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Reforming health care finance: What can Germany learn from other countries?

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KIEL ECONOMIC POLICY PAPERS

5

Reforming Health Care Finance: What Can Germany Learn from Other Countries?

Banafsheh Siadat and Michael Stolpe

- German health care financing is now at the crossroads of fundamental reform. The two main proposals that the new "grand" coalition government
 must take as its starting point for compromise
 could hardly be more polarized. The proposal
 favored by the left, the Bürgerversicherung, a
 Citizens' Health Insurance that is compulsory for
 all, would introduce a new system of proportional
 taxation, based not only on wages, but also on
 other sources of personal income, whereas the
 proposal favored by the right, the Kopfpauschale,
 would equalize per capita contributions for those
 enrolled in the statutory system by introducing a
 poll tax or Flat Rate Insurance (also advocated as
 the Gesundheitsprämie— a "health premium").
- The diverse experiences of other European countries provide interesting lessons on the likely consequences of either reform proposal. The introduction of the Citizens' Health Insurance would move the German system towards general tax financing of the kind that characterizes Beveridge systems, with a single payer funded from general tax revenue, typically structured as a national health service. German policy makers can therefore learn from Spain's recent shift from a Bismarckian system of social health insurance to a Beveridge system and from the introduction of a scheme similar to the Citizens' Health Insurance by France in the 1990s. The introduction of the Flat Rate Insurance would make the German system more similar to the financing of health insurance in Switzerland and the Netherlands, where flat rate premiums are paid by all or parts of the population, respectively.
- Drawing upon such cross-national learning, it appears that the *Flat Rate Insurance* would produce the more favorable impact on the labor market, while preserving Germany's long-standing tradition of solidarity. The *Citizens' Health Insurance* proposal would not eliminate and perhaps not even reduce the marginal burden on producer wages very much, but would likely succeed in tapping a relatively large share of consumers' aggregate willingness to pay, an important aspect of a dynamically efficient health care financing system under conditions of endogenous growth in medical technology.
- The rise of modern medicine during the 20th century has subtly changed the economic nature of the statutory health insurance contract—from actuarial fairness, when the main obligation of sickness funds was to replace lost wage income during times of sick leave, towards something like a Ramsey tax scheme for the financing of a public good: the guaranteed universal access to modern health care and the implicit promise to accommodate the growth of medical technology in the future.
- The reform of Germany's statutory system must be consistent with its short- and long-term purpose. In addition to demographic changes, the design of a sustainable and efficient health care financing system must take the changing role of medical technology into account. More research will hence be needed to better understand how technological innovation changes the opportunities and constraints in which health insurance markets operate.

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1 Introduction

After more than two decades of incremental tinkering with cost containment, German health care financing is now at the crossroads of fundamental reform. It is clear that the impetus for reform stems from a general effort to restore Germany's dismal economic growth, and that the two main proposals, claiming to reduce the health system's impact on nonwage labor costs, are primarily motivated by macroeconomic considerations. We shall argue that a comprehensive assessment of any proposal must be consistent with all of society's objectives for health policy and seek to combine efficiency with equity.

In light of these more general considerations, the two main proposals could hardly be more polarized. The proposal favored by the left, the *Bürgerversicherung*—henceforth *Citizens' Health Insurance*, introduces a new system of proportional taxation, not only based on wages, but also on other sources of personal income, whereas the proposal favored by the right, the *Kopfpauschale*—henceforth Flat Rate Insurance, equalizes per capita contributions by introducing flat rate health premium (also advocated as the *Gesundheitsprämie*), essentially a poll tax for those covered by Germany's statutory system.

To make a contribution to the debate and draw attention to its empirical dimension, we will discuss the two main reform proposals in light of other countries' experiences with comparable reform initiatives, particularly those motivated by similar policy objectives or based on similar designs. The essential features that characterize the *Citizens' Health Insurance* and the *Flat Rate Insurance* schemes have long been present in other OECD countries' health care financing systems, although details do of course differ.

