance sectors (that is, employer-driven contracts).

Overall, two distinct trends can be seen in the voluntary health insurance market. First, voluntary health insurance revenues have grown more slowly than for mandatory health insurance. Between 2000 and 2014 premium revenues increased by Sw.fr.1.2 billion for the first two product lines and by Sw.fr.1 billion for cash benefits, whereas mandatory health insurance premiums grew by Sw.fr.12.4 billion. During the same period voluntary health insurance premiums declined as a proportion of total health insurance revenues, from 34% to 27%. Many companies today are not willing to offer voluntary cover to older people, while the young, who are faced with the heavy burden of mandatory insurance, increasingly choose not to take out voluntary cover for hospital care as long as they are in good health. The consequence of this trend is a worsening of risk pooling.

Second, the sickness funds' share of the voluntary insurance sector has fallen. In 1997, 89% of those with voluntary cover for private or semi-private wards in hospital had a policy with a sickness fund. By 2006 this proportion had declined to 43%. The market shares of sickness funds in terms of voluntary health insurance premium revenues declined between 2000 and 2014 from 57% to 16% (own computation based on FOPH, 2016a: table 911b). These data conceal a very specific strategic choice: many sickness funds have decided to give up the voluntary insurance sector and have set up separate companies to which they have transferred their private portfolios. In this way, organizations that manage private insurance contracts can avoid being monitored by both agencies regulating health insurance, making themselves subject only to the less severe of the two.³⁶

³⁵ Since 2008 the Swiss Financial Markets Supervisory Authority stopped the publication of the figures for private insurers.

³⁶ Konstantin Beck, CSS Insurance, Switzerland, oral communication, 9 July 2008. Hefti & Frey (2008: pp.23–5) have shown a surprising result with respect to profit distribution. From a survey conducted in 65 funds it emerges that only one company has distributed part of its profits to the holding company.

Devolution of competences to the federal government

Historically, the organization of the health system has come under the control of the cantons. Over time, decentralization of competences, ample autonomy of the cantonal governments in public spending decisions and fiscal federalism have created significant differences among cantons with respect to per person health care spending, regulatory setting, the role of the private versus public sector and the level of production capacity (Vatter & Rüefli, 2003; Crivelli, Filippini & Mosca, 2006). Instead of a single health care system, Switzerland is composed of 26 subsystems, connected to each other by the KVG. However, although each canton is formally responsible for ensuring access to good quality health services, the KVG has shifted the balance of power from the cantons to the Confederation. Health insurance is now compulsory at the federal level and the Confederation defines the benefit package guaranteed to each resident.³⁷ In effect, health insurance is a public service institutionalized at national level to which all citizens have universal access. The public service is financed by two instruments: compulsory insurance supplied by private sickness funds within the framework of the KVG and the public spending of the cantonal and municipal authorities. The latter is financed by general local government taxation and used to subsidize providers who offer services included in the compulsory benefit package (for example, hospitals of public interest, public nursing homes, public and non-profit home care institutions). Furthermore, both federal and cantonal contributions are used to subsidize health insurance premiums for households with modest incomes.

The KVG forced a reduction in cantonal autonomy on decisions regarding public spending, leading to several important changes in the distribution of tasks between the Confederation and cantons.³⁸ In 2013,

Therefore, the empirical evidence shows that the profits of the voluntary sector are generally kept within the companies, to increase reserves, to further develop the business (for example, marketing campaigns to attract good risk profiles) or reduce premiums.

³⁷ Social insurance is not automatic but it is compulsory. The cantons are responsible for the surveillance of this mandatory insurance and check the membership status of each citizen. It is impossible to leave one sickness fund without having a contract with another insurer and fines are imposed on those who are caught without coverage (Brunner, Cueni & Januth, 2007: pp.151–2; Cheng, 2010: p.1443).

³⁸ Switzerland is moving in the direction hoped for by the theory of fiscal

the federal health minister issued, for the first time in Switzerland's history, a strategic plan (called *Gesundheit2020*) that sets priorities for health policy action in four areas and defines 36 measures to be implemented in the coming 8 years.³⁹ The reactions of stakeholders and cantonal authorities to this initiative were mixed. Nevertheless, this initiative of the federal government demonstrates that even federal states with a longstanding tradition of decentralization need, at a certain point in their history, to overcome fragmentation and weak health policy leadership, and start to increasingly rely on central power interventions (Crivelli & Salari, 2014b). The essence of the problem lies at a different level: such a transfer of new tasks to the Confederation cannot take place without an amendment of the Federal Constitution (Schaffhauser, Locher & Poledna, 2006) and must be accompanied by a corresponding adjustment of the public spending share borne by the federal government (Crivelli & Filippini, 2003). The absence of these adjustments would result in a violation of the principle of "who decides, pays", as the bulk of public spending on health is still financed by the cantons, even though the Confederation plays an increasingly important role in health policy decisions. Accordingly, it is not surprising that in the last 20 years cantons have been unwilling to accept radical reforms of the system aimed at transferring additional responsibilities and decision-making power to the central government and to health insurers without an equivalent transfer of financial responsibilities. Several times in the last two decades cantons have been the main opponents of the federal government's roadmap of reform, and hence the search for consensus on fundamental changes continues to be slow and complex (Bolgiani, Crivelli & Domenighetti, 2006).

Assessing the performance of health insurance

The contribution of statutory health insurance to health care finance

Switzerland is distinct, among high-income countries, in its highly regressive health care financing system (Wagstaff & van Doorslaer, 1992;

federalism, according to which the central government should have responsibility for income redistribution (and therefore also for financing the basic stock of merit goods), whereas cantons should be responsible for the organization and production of health services (Oates, 1999).

³⁹ See www.bag.admin.ch/gesundheit2020/index.html?lang=en.

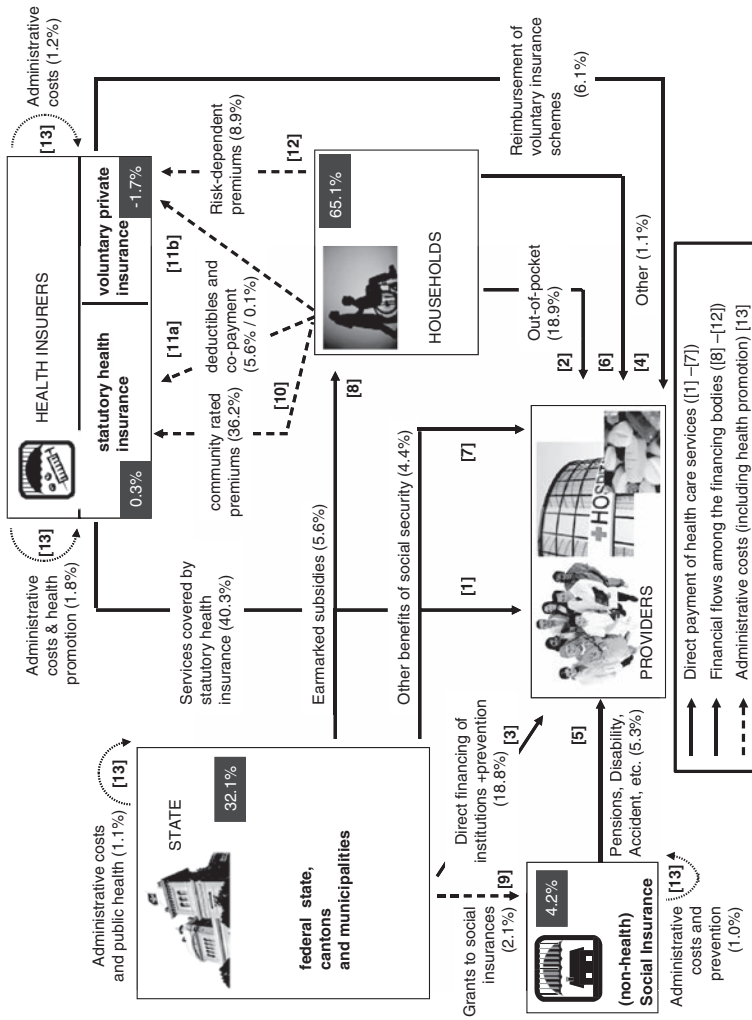


Figure 14.1 Health care financing in Switzerland in 2014

Sources: FSO (2016); FOPH (2016a).

Note: In 2014 total health care financing amounted to Sw.fr.71.3 billion.

Wagstaff et al., 1999; Bilger, 2008; Iten et al., 2009; Ecoplan, 2013; Crivelli & Salari, 2014a). This is due to two factors: first, compulsory health insurance premiums are established independently of citizens' ability to pay; and, second, citizens are called on to pay a considerable share of the health care costs (approximately 31%) out of pocket or through voluntary insurance. This share is high compared with other OECD countries, illustrating how a combination of fiscal federalism, direct democracy⁴⁰ and a private insurance system can lead to low achievement with respect to the objectives of redistribution and vertical equity (Banting & Corbett, 2002).

The Swiss health care system is also characterized by a multiplicity of actors who finance health services: the three levels of government (federal, cantonal and municipal); approximately 60 sickness funds; private insurers and other social insurance bodies; and, finally, every Swiss household. Direct payments for health services are indicated in Fig. 14.1 by the solid arrows with the numbers [1] to [7]; in addition to which several financial transfers take place between the financing bodies, shown by the dashed arrows from [8] to [12]. Finally, the dotted lines [13] indicate administrative costs (which include spending on prevention and health promotion).