Clearly, the introduction of the *Citizens'* Health Insurance would move the German system towards general tax financing of the kind that characterizes Beveridge systems, with a single payer funded from general tax revenue, typically structured as a national health service. German policy makers can therefore learn from Spain's recent shift from a Bismarckian system of social health insurance to a Beveridge system and

from the introduction of a scheme similar to the *Citizens' Health Insurance* by France in the 1990s. The introduction of the *Flat Rate Insurance* would make the German system more similar to the system in Switzerland and the Netherlands, where flat rate premiums are paid by all or parts of the population, respectively.

While such case studies alone cannot replace a general equilibrium analysis of the impact of health care finance reforms on the macroeconomy, they can still give us an idea what effect is likely in relation to specific policy objectives. For example, the experiences of other European countries may help us to identify the proposal most likely to be successful in reducing the excess burden associated with increasing health care revenues or in eliminating inflationary pressure on nonwage labor costs, the latter often deemed a consequence of Germany's current payroll-tax-based health care financing system.

Needless to say, labor market conditions cannot be the only consideration in health care finance. In the longer term, the primary concern must be to endow the health sector with sufficient funds to accommodate a rising demand for medical care amid rising per capita incomes, population aging, and the proliferation of ever more potent (yet often costlier) medical innovations. For the U.S. case, Hall and Jones (2004) estimate that, by the middle of the 21st century, the impact of rising per-capita income alone may raise the efficient share of health spending as a percentage of total expenditures to 33 percent because the marginal utility from health care tends to decline more slowly than the marginal utility from other types of consumption as percapita income increases.

Amid this coming expansion, systems of health care finance must still be sustainable. It is therefore paramount to find an efficient way of dealing with the endogeneity of medical technology. In theory, health insurance that pays out by reducing the consumer price of health care to the level of marginal cost may serve as an efficient two-part pricing contract rewarding the innovator and eliminating lags in the dissemination of new medical technology to all insured individuals simultaneously (Lakdawalla and Sood 2005). But in practice, endogenous change in

medical technology tends to undermine the insurability of individual health risks by introducing a source of nondiversifiable aggregate risk, as Cutler and Zeckhauser (2004, 22) have pointed out. The unprecedented growth of medical technology since World War II appears to have changed the ground rules of health insurance forever.

Our discussion will build on these insights and distinguish between short- and long-term considerations. In the short term, health care financing is guided by a set of pre-determined principles, similar in spirit to Germany's traditional *Ordnungspolitik*, whereas in the long term, sustainability requires far more flexibility, as the system must respond to changes in dynamic constraints and opportunities. The reality and perception of these may evolve further with ongoing demographic and technological change.

A focus on long-term sustainability will also help to clear the confusion about cause and effect that characterizes the current debate in Germany. For example, in the short-term, much of the 1990s' crisis in health care finance has indeed been attributable to German unification and rising unemployment. But the public perception has turned this upside down: rising health spending bore much of the blame for rising unemployment and curbs on health expenditures were widely seen as necessary, without any regard to longterm costs and benefits. Even so, the inadequacy of Germany's traditional orientation toward piece-meal cost containment has long been felt by all sides of the political spectrum. Yet, the focus of the debate has never truly been on the reforms' long-term implications for efficiency but rather, almost exclusively, on the presumed distributional implications.

Indeed, fear of upsetting the distribution implied by the status quo may actually be the main explanation for the political establishment's protracted response to the simmering finance crisis. Slow growth and rising unemployment have taxed the country's wage-based pay-as-you-go health care financing scheme since the early 1990s. But the political establishment only be-

Special expert commissions, which included leading representatives from the world of academia as well as other sectors of German society, convened to design new health care financing models, and prompted much public debate. First, the Rürup Commission, created by the SPD-Green governing coalition and led by Professor of Economics, Bert Rürup (University of Darmstadt), produced two competing proposals as commission members failed to overcome their fundamental disagreement. The proposals were the Citizens' Health Insurance, introduced by Professor of Economics Karl Lauterbach (University of Cologne), and the Flat Rate Insurance, a basic scheme of flat rate health premiums, introduced by Bert Rürup himself. Second, the Herzog Commission, established by the CDU-CSU opposition and named after the former German President Roman Herzog, further developed the notion of flat rate health premiums into a proposal that involved earmarking a portion of health revenues to build up a collective capital stock in anticipation of future aging-related expenditure increases.