Total spending on health care is therefore distributed in the following manner:

- The share borne by the state (Confederation, cantons and municipalities) is about 32%, financed by Swiss residents in a generally progressive way by means of taxation. The bulk of the state share comes from cantons and is used to finance hospitals. A significant but smaller portion of this share is used to subsidize premiums (56% from federal government, 44% from the cantons in 2014).
- The net share borne by non-health social insurance funds (accident, invalidity and pensions) is about 4.2%.⁴¹ This share comes from

⁴⁰ Fiscal federalism and direct democracy are jointly responsible for the significantly lower level of public spending on health care (Feld & Kirchgässner, 2005).

⁴¹ In general, the main goal of such social insurance is to provide cash benefits. However, premium revenues finance in-kind benefits too. For example, health care delivered to an employed person due to an accident is financed by accident insurance rather than mandatory health insurance.

contributions proportional to income and is jointly financed by employers and employees.

- The share of expenditure borne by households accounts for 65.1%.⁴² This spending, whose main feature is the absence of any relation to citizens' ability to pay, comes in four distinct forms, with different redistributive effects:
 - net community-rated premiums for mandatory health insurance,⁴³ which amount to 30.6% of total spending (36.2% less 5.6% of premium subsidies) and reflect solidarity between the healthy and the sick, and between generations
 - voluntary private insurance premiums, which are risk-rated but still defined *ex ante* and therefore represent a way of financing health care based on mutuality (8.9% of total spending)
 - contributions depending *ex post* on each individual's health care consumption, net of the public contributions in various regimens of social protection such as social aid, allowance, etc. (24.5%); this category includes direct out-of-pocket payments as well as co-insurance and deductibles for services covered by mandatory health insurance
 - private donations to non-profit institutions represent 1.1% of health spending.

In a nutshell, approximately one third of Swiss health care financing is linked to citizens' income and ability to pay (federal, cantonal and municipal tax financing, with the exception of value added tax, non-health social insurance contributions). The second third reflects each citizen's risk profile and individual health care consumption (voluntary private insurance and out-of-pocket payments). The last third allows for a high degree of solidarity between the sick and the healthy (the community-rated premiums). As a result, the middle class bear a disproportionately heavy share of the financial burden in the interests of solidarity.

⁴² The total of the three shares exceeds 100%, since it includes the deficit of statutory health insurance (0.6% in 2013) and the surplus of voluntary insurance (2.1% in 2013).

⁴³ Mandatory health insurance is for individuals, with every family member having a separate contract. Premiums are paid directly to the sickness funds, generally on a monthly basis.

Unsustainable health insurance premiums for the middle class

Overall, Swiss health care is characterized by good equity of access⁴⁴ and substantial and widespread public approval – in spite of high levels of out-of-pocket expenditure – by virtue of the high degree of responsiveness to patients' desires, the large benefit package and ample freedom of choice. However, beyond these positive performance scores, emphasized in several international analyses (WHO, 2000; OECD, 2006; van Doorslaer, Kollman & Puffer, 2002; van Doorslaer, Masseria & Koolman, 2006; Schoen et al., 2010), there is little pressure to enhance efficiency in the Swiss health care system.

Retrospective (fee-for-service) provider payment for outpatient care, collective negotiations at the association level and ineffective risk adjustment by health insurers are not the best way to prevent monopoly rents in income distribution (Zweifel, 2004). The explosion of health care costs experienced in Switzerland is reflected in constant increases in health insurance premiums over the last 10 years. Between 1996 and 2016 the average national annual premium for adults has grown by 147% from Sw.fr.2077 (about €1900) to Sw.fr.5138 (about €4700).⁴⁵ The increase may have been more pronounced without the concurrent transfer of risk from the health insurers to the insured; from 1996 to 2005 the minimum deductible doubled from Sw.fr.150 to Sw.fr.300. The ongoing reduction in statutory reserve standards since 1998 has also contributed to containing the size of actual premium inflation.⁴⁶

⁴⁴ Although financial barriers might be a problem for lower social classes [EU-SILC data show that in 2014 almost 10% of the poorest income quintile reported having an unmet need for dental care due to cost; Eurostat (2016)], horizontal inequity scores for Switzerland are not significantly different from zero with respect to the probability of visiting a doctor and the mean number of visits, whereas the probability and number of general practitioner visits are pro-poor and those of specialist visits are pro-rich (van Doorslaer, Masseria & Koolman, 2006; De Pietro et al., 2015: p.238). However, according to some evidence of supply-induced demand in Switzerland (Domenighetti et al., 1993; Crivelli, Filippini & Mosca, 2006), we cannot exclude the possibility that poorer households obtain the appropriate quantity of specialist visits whereas richer households over-consume specialist care.

⁴⁵ There is significant variation across cantons. From 1996 to 2014, the largest growth was noted in Argovia (+182%) and the lowest in Vaud (+71%). In absolute terms, the annual premium increased from a minimum of Sw.fr.2049 (in Wallis) to a maximum of Sw.fr.3775 (in Basle-Town); see FOPH (2016a).

⁴⁶ By law, sickness funds have to withhold a fixed percentage of premium

As a result of cost and premium inflation, combined with increased cost shifting to consumers, the economic burden of health insurance has become unsustainable for a large number of citizens (Kilchenmann, 2014; Frey & Neumann, 2015).⁴⁷ Although premium subsidies for households with modest incomes (provided jointly by the Confederation and cantons) have increased by 64% between 1998 and 2014, the impact of the net premium on disposable income for many households has also increased greatly, in many cases exceeding the 8% threshold to which the Federal Council committed itself when presenting the KVG draft bill in 1991 (Kägi et al., 2012; Frey & Neumann, 2015). Fig. 14.2(a) shows the evolution of net premium incidence (as a percentage of disposable income) for two typical households (a family of four and a retired single person) from 1998 to 2014. The graph highlights the Swiss average as well as the situation in the cantons with the lowest and highest incidence. Fig. 14.2(a) illustrates two facts. First, a general growth in incidence over time; the almost flat development for the retired person between 2004 and 2007 is due to a change in the economic

revenues to lower the risk of insolvency. The total amount of reserves decreased from 25.7% in 1996 to 15.7% in 2011, reflecting the significant reduction in the statutory solvency requirements (for the largest funds with more than 250 000 insured the minimum reserve ratio decreased from 20% to 10%). The freed reserves have been used by insurers partly to absorb cost inflation and smooth out premium increases. Since 2012, a new method has been used to compute the solvency ratio of Swiss sickness funds. The new solvency ratio declined from 172% in 2012 to 155% in 2014 (FOPH, 2016a).

⁴⁷ In Switzerland, a growing number of the insured (on average, young people in socially and economically weak situations, who are still in good health or do not have significant health problems) no longer pay their premiums. In 2006, the parliament strengthened the sanctions these people face, giving the sickness funds the opportunity to suspend coverage until all unpaid invoices have been settled. Since 2012, if individuals fail to pay their premiums, mandatory health insurance companies can request cantons to pay 85% of the unpaid bills on behalf of the insured. This change was introduced to ensure that all residents have valid insurance coverage and can receive care. However, cantons can keep a black list of individuals with frequent arrears. These lists are sent to public (cantonal) providers, and mandatory health insurance companies have to reimburse only emergency care provided to them. According to data of the FOPH (2016a), more than 350 000 people had arrears on their premiums in 2014, whereas 23 000 people were registered on the black lists due to repeated arrears in paying their premiums.

situation of the underlying reference household,⁴⁸ which masks the real development of the situation. Second, the strong horizontal inequity of financing across the cantons; the distance between the lowest and the highest canton remains constant over time for the retired person, but it increases for the family. This variation can be explained by the different levels of cantonal spending on health as well as the cantons' diverging strategies in earmarking subsidies for low-income households; some cantons distribute small allowances to a large share of the population, whereas others prefer to target smaller groups of citizens and give them larger amounts of money (Preuck & Bandi, 2008).⁴⁹ Moreover, the large reform of the fiscal equalization scheme in 2008 provided cantons with more leeway to react to budgetary pressures by cutting their spending for earmarked premium subsidies (Gerritzen, Martinez & Ramsden, 2016). As a result, heterogeneity of incidence across cantons could even further increase in the coming years.

As would be expected from the system's design, those bearing the greatest share of the financing burden belong to the middle class, the group that no longer benefits from premium subsidies or receives only a marginal contribution from the state. Fig. 14.2(b) illustrates a typical ratio of net insurance premium incidence on household disposable income in Switzerland, computed for a couple living in Ticino canton in 2011.⁵⁰ The highest level of incidence, in this particular case 17.5% of disposable income, corresponds to the middle class (an income of Sw.fr.53 000 for a couple). Moreover, for many insured people whose income is slightly above the poverty line, small increases in income are to a large extent eroded by the immediate stopping of means-tested social aid and by the quick reduction in the subsidies provided, resulting in significant threshold effects (the almost vertical line between Sw.fr.44 000 and Sw.fr.53 000 in Fig. 14.2b).

⁴⁸ The income of the retired person was changed from Sw.fr.30 000 to Sw.fr.45 000 between 2004 and 2006.

⁴⁹ See Gilardi & Füglistler (2008) for an empirical analysis of the diffusion of health insurance subsidy policies across cantons, using a dyadic approach.

⁵⁰ Although the system of premium subsidies differs greatly from one canton to another (Crivelli et al., 2007), the final outcome in terms of incidence is very similar to that illustrated in Fig. 14.2(b). This can easily be demonstrated by looking at the new on-line monitoring of premium incidence in the different cantons, set up in 2008 by the Swiss Office of Public Health (see www.bag.admin.ch/praemienverbilligung/index.html?lang=de).

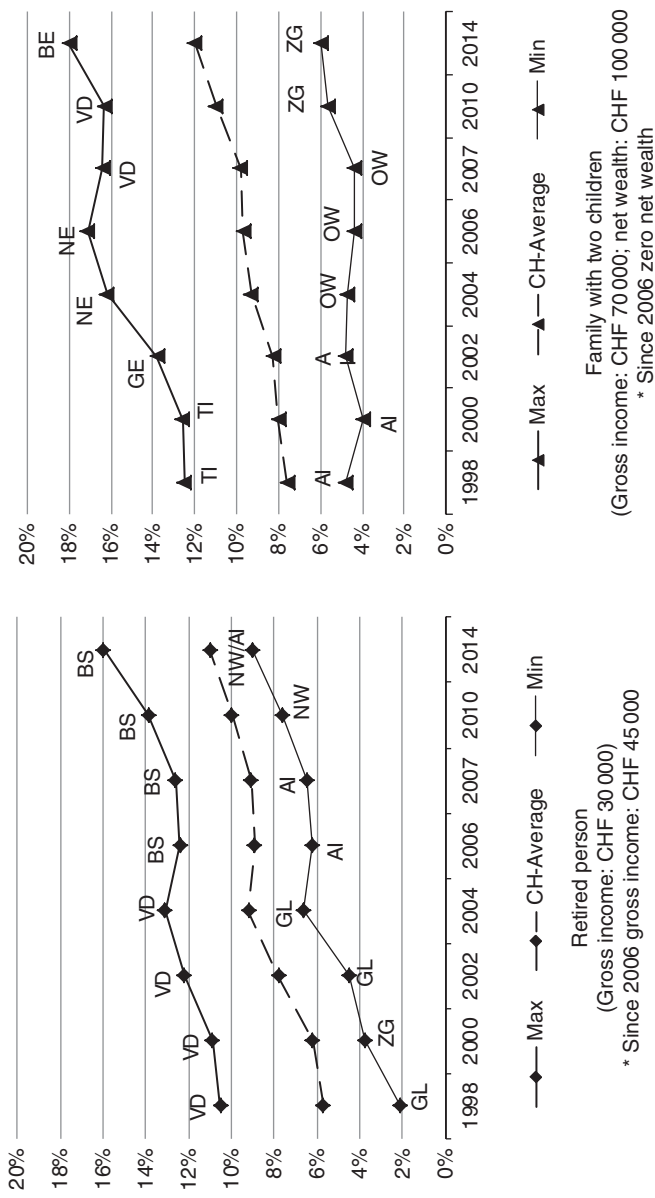


Figure 14.2 (a) Change in net premiums as a percentage of disposable income (Swiss average and cantons with lowest and highest incidence), 1998–2014
Source: Balthasar, Bieri & Gysin (2008).

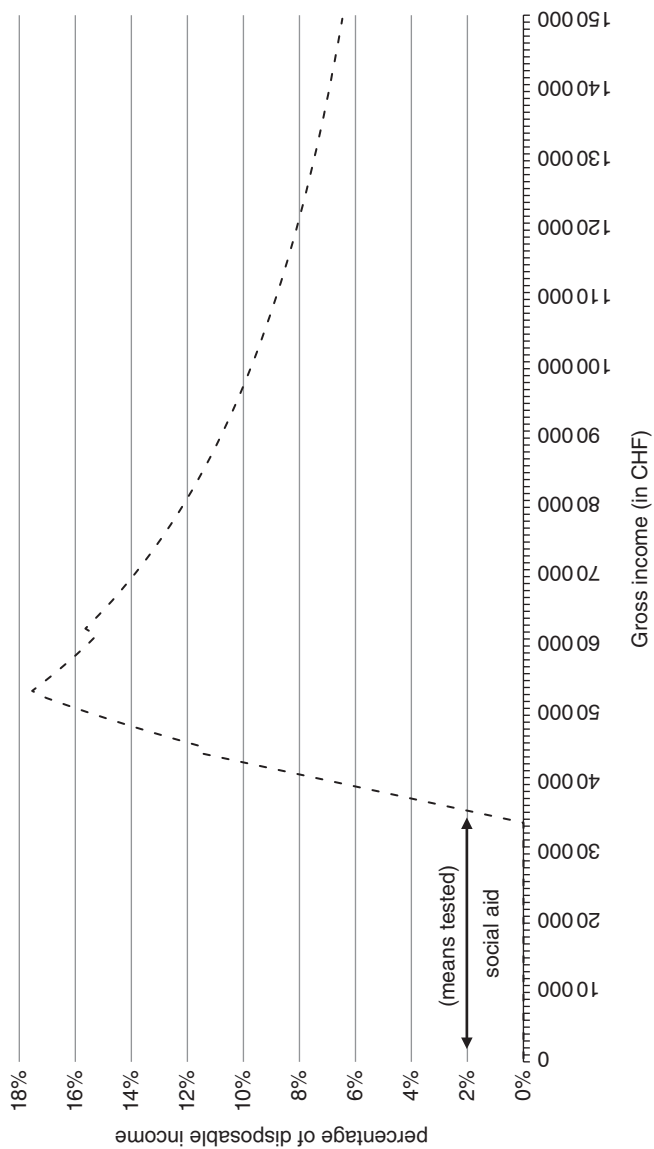


Figure 14.2 (b) Shape of the 2011 net insurance premium incidence for a couple living in Ticino

Source: Crivelli et al. (2015).

Victor Fuchs foresaw this problem in his presidential address to the American Economics Association in 1996, although Fuchs himself may have been unaware that only a few days earlier Switzerland had adopted this system. He noted that:

“There are only two ways to achieve systematic universal coverage: a broad-based general tax with implicit subsidies for the poor and the sick, or a system of mandates with explicit subsidies based on income. I prefer the former because the latter are extremely expensive to administer and seriously distort incentives; they result in the near-poor facing marginal tax rates that would be regarded as confiscatory if levied on the affluent.” (Fuchs, 1996: p.17).

Evolution of health insurance market structure

Throughout the first half of the 20th century (Fig. 14.3a) the number of sickness funds doubled from about 500 in 1915 to over 1100 in 1950. This was followed by a phase of progressive concentration in the market, largely through mergers and acquisitions (Frei, 2007),⁵¹ marked by a dramatic fall in the number of sickness funds (from 984 in 1965 to 58 in 2015) and an increasing degree of professionalism and range of operation.⁵² Nevertheless, the administrative costs of mandatory health insurance remain moderate (compared with United States standards), amounting to 4.9% of total operating costs in 2014.

Over time the change in numbers of sickness funds has been accompanied by other profound changes. Once-local mutual support groups were transformed into modern insurance companies – global players⁵³ – losing their local vocation and their link to particular population groups such as employees in a given firm, members of a trade union, special professional categories and inhabitants of a given area. The Herfindahl–Hirschman Index (HHI) computed for each individual

⁵¹ At the same time, there was an increase in the degree of population coverage.

⁵² Although there was an overall decrease in the number of insurers nationally, the average number of companies operating in each canton (that is, the choice set from the insured’s point of view) increased from an average of 40 sickness funds per canton in 1997 to 56 in 2004 (Frank & Lamiraud, 2008) and then decreased again to reach an average of 45 in 2015.

⁵³ In 1980 the global players made up just 1.8% of total number of sickness funds (Alber & Bernardi-Schenkluhn, 1992: p.241), while in 2016 most health insurers (83%) operated on a national scale.