In the following analysis, we place the need for reform in its historical context, identify economically valid reasons for reform, derived from a set of acceptable long-term objectives, and contrast each of the main proposals with the relevant experiences of other countries. We find that neither the *Citizens' Health Insurance* nor the *Flat Rate Insurance* promise to fully meet those long-term objectives. However, by incorporating lessons from abroad, it appears that the *Flat Rate Insurance* would more strongly reduce the undesirable labor market impact of the current system while preserving solidarity, at the price of sacrificing equity.

We do not discuss whether the *Flat Rate Insurance*, clearly the more ambitious departure

gan to contemplate radical reform in 2003, when the federal government in cooperation with the conservative CDU-CSU opposition launched *Agenda 2010*, a comprehensive reform package with substantial implications for the health care sector.

¹ In 2003, the unemployment rate had regional variations, ranging from 20.7 percent in eastern states (e.g., Saxony-

Anhalt) to 6.1 percent in western states (e.g., Baden-Württemberg). In Berlin, the unemployment rate was 18.1 percent (Busse and Riesberg 2004, 5).

from the status quo, would be acceptable in the policy-making arena. While a grand coalition of the CDU-CSU and SPD parties holds power, radical change is unlikely. Instead, the governing parties will probably only be able to agree on the lowest common denominator. However, as economists, we point out that *Flat Rate Insurance* does not necessarily make the health care financing system *more efficient* in the sense that premiums would be actuarially fairer than in the case of income-related premiums. Individual health risks may decline with income and with the level of education, but the demand for health care tends to rise with age.

A flat rate premium would not take that into account, nor would it reflect other determinants of an individual's expected health expenditure. Worst of all, a flat rate would fail to raise the optimal aggregate revenue to finance the adoption of new medical technology, for which more affluent groups tend to have a greater willingness to pay than lower-income groups. It would be dynamically inefficient to allow financial constraints to impede the adoption of technologies for which the rich and the poor's combined aggregate willingness to pay exceeds the costs.

The remainder of this paper is structured as follows. First, we discuss a set of generally acceptable reform objectives. Second, we give a brief overview of Germany's current health care financing system. Third, we provide an overview of lessons learned in an international context from countries that have conducted similar reforms of their health care financing systems recently. Fourth, we discuss the two main reform proposals for Germany in light of the relevant experiences of other European countries. Our fifth section provides a more general discussion and section six concludes.

1.1 Reform Objectives

A consistent set of reform objectives, which is no trivial matter itself, serves as the yardstick for any rational evaluation of the *Citizens' Health Insurance* and the *Flat Rate Insurance* proposals. It is worth discussing policy aims in some detail, since a major obstacle hindering

genuine health care reform in the past seems to have been the presence of ill-defined and incongruous objectives. And this problem cannot be blamed on the shortsightedness of the political process alone; it is ultimately rooted in the fundamental difficulty of defining short-term policy targets derived from a society's long-term policy objectives. For example, it is important to consider: (i) the amount society should spend on current and future health care needs, (ii) the level of investment to be allocated toward the development of new medical technology, and (iii) the distribution of the financial burden among those able to pay and those likely to benefit.

Ideally, both long- and short-term targets should be derived from an intertemporal maximization of social welfare, the sum of all discounted present values of the future value of life minus the cost of staying alive. With a view to the long-term, Nordhaus (2003) and Murphy and Topel (2003) have begun to investigate the policy implications of general intertemporal optimization models in which the state of medical technology is endogenous. Along with demographic change, the introduction of new medical technologies is a major, albeit inherently unpredictable, determinant of the supply and demand for medical services, which together determine the optimal level of health care finance in a given period of time.

To focus on the problem of medical technology, Lakdawalla and Sood (2005) ignore intergenerational issues and show that a competitive health insurance market can provide efficient incentives for innovation in medical technology. They make this point in the context of a two-period model of health insurance that enforces efficient rewards for inventors by mimicking a two-part pricing contract in which the insurance premium is like an ex ante access fee in exchange for an ex post fixed unit price for its utilization.