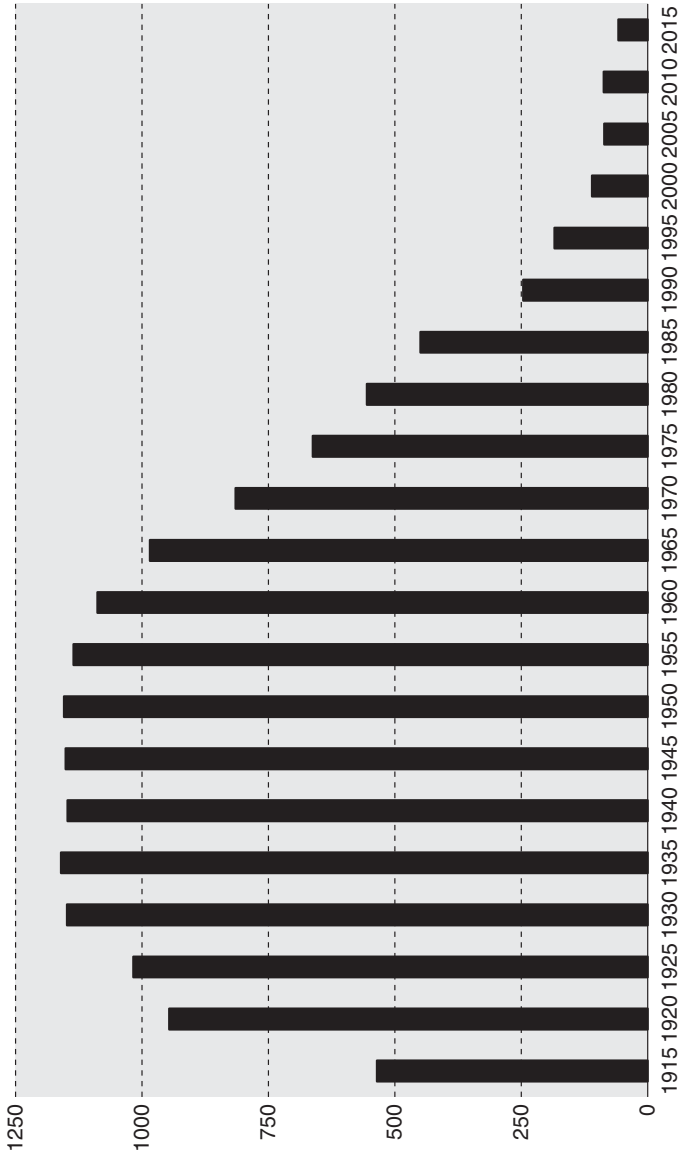


Figure 14.3 (a) Number of sickness funds in Switzerland, 1915–2015

Sources: Alber & Bernardi-Schenkluhn (1992), FOPH (2016b).

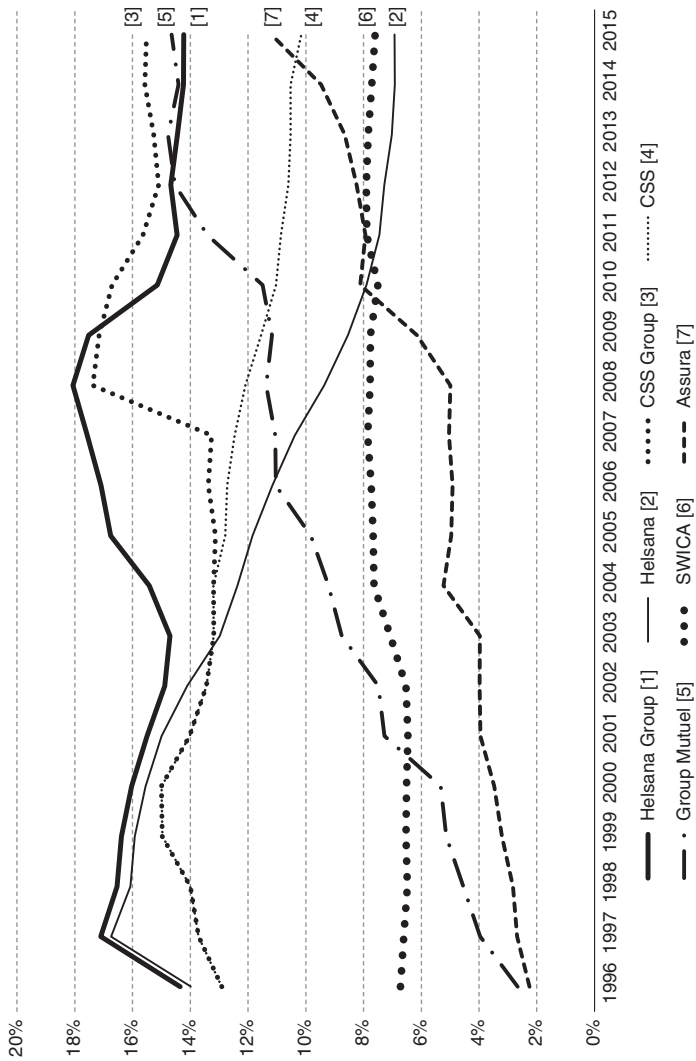


Figure 14.3 (b) Market share of the largest insurers and holdings in Switzerland, 1996–2015
 Source: FOPH (2016b).

health insurer shows a weak reduction in market concentration (the HHI declined from about 0.0757 in 1996 to 0.0545 in 2015). In fact, the largest sickness funds (Helvetia/Helsana, CSS and Visana) have increasingly lost clients, to the benefit of average-sized companies investing in risk selection, in particular Assura and sickness funds belonging to the insurance holding Group Mutuel, which in 2003/2004 included 17 different companies and was very successful at segmenting its clientele into risk groups. Starting from 2003 even the largest sickness funds have tried to imitate this strategy, transforming themselves into holding companies and grouping sickness funds, which maintain their own company names (as well as their independent legal status) but are managed according to a common strategic orientation.⁵⁴ By acquiring small funds and creating new companies CSS and Helsana have managed to stop the loss of affiliated members observed since 1997 and reverse the trend (see Fig. 14.3b). Another successful sickness fund, that managed to maintain its market share without creating a holding structure, was Swica. The competitive advantage of Swica has been its strong investment from the very beginning in the development of HMOs. Hence, when considering the market share of the holding companies that exist today, instead of individual sickness funds, we observe a significant increase in market concentration between 1996 and 2015 (the HHI increases from 0.0763 to 0.1008). The regional markets are much more concentrated. In five cantons (Geneva, Jura, Obwalden, Basel City and Graubünden) the 2006 HHI was higher than 0.1800 (which corresponds to the usual threshold indicating a highly concentrated market) (Hefti & Frey, 2008: p.46). The improvement of the risk adjustment formula, which was implemented in 2012 with the aim of making cream-skimming strategies less attractive, had the expected positive effect. Already in 2011, Group Mutuel decided to slim down its structure by reducing the number of companies from 15 to four, significantly enhancing market transparency.

Risk pooling and switching behaviour

Hirschman (1970) argues that in order to judge the functioning of the exit-reaction mechanism one must evaluate switching behaviour in

⁵⁴ People are generally not aware of the holding structure of the health insurers and still regard each sickness fund as if it were a completely different company.

relation to differences in price and quality. As explained previously, collective contracting for the compulsory benefit package removes differences in the quality of covered health services. Disparities exist, however, in the quality of administrative services and the price of community-rated premiums. The latter reflects the average profile of an insurer's risks (and is therefore susceptible to cream-skimming strategies) and the insurer's ability to control consumers' invoices, limiting the consequences of moral hazard. Although there are tangible differences between insurers in terms of administrative service quality,⁵⁵ these are difficult to quantify. It is even more difficult to determine elasticity of demand with respect to administrative quality. What can be hypothesized is that these differences are more evident to those with frequent relations with their insurers – for example, people with chronic conditions who often require information or regularly submit invoices and can better assess speed of reimbursement.⁵⁶

Despite large differences in premiums (Leu et al., 2007) and low switching costs, for many years only a small fraction of policy-holders (between 2% and 3%) switched insurer.⁵⁷ However, the situation has changed significantly in recent years, due to continuous premium growth, which makes health insurance more and more unaffordable for the middle class (households not eligible for subsidies). The percentage of people switching to a cheaper health insurer between 2009 and 2010 exceeded 15% and has since then remained consistently above 6.5%. According to Diserens (2002), quoted in Beck (2004a), price elasticity for mandatory health insurance (estimated from aggregate market-share data) is approximately -0.5 in Switzerland, higher than is seen in the Netherlands, but much lower than in Germany (Schut, Gress & Wasem, 2003). However, using individual data Beck & Gelpe (2002) obtained much higher estimates (average value -1.09) and elasticity estimates calculated by Rüttschi (2006) are even higher. In other words,

⁵⁵ See the Comparis survey (www.comparis.ch).

⁵⁶ For this reason, from a theoretical viewpoint, increased competition among health insurers to acquire good risks and avoid bad risks can contribute to a general decline in the quality of client support services, so vitiating signals from dissatisfied enrollees or (exiting) people to the sickness fund management.

⁵⁷ The percentage of individuals switching funds (which includes movement between companies of the same insurance group) was, for example, 3.3% in 2005, 2.7% in 2006, 2.3% in 2007 and 2% in 2008; see the Comparis survey (www.comparis.ch).

Swiss consumers seem to be less responsive to changes in the price of premiums than German consumers, but recent data highlights a new trend leading to the expectation of higher switching rates in the future. Empirical evidence shows that those willing to change sickness fund frequently come under the category of good risks: young, healthy and higher educated enrollees (see Strombom, Buchmueller & Feldstein, 2002; Beck et al., 2003).

What emerges from this picture is that most insured people do not exit but stay with their sickness fund, even if their premiums are 40% higher than the least expensive on offer. There are many ways of interpreting this limited degree of switching. The insured may regard the transaction costs of switching to be very high, particularly if they are older or sicker and have voluntary insurance coverage.⁵⁸ Alternatively, low mobility could be explained by asymmetric information (people underestimate the potential gain of switching health insurer), the limited rationality of individuals and their status quo bias. Moreover, even though the premium is higher, many insured may be unwilling to switch out of loyalty to their own sickness fund. Finally, there are risk-averse individuals who prefer to remain faithful to a company whose faults and merits they know rather than face the uncertainty of a new insurer. Or perhaps, more simply, they hold on to the hope that in future their current insurer will offer the compulsory benefit package cover at a more competitive rate.

According to Laske-Aldershof et al. (2004), the reasons for increased premium variation in Switzerland include a risk-adjustment formula with poor predictive power before 2011,⁵⁹ the low-risk profile of switchers,

⁵⁸ Customer mobility is limited for voluntary insurance contracts (which are governed by private law) because when taking out such a policy, the insurer may request a medical examination and use the information obtained to calculate risk-adjusted premiums and introduce limits to coverage. Some people fear that by changing their basic insurer they might lose their voluntary cover.

⁵⁹ Technically, risk adjustment is calculated as follows: sickness funds with an age structure that compares favourably with that of the general population (many younger and male, few female and older) must contribute to a risk equalization fund, whereas those showing a competitive disadvantage in this regard will receive a subsidy from it. On the shortcomings of the Swiss risk-adjustment formula, based only on sex and age, and on the reform proposals see Spycher (2002), Holly et al. (2004), Beck (2004a, 2004b), Beck et al. (2006). Since 2012 the formula considers a new factor: hospitalization in the previous year and this change is considered as a major improvement

the success of risk-selection strategies adopted by the most aggressive sickness funds and the relative share of people choosing higher deductible levels in the population enrolled in the different sickness funds. As a result, risk-pooling has become less efficient over time. As shown by Frank & Lamiraud (2008), the broadening choice set facing the insured in most cantons (see footnote 255) brought about, *ceteris paribus*, a significant decrease in the frequency of switching.⁶⁰ All these data suggest that further liberalization of the health insurance market, if accompanied by an increase in insurers, could have negative outcomes such as lower efficacy in the exit decisions of the insured and, indirectly, increased risk of transferring so-called rent to insurers.

Risk selection versus moral hazard control

For people who do not switch insurer, the opportunity for partial exit remains an option through the choice of a higher optional deductible or a managed care contract. The number of adult insureds opting for an optional deductible rose between 1996 and 2014 from 32% to 56%.⁶¹ The diffusion of higher deductibles may have both a positive and a negative impact. The positive consequence is an increase in individual responsibility and a reduction in the use of unnecessary health services. Some authors concur that high deductibles have significantly reduced moral hazard in Switzerland (see Werblow, 2002; Felder & Werblow, 2003; Werblow & Felder, 2003), whereas other studies estimate the positive impact of high deductibles to be modest (Schellhorn, 2002). The negative effect is the process of self-selection that determines deductible choice. Geoffard, Gardiol & Grandchamp (2006) have observed, from a representative sample of clients, that the mortality rate of the insured selecting the minimum deductible is 200% greater than that of those selecting a medium deductible. On the other hand, the insured choosing

in mitigating cream-skimming (Beck, Trottman & Zweifel, 2010; Eugster, Sennhauser & Zweifel, 2010).

⁶⁰ These results were obtained through a complex econometric model that controlled for variables such as the potential saving achieved by switching fund, the existence of voluntary cover, the degree of satisfaction towards one's own insurer, the duration of the contract, and sex, age and self-reported health status.

⁶¹ In 2005 the maximum deductible rose from Sw.fr.1500 (about €1370) in 1996 to the present Sw.fr.2500 (about €2290).

a high deductible had a 30% lower mortality rate than those choosing a medium deductible when the data were standardized by age and sex.

The exit of Swiss insurees towards managed care contracts has been less common than the choice of optional deductibles up to 2012. After an initial burst of enthusiasm,⁶² a period of stagnation ensued. A possible explanation for the limited diffusion of managed care, which many experts believe is not yet capable of introducing competitive pressure on health care providers, is that discounts for these particular insurance forms are regulated to values far below the actual cost savings achieved and lower than the compensation generally necessary to overcome consumer resistance to managed care restrictions (Zweifel, Telser & Vaterlaus, 2006). Since 2004 another upsurge in the popularity of managed care contracts has been observed. The 2008 market share of these alternative insurance forms was 24.3% of the adult population and rose in the last 6 years up to 62% in 2014. The new possibility to combine a managed care contract with an optional deductible (and to benefit from both discounts) certainly helped to increase the popularity of these contracts. Instead of switching health insurer, a growing number of policy-holders are opting for these alternative models in an attempt to avoid raising premiums in the classic form of cover. Lehmann & Zweifel (2004) have attempted to evaluate risk-adjusted expenditure differentials for clients who are members of the three most widespread forms of managed care (HMO, PPO, IPA) compared with the expenditure of clients selecting the traditional contract form. Overall, observed costs are 62% below average in HMO contracts, 39% below with PPO and 34% below with IPA. Yet the maximum premium discount allowed by law is 20%. After controlling for the effects of risk selection, the true savings account for two thirds of the cost reductions recorded by HMOs, half of those by PPOs and one third of savings made by IPAs. A more recent study (see Reich, Rapold & Flatscher-Thöni, 2012) estimates efficiency gains of 21.2% for HMO, of 15.5% for IPA and of 3.7% for the so-called *Telmed* contracts,⁶³ whereas the risk selection effects account for 8.5%, 5.6% and 22.5%, respectively. Given that only a part of the savings made can be retransferred to the client in the form of a premium discount, particularly in HMOs, it is quite probable that

⁶² Between 1996 and 1997 membership of alternative insurance models quadrupled to reach 8%.

⁶³ The insured who sign such a contract are obliged to consult a medical call centre, before turning to other medical providers.

the people who have opted for these systems did so due to their inability to pay the ordinary premium and are therefore mainly people in good health but with a relatively low income.

The central role of direct democracy in past and future health insurance reforms

Direct democracy and federalism are at the origins of the very slow pace of radical reforms in the Swiss health insurance system. Referenda and popular initiatives allow Swiss citizens to intervene directly in the decision-making process, approving or rejecting each reform through a popular ballot. Because unbalanced and radical revisions have a high likelihood of rejection in popular ballots, bills are generally amended early on in a pre-parliamentary phase involving negotiation *ex ante* with opponents of reforms originating in government or parliament and incorporating the demands of the most powerful lobbies (Cheng, 2010: p.1450).⁶⁴ In addition, federalism encourages the proliferation of organizational models and spending levels that vary across cantons (Crivelli & Salari, 2014b). Although these variations should reflect citizens' preferences, they create inevitable tensions in maintaining a universal system. Between 1974 and 2014 the Swiss population was called to the ballot box no less than 14 times⁶⁵ to deliberate on reforms in the health insurance sector (two urgent federal decrees, three reforms of the federal law proposed by parliament and put to referendum, seven popular initiatives and four counter-proposals). With the exception of the referendum on the KVG in 1994, of two referendums on counter-proposals and of those regarding the two urgent federal decrees accepted by the people, the remaining 11 popular ballots failed (see Table 14.1).

A recurring topic during these years of health insurance reform is the enhancement of equity in financing through more extensive use of general

⁶⁴ In some cases, when recourse to direct democracy cannot be prevented, negotiating *ex post* is possible. This occurs when the demands of an initiative's promoters can be partially met in a formal counter-project (a more moderate constitutional amendment) or, more frequently, in legislative amendments that will not necessitate a popular vote.

⁶⁵ On two occasions (1974 and 1994) the Swiss people were called to vote on two proposals in the same ballot round.

taxation⁶⁶ or by changing from community-rated to income-dependent health insurance premiums.⁶⁷ What can be considered a potentially radical change to the system was rejected five times with a sweeping majority of between 60% and 76% of the population, but each time with a participation rate of less than 50% of citizens (ranging from 39.7% in 1974 to 49.7% in 2003). The 2003 popular ballot is particularly illustrative. Two surveys conducted during the second half of 2002 showed a substantial majority of citizens (63%) declaring themselves willing to pay income-related health insurance premiums (Crivelli, Domenighetti & Filippini, 2007). However, 6 months later, in May 2003, 73% of the electorate rejected the popular initiative “Health at Accessible Prices”, which proposed a mixed financing system including income-related premiums alongside an increase in value added tax. Undoubtedly, there were substantial differences between the (generic) question asked of the sample interviewed in the 2002 surveys and the specific model proposed by the promoters of the initiative. The media campaign launched at the end of 2002 (see, for example, Credit Suisse, 2003) also persuaded many citizens that it was in their interest to maintain the status quo. There were similar results in the popular ballot held in March 2007 concerning the creation of a single sickness fund with income-related premiums. Two months after the clear No to the initiative (72% of the votes), a survey undertaken for the health insurers showed that 60% of the population favoured the change to income-related premiums. Finally, the impact of the ballot campaign in shifting opinions towards the status quo has been assessed also in the latest ballot of September 2014 (initiative “for a public health insurer”). In a poll carried out in June 2013, 65% of respondents declared themselves in favour of a single, public health insurer. The opponents’ campaign kicked off in 2013 and strengthened in June 2014. As a result, the percentage of those supporting the initiative fell constantly over time. This decline in supporters, observed in the polls, shows again how a majority in favour of the initiative (until June 2014) can be gradually transformed into a majority against it (De Pietro & Crivelli, 2015), with 61.8% of voting people finally rejecting the initiative.