For health insurance to be dynamically efficient, it must allow the patent holders to extract as much of the consumer surplus from medical technology as possible. Because health insurers essentially act as intermediaries between consumers and the suppliers of technology, the mode of financing can have a significant impact on the

efficiency of the entire system, an insight that could not be obtained by purely static analyses in which the state of medical technology is held constant. Although Lakdawalla and Sood (2005) use a representative agent framework that abstracts from distributional issues, it is clear that a dynamically efficient health care financing scheme must take the real world's unequal distribution of income and wealth into account as determinants of individuals' willingness to pay.

In the short term, the health care financing system cannot adjust frictionlessly to every relevant exogenous shock. Adjustment costs and the presence of incomplete contracts mean that health care financing must be based on simple principles, such as solidarity, equity, and the parsimonious use of resources. Indeed, these three are the official objectives underlying the present system of health care finance in Germany. Germany's Social Code (Sozialgesetzbuch) implies that health care finance should seek to preserve the solidarity and equity inherent in the health care system alongside market-oriented (i.e., competitive) forces, while ensuring the system's long-term financial solvency. In other words, health care reforms should strive for the appropriate balance between state intervention and free market orientation. We believe that these principles can be reconciled with static and dynamic efficiency considerations.

Solidarity (Solidarität) as outlined in the Social Code specifies that medical care must be provided solely according to individual needs and the financing of care should not be predicated upon an individual's ability to pay, income, or social status. The system presently expresses this solidarity by offering universal coverage and equal access to comprehensive benefits for the entire population.²

The concept of *equity* in health care financing involves distributional concerns, that is, primarily the incidence of taxation between high- and low-income groups. The literature distinguishes between vertical equity, denoting that the rich pay more than the poor for a given level of

service, and horizontal equity, postulating that two persons with the same income pay the same level of tax. A progressive health care financing system implements vertical equity by placing a greater burden of taxation on high-income groups, relative to low-income groups. To implement horizontal equity, people of the same income level must be required to pay the same amount for health care, as explained in Mossialos and Dixon (2002).

The concept of *efficiency* is often deemed to conflict with equity, but it is in fact an important precondition, especially in a dynamic context. Advocates of a *market-oriented* approach to health care finance view competition between health insurance providers as the most powerful tool to enhance productivity and generate "economically efficient" outcomes, encompassing both technical and allocative efficiency:

- (i) Technical Efficiency. Technical efficiency involves the maximization of output for a given level of inputs or, conversely, the minimization of inputs for a given level of output. As Mossialos and Dixon (2002) point out, although there is no clear evidence that funding methods determine the level of technical efficiency in the production of care with a given state of technology, administrative and transaction costs may be associated with revenue collection. Therefore, an important policy target lies in minimizing administrative expenditures. In economic jargon, achieving technical efficiency implies moving onto the production possibilities frontier. Here, one must distinguish between the production of medical care and the production of health insurance services. The link between the two exists via the purchasing behavior of insurers, which is often constrained by regulations. The provision of health care may become technically inefficient when regulation limits the choice of technology.
- (ii) Allocative Efficiency. Allocative efficiency is attained via the maximization of welfare given constrained resources. It can be represented as the selection of the best point on the production possibilities frontier by a suitable social welfare function and entails allocations between health and other areas of

² For more extensive discussions of the origin and significance of solidarity in German health policy, see Altenstetter (1999) and Pfaff and Wassener (2000).

public spending, as well as allocations within the health care sector itself. Here again, we must distinguish between the production of medical care and the production of health insurance against the costs of medical care. In a best-case scenario, allocative efficiency would also insure patients against the risk of medical care's failure to restore their individual health.

Essentially, allocative efficiency implies the absence—or the full correction—of market failures, two of which are especially important in the context of health care finance: adverse selection and risk selection.

Adverse selection, a market failure induced by asymmetric information, arises when consumers have more complete knowledge about their health status and propensity to use health services than the insurer.³ Thus, consumers select insurance plans that provide them with the bestanticipated payout. As a result, premiums for low-risk groups are relatively inexpensive visà-vis those for high-risk groups. The ensuing "equilibrium" in a competitive market for health insurance may be unstable in the sense that high or "poor" risks are priced out of the insurance market.