⁶⁶ The popular initiative voted on in 1992 suggested anchoring sufficient premium reductions in the Constitution, financed by the Confederation and cantons, to the benefit of people with modest income.

⁶⁷ With four popular ballots in 1974, 1994, 2003 and 2007.

Yet there is another explanation which invokes Hirschman's theory: the opportunity of exit (towards sickness funds with lower premiums, higher deductibles or managed care contracts) takes strength away from voice.⁶⁸ Many people (especially good risks and those with modest income) who, in the absence of this exit opportunity, would vote in favour of radical reforms of the system, either do not participate in popular ballots or vote in favour of the status quo. When it is a question of voting on reforms to the health system, natural tensions occur within each individual, as interests as patient and tax payer⁶⁹ diverge from preferences about being insured.⁷⁰

Following the rejection of the single sickness fund proposal in March 2007, which would have strengthened the role of voice⁷¹ in the governance of health insurance and suppressed the possibility of switching insurer, in June 2008 the Swiss people were called on again to make an important decision, which could have caused the fragile compromise between market and state regulation in the present legislation to break down. Right-wing groups blame the state-constrained Swiss health care system for preventing competition between sickness funds, and the existence of (in their view) an overly comprehensive benefit package for encouraging over-consumption and moral hazard on the part of many patients. The Swiss People's Party therefore launched an initiative based on two fundamental pillars: the transfer of part of the health services presently included in the compulsory benefit package to voluntary private insurance⁷² and the strengthening of competition and market logic (by abolishing compulsory contracting, accepting liberalization of provider

⁶⁸ Following Hirschman (1970: ch.4), the opportunity to resort simultaneously to the reaction mechanisms of "exit" and "voice" can cause strong tensions that can result in weak governance of the system.

⁶⁹ These interests include maintaining maximum freedom of choice of physician, not closing hospitals in one's own region, keeping the bundle of insured services as comprehensive as possible and paying fewer taxes.

⁷⁰ These preferences include avoiding continuous premium increases by means of a better redistribution of the premium burden.

⁷¹ This would be achieved through the opportunity for the insured to be represented on the boards of directors and through surveillance of the single sickness fund.

⁷² According to their proposals the compulsory benefit package should only cover the costs of medical care needed to alleviate pain and cure and rehabilitate the patient that are also cost-effective. As a result, maternity and preventive care would have been excluded from the compulsory benefit package.

fees and granting the insurers the status of single purchasers of health services).⁷³ In particular, market mechanisms would be reinforced in the relations between insurers and the insured, and in the relations between insurers and providers.

Parliament drew up a counter-project to this initiative (called “For a More Effective and Better Quality Health Care System Thanks to Greater Competition”), with the aim of anchoring the most important principles of the initiative within the Federal Constitution and increasing the probability of acceptance.⁷⁴ The most significant amendment to the initiative’s text was to remove the shrinking of the compulsory benefit package from the proposal. In January 2008, the Swiss People’s Party withdrew their initiative in support of parliament’s counter-project. Two months previously, surveys undertaken by Swiss Television had outlined a fairly clear picture of the ballot’s potential outcome: 60% claimed to be in favour of the counter-project, 20% were against it and 20% undecided. In the following 2 months an extremely fierce campaign (cantonal authorities were strongly opposed to the counter-project, as were doctors’ and patients’ associations and the centre-left parties) succeeded in bringing about a sensational reversal in the outcome of the vote; in fact on 1 June 2008, 69.5% of voters rejected the counter-project, opting once again for the status quo.

As shown in Fig. 14.4, the results of these two consecutive popular ballots bear witness to a clear negative correlation between the preferences of the population of the 26 cantons. Both reform projects were far from obtaining the required dual majority (of the people and of the cantons), but they had the merit of pushing the debate on reforms towards a well-defined strategic choice. This in turn would have the advantage of clarifying not only the role given to market mechanisms and state regulation, but also whose stake (citizens, patients or insured

⁷³ Recall that until 2011 the cantons had to cover at least 50% of the operating costs and 100% of investment in public-interest hospitals through local taxes. Since 2012, they have to pay 55% of the diagnosis-related group prices in all (public and private) hospitals that are included in the cantons’ hospital lists (<https://en.comparis.ch/krankenkassen/info/glossar/kantonale-spitalliste>). In the promoters’ proposal this money would be transferred (through capitation) to the insurers, who at this point would become the single purchasers of all health services and would be liable to cover the entire cost.

⁷⁴ The health insurance lobby in the Swiss parliament is powerful. A significant number of members of parliament sit on the executive boards of sickness funds.

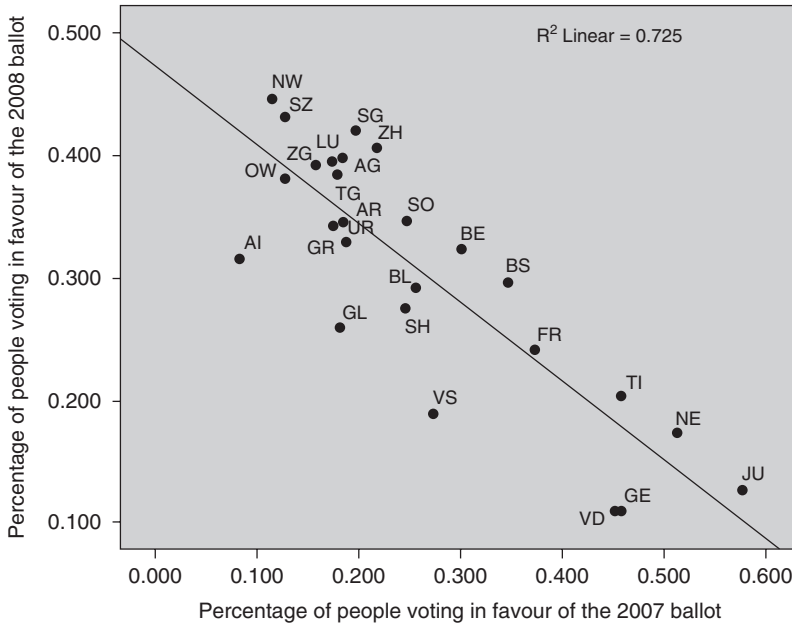


Figure 14.4 Correlation of cantonal results in the 2007 and 2008 popular ballots in Switzerland

Source: Own illustration based on the popular ballots data at the cantonal level.⁷⁵

people) would ensure governance of the Swiss health system. It is not easy to see how a compromise can be found between two antithetical reform strategies in a ballot system that requires a dual majority.

What does seem certain is a slow but inexorable cultural change among citizens and the insured. The obligation to insure themselves combined with (radical and partial) exit options has modified citizens' perceptions of what is acquired by paying the health insurance premium. As Ostrom (2005) well emphasizes, some policies can crowd out reciprocity and collective action. The irrevocability of regressive premium payments has prompted many citizens to view health insurance as a socially unjust tax, and there is an alarming increase in the number of citizens who no longer pay their compulsory premiums regularly (with a prevalence that in some cantons reaches 5% – see Egloff, 2016). At

⁷⁵ See www.parlament.ch/de/services/volksabstimmungen/fruehere-volksabstimmungen.

the same time, the possibility of frequently switching insurer makes the typical social insurance values of solidarity and mutuality less obvious. In recent years, a growing number of citizens seem driven to consider cover against the risk of ill health as a commodity; a premium is paid in exchange for health services (and not for the right to transfer financial risk to third parties in case illness strikes). The inflationary incentives inherent in the Swiss fee-for-service payment of ambulatory care (provided both in hospitals and private medical practices) with only weak referral systems (Schwenkgenks et al., 2006) encourage the use of inappropriate diagnostic and therapeutic services by people who are in fact in good health. Hence, the perception of a welfare state in which “abuses are the order of the day” infects the population and raises questions about the legitimacy of proposals intended to maintain and strengthen solidarity among the healthy and sick, young and old, rich and poor,⁷⁶ giving rise to the danger of undermining the foundation upon which the Swiss system of universal health insurance is based.

References

- Achtermann W, Berset C (2006). *Gesundheitspolitiken in der Schweiz – Potential für eine nationale Gesundheitspolitik. Band 1: Analyse und Perspektiven*. Bern, Bundesamt für Gesundheit.
- Alber J, Bernardi-Schenkluhn B (1992). *Westeuropäische Gesundheitssysteme im Vergleich: Bundesrepublik Deutschland, Schweiz, Frankreich, Italien, Grossbritannien*. Frankfurt/Main, Campus Verlag.
- Balthasar A, Bieri O, Gysin B (2008). *Monitoring 2007. Die sozialpolitische Wirksamkeit der Prämienverbilligung in den Kantonen*. Bern, Bundesamt für Gesundheit.
- Banting G, Corbett S (2002). *Health policy and federalism: a comparative perspective on multi-level governance*. Montreal and Kingston, McGill-Queen's University Press.
- Baur R (2004). *Managed Care-Modelle Bestandesaufnahme 2004*. Bern, Bundesamt für Gesundheit.
- Beck K (2000). Growing importance of capitation in Switzerland. *Health Care Management Science*, 32:111–19.

⁷⁶ As illustrated by Fong, Bowles & Gintis (2005).

- Beck K (2004a). *Risiko Krankenversicherung – Risikomanagement in einem regulierten Krankenversicherungsmarkt*. Bern, Paul Haupt Verlag.
- Beck K, ed. (2004b). *Reformstau beim Risikoausgleich? Internationale Erfahrungen und konkrete Lösungen für die Schweiz*. Luzern, Risk Adjustment Network (RAN).
- Beck K, Gelpe V (2002). Mobility in the Swiss health insurance market, *paper presented at the RAN Conference in Leuven (28–29 June 2002)*. Luzern, CSS health insurance mimeo.
- Beck K, Zweifel P (1998). Cream skimming in deregulated social health insurance: evidence from Switzerland. In: Zweifel P, ed. *Health, the medical profession and regulation. Developments in Health Economics and Public Policy series*, vol. 6. Dordrecht and Boston, Kluwer Academic.
- Beck K, Trottmann M, Zweifel P (2010). Risk adjustment in health insurance and its long-term effectiveness. *Journal of Health Economics*, 29(4):489–98.
- Beck K et al. (2003). Risk adjustment in Switzerland. *Health Policy*, 65(1):63–74.
- Beck K et al. (2006). *Nachhaltige Gestaltung des Risikoausgleichs in der Schweizerischen Krankenversicherung*. Bern, Ott Verlag.
- Berchtold P, Peier C (2012). Ärztenetze in der Schweiz 2012: Eindrückliches Wachstum. *Care Management*, 5(3).
- Berchtold P, Peytremann-Bridevaux I (2011). Integrated care organizations in Switzerland. *International Journal of Integrated Care*, 11(special edn):e010.
- Bilger M (2008). Progressivity, horizontal inequality and reranking caused by health system financing: a decomposition analysis for Switzerland. *Journal of Health Economics*, 27(6):1582–93.
- Bolgianni I, Crivelli L, Domenighetti G (2006). The role of health insurance in regulating the Swiss health care system. *Revue française des affaires sociales*, 60(2–3):227–49.
- Bruni L, Zamagni S (2007). *Civil economy*. Oxford, Peter Lang.
- Brunner HH, Cueni S, Januth R (2007). Krankenversicherung. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2007–2009. Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Cheng T-M (2010). Understanding the ‘Swiss Watch’ Function of Switzerland’s Health System. Interview with Thomas Zeltner. *Health Affairs*, 29(8):1442–51.
- Credit Suisse (2003). *Spotlight: risques et effets secondaires de l’initiative-santé du PS*. Zurich, Economics and Policy Consulting.
- Crivelli L, Bolgianni I (2009). Consumer-Driven Versus Regulated Health Insurance in Switzerland. In: Okma K, Crivelli L, eds. *Seven countries, seven reform models: the health care reform experience of Chile, Israel, The Netherlands, New Zealand, Singapore, Switzerland and Taiwan*. Singapore, World Scientific Publishers.

- Crivelli L, Filippini M (2003). Il federalismo nel settore sanitario. In: Ghiringhelli A, ed. *Il Ticino nella Svizzera*. Locarno, Dadò.
- Crivelli L, Salari P (2014a). The inequity of the Swiss health care system financing from a federal state perspective. *International Journal for Equity in Health*, 13(17):1–13.
- Crivelli L, Salari P (2014b). The impact of federalism on the healthcare system in terms of efficiency, equity, and cost containment: the case of Switzerland. In: Levaggi R, Montefiori M, eds. *Health Care Provision and Patient Mobility. Health Integration in the European Union*. Developments in Health Economics and Public Policy 12. Milan, Springer.
- Crivelli L, Domenighetti G, Filippini M (2007). Federalism versus social citizenship: investigating the preference for equity in health care. In: Porta PL, Bruni L, eds. *Handbook on the Economics of Happiness*. Cheltenham, Edward Elgar.
- Crivelli L, Filippini M, Mosca I (2006). Federalism and regional health care expenditures: an empirical analysis for the Swiss cantons. *Health Economics*, 15(5):535–41.
- Crivelli L et al. (2007). *I costi dell'assicurazione malattia nel Cantone Ticino*. Rapporto finale per il Consiglio degli Anziani del Cantone Ticino.
- Crivelli L et al. (2015). *Valutazione del sistema RIPAM. Rapporto finale*. Bellinzona: IAS: http://m4.ti.ch/user_librerie/php/GC/caricaAllegato.php?allid=88902; accessed on 15/11/2016.
- Cutler D (2002). Equality, efficiency, and market fundamentals: the dynamics of international medical care reform. *Journal of Economic Literature*, 40(3):881–906.
- De Pietro C et al. (2015). Switzerland: Health system review. *Health Systems in Transition*, 17(4):1–288.
- De Pietro C, Crivelli L (2015). Swiss popular initiative for a single health insurer ... once again! *Health Policy*, 119(7):851–5.
- Diserens D (2002). *Die Prämienbudgetierung – ein Kernprozess von Krankenversicherungen*. Bublikon/Wohlenschwil: mimeo.
- Domenighetti G et al. (1993). Revisiting the most informed consumer of surgical service: the physician patient. *International Journal of Technology Assessment in Health Care*, 9(4):505–13.
- Ecoplan (2013). Umverteilungseffekte in der obligatorischen Krankenversicherung: Mikrosimulation für die Schweizer Bevölkerung auf Basis der SILC-Erhebung unter Berücksichtigung der kantonalen Strukturen. Bern, Federal Office of Public Health: www.bag.admin.ch/themen/krankenversicherung/06392/06517/index.html?lang=de; accessed on 17/10/2016.

- Egloff M (2016). Assicurati morosi, sospesi e insolventi in Ticino. Valutazione dell'applicazione cantonale dell'art. 64a LAMal cpv. 7 entrato in vigore il 1° gennaio 2012: www4.ti.ch/user_librerie/php/GC/caricaAllegato.php?allid=114800; accessed on 11/11/2016.
- Enthoven AC (1993). Managed competition: history and principles. *Health Affairs*, 12(suppl.):24–48.
- Enthoven AC (2003). Employment-based health insurance is failing: now what? *Health Affairs Web Exclusives* 28 May: <http://content.healthaffairs.org/cgi/content/full/hlthaff.w3.237v1/DC1>; accessed on 11/02/2010.
- Eugster P, Sennhauser M, Zweifel P (2010). Capping risk adjustment? *Journal of Health Economics*, 29(4):499–507.
- Eurostat (2016). Self-reported unmet needs for dental examination by sex, age, detailed reason and income quintile [hlth_silc_09]: <http://ec.europa.eu/eurostat/web/health/health-care/data/database>; accessed on 25/11/2016.
- Feld LP, Kirchgässner G (2005). Sustainable fiscal policy in a federal system: Switzerland as an example. In: Kriesi H et al., eds. *Contemporary Switzerland: revisiting the special case*. New York, Palgrave Macmillan.
- Felder S, Werblow A (2003). Swiss social health insurance: co-payments work. *CESifo DICE report*, 1(3):43–6.
- Fong CM, Bowles S, Gintis H (2005). Reciprocity and the welfare state. In: Gintis H, Boyd S, Fehr E, eds. *Moral sentiments and material interests*. Cambridge, MA, MIT Press.
- FOPH (Federal Office of Public Health) (2016a). *Statistik der obligatorischen Krankenversicherungen 2014*. Bern, Bundesamt für Gesundheit.
- FOPH (2016b). Verzeichnis der zugelassenen Krankenversicherer (1.1.2016) [Register of the licenced health insurers]: www.bag.admin.ch/bag/de/home/themen/versicherungen/krankenversicherung/krankenversicherung-versicherer-aufsicht.html; accessed on 25/11/2016.
- Frank RG, Lamiraud K (2008). *Choice, price competition and complexity in markets for health insurance*. NBER Working Papers No. 13817. Cambridge, MA, National Bureau of Economic Research.
- Frei W (2007). Krankenversicherer. In: Kocher G, Oggier W, eds. *Gesundheitswesen Schweiz 2007–2009. Eine aktuelle Übersicht*. Bern, Verlag Hans Huber.
- Frey M, Neumann R (2015). *Wirksamkeit der Prämienverbilligung – Monitoring 2014*. Bern: Bundesamt für Gesundheit: www.bag-anw.admin.ch/kuv/praemienverbilligung/data/download/Monitoring%202014%20-%20Schlussbericht.pdf?webgrab=ignore; accessed on 15/11/2016.
- FSO (Federal Statistical Office) (2016). *Coût et financement du système de santé en 2014*. Neuchâtel, Office fédéral de la statistique.