Risk selection, also known as cream-skimming, is a strategy of the insurers to profit from the exclusion of high risk groups through, for example, underwriting rules that help to target products at low risk individuals. It occurs when insurers have better information about consumers' health status than consumers themselves. The insurer will then try to induce low-risk individuals to self-select by making health insurance unattractive for high-risk individuals. While adverse selection occurs when insurers are passive, risk selection reflects a conscious attempt by insurers to segment the market. Ultimately, this may conflict with solidarity and equity objectives.

In a sense, adverse selection and risk selection are opposite sides of the same asymmetric information story, which arises from hidden characteristics of the insured and is therefore distinct

from the issue of moral hazard, which arises from hidden actions by the insured. Moral hazard is often cited as a justification of introducing copayments for the insured so as to put a pecuniary constraint on the patient's demand for medical care. At the same time, health insurers may use differential co-payments as a means for risk selection, as those knowing that they have a relatively low risk of catching a disease have an incentive to purchase health insurance contracts with relatively high co-payments, but low premiums, and vice versa. Over time, the relevance of asymmetric information in health care may change as new technology, such as genetic testing, alters the distribution of information in the health insurance market; this holds important implications for health care financing policies.

2 Germany's Current Health Care Financing System

Currently, the public or statutory health insurance system (SHI), based on wage-related social insurance contributions, serves as the primary source of health care financing, accounting for nearly 57 percent of total health expenditures (2002) and providing coverage for approximately 88 percent of the population in 2003 (Busse and Riesberg 2004, 57). Together with other statutory insurance schemes (e.g., retirement, accident) and taxes, public financing accounts for 75.2 percent of total health expenditures overall (2002).⁴ In contrast, private financing sources account for only 24.7 percent of health expenditures, including private health insurance (PHI) that alone accounts for 8.4 percent of total expenditures (2002), while covering nearly 10 per-

³ See Hsiao (1995) for a nontechnical introduction to these concepts and their application in the context of health care.

⁴ Public sources of health care financing accounted for 75.2 percent of total health expenditures in 2002 and can be broken down as follows: statutory health insurance (56.9 percent), taxes (7.8 percent), statutory retirement insurance (1.7 percent), statutory accident insurance (1.7 percent), and statutory long-term care insurance (7 percent). Private sources of health care financing accounted for 24.7 percent of total health expenditures in 2002, consisting of: out-of-pocket payments/NGOs (12.2 percent), private insurance (8.4 percent), employer (4.1 percent). See Busse and Riesberg (2004, 57–58).

cent of the population (2003); the remaining 2 percent of the population receive coverage through sector-specific schemes, as discussed below (Busse and Riesberg 2004, 57).

2.1 The Public or Statutory Health Insurance Market

SHI is operated via 292 competing sickness funds (January 2004) responsible for the collection of social insurance contributions directly from employers and government agencies, purchasing benefits, and paying providers, as described in more detail by Busse and Riesberg (2004). Funds operate on a pay-as-you-go principle. Importantly, they establish their own contribution rates (subject to approval by state authorities), which have exhibited increases in recent years to account for the fact that sickness funds cannot incur deficits or accumulate debts.

The public health insurance scheme is mandatory for employees with gross monthly income below €3,825 (January 2003), a substantial increase from the former income eligibility threshold of €3,375 in 2002. Contributions to SHI are based on "contributory income" from gainful employment, pensions, and unemployment benefits (with a maximum of €3,487.5 in 2004, €3,525 in 2005, and €3,562.50 in 2006) and levied independent of savings, possessions, or other income sources, such as capital, rent, interest. Contributory income is hence driven by such factors as wages and unemployment fluctuations, as well as by regulatory interventions defining the contribution limit. As an example, unemployment decreases the pool of contributory income for the system at large, whereas a wage increase (particularly for high-income "voluntary" SHI enrollees already paying the maximum contribution) does not necessarily translate into increased SHI revenues.