- Fuchs V (1996). Economics, values and health care reform. *American Economic Review*, 86(1):1–24.
- Geoffard PY, Gardiol L, Grandchamp C (2006). Separating selection and incentive effects: an econometric study of Swiss health insurance claims data. In: Chiappori P-A, Gollier C, eds. *Competitive failures in insurance markets*. Cambridge, MA, MIT Press.
- Gerlinger T (2003). Gesundheitsreform in der Schweiz - ein Modell für die Reform der gesetzlichen Krankenversicherung? *Jahrbuch für Kritische Medizin*, 38:10–30.
- Gerritzen BC, Martinez IZ, Ramsden A (2016). Saving on a tight budget: cantonal health care financing and health care expenditure burdens for low-income households in Switzerland. Working Paper: <https://sites.google.com/site/isabelzenaidamartinez/research>; accessed on 15/11/2016.
- Gilardi F, Füglistler K (2008). Empirical modeling of policy diffusion in federal states: the dyadic approach. *Swiss Political Science Review*, 14(3):413–50.
- Gilliand P, ed. (1986). *Les Coûts et l'assurance*. Lausanne, Éditions Réalités Sociales.
- Gilliand P, ed. (1990). *Assurance-maladie – Quelle révision?* Lausanne, Éditions Réalités Sociales.
- Grandchamp C, Gardiol L (2011). ‘Does a mandatory telemedicine call prior to visiting a physician reduce costs or simply attract good risks?’, *Health Economics*, 20(10):1257–67.
- Hefti C, Frey M (2008). *Die Entwicklung der Versicherungslandschaft in der Krankenversicherung 1996–2006*. Neuchâtel: Schweizerisches Gesundheitsobservatorium: www.obsan.admin.ch/bfs/obsan/de/index/05/publikationsdatenbank.Document.113391.pdf; accessed on 15/11/2016.
- Herzlinger RE, Parsa-Parsi R (2004). Consumer-driven health care: lessons from Switzerland. *Journal of the American Medical Association*, 292:1213–20.
- Hirschman A (1970). *Exit, voice and loyalty: responses to decline in firms, organizations, and states*. Cambridge, MA, Harvard University Press.
- Holly A et al. (2004). *Health-based risk adjustment in Switzerland: an exploration using medical information from prior hospitalization*, revised version of the final report on research financed by the Swiss National Fund (National Research Program 45). Lausanne, Institut d'économie et management de la santé (IEMS), University of Lausanne.
- Iten R et al. (2009). Volkswirtschaftliche Wirkungen steigender Gesundheitsausgaben. Zuerich: INFRAS: www.vips.ch/dok_download.cfm?dokID=1446; accessed 17/10/2016.
- Kägi W et al. (2012). *Monitoring 2010: Wirksamkeit der Prämienverbilligung*. Bern, Federal Office of Public Health: www.bag.admin.ch/themen/

- krankenversicherung/01156/01159/index.html?lang=de; accessed 15/11/2016.
- Kilchenmann C (2014). Krankenversicherung: Wer bezahlt, wer bekommt? *Soziale Sicherheit*, 3/2014:184–5.
- Knüsel R, Zurita F (1979). *Assurances sociales: une sécurité pour qui? La loi Forrer et les origines de l'état social en Suisse*. Lausanne, Institut de science politique.
- Laske-Aldershof T et al. (2004). Consumer mobility in social health insurance markets: a five-country comparison. *Applied Health Economics and Health Policy*, 3(4):229–41.
- Lehmann H (2003). *Managed care: Kosten senken mit alternativen Krankenversicherungsformen*. Zürich/Chur, Verlag Rüegger.
- Lehmann H, Zweifel P (2004). Innovation and risk selection in regulated social health insurance. *Journal of Health Economics*, 23(5):997–1012.
- Leu R et al. (2007). *A tale of two systems: the Swiss and the Dutch health care systems compared*. Baden-Baden, Nomos Verlagsgesellschaft.
- Muheim D (2003). Caisses privées et assurances sociales: retour sur les premiers projets d'assurance-maladie (1893–1912). In: Fédération suisse des employés en assurances sociales (FEAS) (ed). *Aspect de la sécurité sociale: dossiers problèmes non résolus*. Lausanne, FEAS.
- Oates W (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37(3):1120–49.
- OECD (2006). *OECD Reviews of Health Systems: Switzerland*. Paris, OECD
- OECD (2011). *OECD Reviews of Health Systems: Switzerland*. Paris, OECD
- Ostrom E (2005). Policies that crowd out reciprocity and collective action. In: Gintis H, Boyd S, Fehr E, eds. *Moral sentiments and material interests*. Cambridge, MA, MIT Press.
- Polikowski M, Santos-Eggimann B (2002). How comprehensive are the benefit packages of health services? An international comparison of six health-insurance systems. *Journal of Health Services Research and Policy*, 7(3):133–42.
- Preuck R, Bandi T (2008). Prämienerbilligung – zwischen wünschbaren Zielen und finanziellen Rahmenbedingungen. *Soziale Sicherheit*, 3:178–81.
- Reich O, Rapold R, Flatscher-Thöni M (2012). An empirical investigation of the efficiency effects of integrated care models in Switzerland. *International Journal of Integrated Care*, 12:1–12.
- Reinhardt UE (2004). The Swiss health system: regulated competition without managed care. *Journal of the American Medical Association*, 292:1227–31.

- Rossini S, Martignoni Y-L (2000). *L'importance des institutions privées sans but lucratif dans la protection sociale en Suisse*. Neuchâtel, Office fédéral de la statistique.
- Rütschi C (2006). *Who cares about prices? An empirical analysis of basic health insurance choice in Switzerland*. Technical report, University of Bern.
- Schaffhauser R, Locher H, Poledna T, eds. (2006). *Das Gesundheitswesen – Motor von Wohlbefinden und Wohlstand. Radikale Denkanstöße für das Schweizer Gesundheitswesen*. St Gallen, Institut für Rechtswissenschaft und Rechtspraxis.
- Schellhorn M (2002). Auswirkungen wählbarer Selbstbehalte in der Krankenversicherung: Lehren aus der Schweiz? *Vierteljahrshefte zur Wirtschaftsforschung*, 71(4):411–26.
- Schoen C et al. (2010). How Health Insurance Design Affects Access To Care And Costs, By Income, In Eleven Countries. *Health Affairs*, 29(12):2323–34.
- 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(2):117–38.
- Schwenkgenks M et al. (2006). Economic efficiency of gatekeeping compared with fee for service plans: a Swiss example. *Journal of Epidemiology & Community Health*, 60:24–30.
- Sommer JH (1987). *Das Malaise im Gesundheitswesen. Diagnose und Therapievorschläge*. Zürich, Orell Füssli.
- Spycher S (2002). *Compensation des risques et pools possibles (pools de hauts risques) dans l'assurance maladie obligatoire*. Rapport de recherche No. 19/03. Bern, Office fédéral des assurances sociales.
- Strombom BA, Buchmueller TC, Feldstein PJ (2002). Switching costs, price sensitivity and health plan choice. *Journal of Health Economics*, 21(1):89–116.
- Swiss Antitrust Commission (1993). *Krankenkassen und Tarifverträge*. Bern, Veröffentlichungen der Schweizerischen Kartellkommission und des Preisüberwachers, Vol. 2/1993.
- Thomson S et al. (2013). Statutory health insurance competition in Europe: a four-country comparison. *Health Policy*, 109(3):209–25.
- Trottmann M, Zweifel P, Beck K (2012). Supply-side and demand-side cost sharing in deregulated social health insurance: Which is more effective? *Journal of Health Economics*, 31(1):231–42.
- van Doorslaer E, Masseria C, Koolman X (2006). Inequalities in access to medical care by income in developed countries. *Canadian Medical Association Journal*, 174(2):177–83.
- van Doorslaer E, Koolman X, Puffer F (2002). Equity in the use of physicians in the OECD countries: has equal treatment for equal need been achieved?

- In: OECD, ed. *Measuring up: health systems performance in OECD countries*. Paris, OECD.
- Vatter A, Rüeßli C (2003). Do political factors matter for health care expenditure? A comparative study of Swiss cantons. *Journal of Public Policy*, 23(3):301–23.
- Wagstaff A, van Doorslaer E (1992). Equity in the finance of health care: some international comparisons. *Journal of Health Economics*, 11(4):361–87.
- Wagstaff A et al. (1999). Equity in the finance of health care: some further international comparisons. *Journal of Health Economics*, 18(3):263–90.
- Werblow A (2002). Alles nur Selektion? Der Einfluss von Selbstbehalten in der Gesetzlichen Krankenversicherung. *Vierteljahreshefte zur Wirtschaftsforschung*, 71(4):427–36.
- Werblow A, Felder S (2003). Der Einfluss von freiwilligen Selbstbehalten in der gesetzlichen Krankenkasse: Evidenz aus der Schweiz. *Schmollers Jahrbuch*, 123(2):235–64.
- WHO (World Health Organization) (2000). *The world health report 2000. Health systems: improving performance*. Geneva, World Health Organization.
- Zweifel P (1990). Comparative health systems: Switzerland. In: Scheffler RM, Rossiter LF, Rosa J-J, eds. *Comparative health systems: The future of national health care systems and economic analysis. Advances in Health Economics and Health Services Research*. London, JAI Press.
- Zweifel P (1992). *Bonus options in health insurance*. Dordrecht, Kluwer Academic.
- Zweifel P (1998) Managed care in Germany and in Switzerland: Two approaches to a common problem. *Pharmacoeconomics*, 14(0):1–8.
- Zweifel P (2000). Switzerland. Special section: reconsidering the role of competition in health care markets. *Journal of Health Politics, Policy and Law*, 25(5):937–44.
- Zweifel P (2004). Competition in health care – the Swiss experience. *Économie Publique*, 14(1):3–12.
- Zweifel P, Telser H, Vaterlaus S (2006). Consumer resistance against regulation: the case of health care. *Journal of Regulatory Economics*, 29(3):319–32.