As SHI contributions currently cover non-income-earning spouses and children without additional charge, it is attractive for individuals with large families and/or high risks who would otherwise pay greater risk-rated premiums under private insurance schemes.

Between 1949 and 2004, social insurance contributions were shared equally between employees and employers. To illustrate, the average contribution rate of 14.2 percent (2004), encompassed a 7.1 percent employee contribution (i.e., 7.1 percent of the insured's pre-tax income below the "contributory income" threshold up to the maximum level (€3,487.5 in 2004, €3,525 in 2005, and €3,562.50 in 2006), and a 7.1 percent employer contribution paid in addition to wages (Busse and Riesberg 2004, 59). Recent legislation, however, stipulated changes in the proportion of employee-employer contributions to 54 percent and 46 percent respectively (effective July 2005), with the additional 0.9 percent employee contribution used to finance dentures, so that sickness funds were able to reduce contribution rates by 0.9 percentage points (Busse and Riesberg 2004, 202).

Recent trends illustrate that contribution revenues are growing slower than GDP and health expenditures, leading to sickness fund deficits, and thus obligating funds to increase contribution rates since funds cannot amass long-term debts. Busse and Riesberg (2004) report that, fund deficits rose to €3 billion annually from 2001 to 2003, and funds subsequently raised contribution rates from 13.5 percent of gross earnings in 2001 to 14.3 percent in 2003. It is noteworthy that the contribution rate of a fund is the same for all fund members with the same benefits package; that is, funds cannot calculate rates based on risk, region, or other potentially relevant criteria, as occurs in private insurance schemes.

In an attempt to foster *efficiency*, the law allows for consumer choice across sickness funds, introducing competition between funds on the basis of premium pricing. The resulting increased competition and fund consolidation that emerged prompted measures to ensure the preservation of *solidarity*. Specifically, a retrospective risk adjustment mechanism exists to adjust for income differences across funds due to the various demographic and health-status profiles of enrollees (discussed below). In the absence of such a risk equalization scheme, sickness funds with enrollees exhibiting lower expenditures percapita are able to offer lower contribution rates

than those with higher standardized expenditures per-capita.

Although there has been some talk of allowing sickness funds to contract for the purchase of packages of care on a one-to-one basis with selected providers, sickness funds and providers are in fact legally prevented from integrating into HMO-style organizations such as those pervasive in the U.S. Thus, at present, Germany retains a strong segregation between the financing and delivery of health care, preventing the onset of "managed care"—with the exception of rehabilitation services provided by Germany's statutory accident and pension insurers.

2.2 The Private Health Insurance Market

Private health insurance (PHI) supplies three types of policies for which Buchner and Wasem (2003, 23) report the following population shares: "Full" substitutive health insurance for approximately 7 percent of the population primarily covers high-income earners and self-employed individuals. Normal employees needed to earn more than €3,900 in 2005 and need to earn more than €3,937.50 in 2006 in order to be allowed to opt out of the statutory system. The regulations are less stringent for certain types of civil servants. Substitutive insurance for civil servants accounts for approximately 5 percent of the population for which the government pays between 50-70 percent of medical expenditures, with remaining expenses covered via private insurance. Finally, private supplementary health insurance covers 10 percent of those insured in the public scheme for additional "luxury" services (e.g., single rooms for inpatient care).

Competition occurs between sickness funds in the public scheme and private companies over those individuals who can opt-out of the public scheme, namely, high-income earners. In other words, two systems are available for a subset of the population: a pay-as-you-go system funded via income-related contributions and a capital-funded system financed through risk-rated premiums of private insurance companies.

2.3 The Impetus for Reform

2.3.1 Rising Contribution Rates

Despite the anticipated cost savings and efficiency gains resulting from sickness fund competition, fund deficits have been an increasing problem, resulting in the rapid growth of contribution rates; across funds, rates have exhibited an upward convergence (Burger et al. 2003).

This prompts an examination of the underlying factors driving the growth in fund deficits, and hence contribution rates. As noted by Busse and Riesberg (2004), these factors include: (i) the decreasing proportion of wages in the total economy, (ii) the decrease in social insurance as a percentage of total wages, (iii) the increase in the number of pensioners, (iv) high unemployment, and (v) the increase in the number of "mini" jobs (versus full-time employment).⁵ Such factors, although largely induced by macroeconomic conditions, have prompted calls for reform to disconnect health care financing from Germany's volatile labor market, protect the vitality of Germany industry, and better adjust to demographic changes.

Labor Market Dependency. As current social contribution calculations do not incorporate income other than "employment income" (i.e., wages, salaries), funding for the health sector remains heavily reliant on the labor market, and thus vulnerable to fluctuations in employment. In 2003, unemployment amounted to 10.5 percent of the workforce, with regional variations revealing much higher rates in the former East.

Thus, the culmination of both Germany's growing unemployment rate and "temporary" or part-time employment rate translate into less revenue flowing into the statutory health system.

Labor Market Impact. As current incomebased social insurance contributions effectively represent a tax on labor, they aggravate and distort both production and labor supply decisions (Felder 2002). Some authors even go so far to argue that the implied increase in nonwage labor costs can create a vicious cycle of stagna-

⁵ Although "mini" jobs contribute to SHI funding, the contributions per enrollee are much smaller than with full-time gainful employment. See Busse and Riesberg (2004, 60).

tion and further aggravate unemployment (see, for example, Kifmann 2003). Moreover, German industry is placed at a comparative disadvantage in the global business community because non-wage labor costs (i.e., "contributions") affect the price of labor. Even the government sees this as a cause of the increasing difficulty to attract businesses to Germany (Schmidt 2005).

2.3.2 Demographic Change and Intergenerational Equity

The health care demands of Germany's aging populace have further contributed to the rise in health expenditures. As an illustration, the proportion of the German population under 15 years of age declined from 25 percent in 1970 to 15 percent in 2003, while the proportion of the population over 64 years of age increased from 15 percent to 18 percent (Busse and Riesberg 2004, 6). Although the proportion of individuals over 80 years of age remained relatively constant in the last decade, projections reveal an imminent upward trend. These demographic factors have culminated in the burden of health care financing distributed unequally across generations, so that relatively fewer younger individuals pay for the needs of a growing elderly populace.

2.3.3 Reform Objectives

In defining Germany's health care reform objectives, it is important to assess to what extent the current system already satisfies the grand policy goals of solidarity, equity, and efficiency.

The current German health care financing system retains *solidarity* by providing equal access to medical care regardless of income or social status. Moreover, the system provides universal coverage (with few exceptions) and comprehensive benefits for the entire population. Thus, medical care is provided according to need, and health care financing is contingent upon ability to pay, as contributions reflect a percentage of gross earnings.

Universal care allows for coverage of 88 percent of the population by the public scheme, 10 percent by private insurance companies (including 4 percent civil servants with free govern-

ment care), and 2 percent by sector-specific government schemes (e.g., military, police, social welfare, assistance for asylum seekers). The uninsured population is nominal, approximating 0.7 percent, consisting of the self-employed and individuals who previously failed to make private or public insurance contributions (Busse and Riesberg 2004, 57).

In addition, a safety net is established for individuals with gross monthly earnings less than €400 whereby only employers make contributions at a rate of 11 percent across all funds. With respect to artists and students, the federal government assumes half of their contribution payments. Finally, the Federal Agency for Employment assumes the financing role of the employer for unemployed persons.

Solidarity is further enshrined in the public system via a set of comprehensive benefits, stipulated in the Social Code. Irrespective of individual wealth, contributory income, or duration of insurance coverage, the insured and their dependents are entitled to the same benefits package. As denoted in Chapter 3 of the Social Code Book V, the benefits package includes: disease prevention, health promotion at the workplace, disease screening, disease treatment (e.g., inpatient care, ambulatory care, dental care, pharmaceuticals, care provided by allied health professionals, medical devices, nursing home care, some rehabilitative care, and sociotherapy), emergency and rescue care, patient transportation under certain health conditions, and other benefits such as patient information.⁶

In order to preserve *equity* in health care, Germany must ensure that the system is financed progressively, with high-income groups bearing a proportionally greater share of health expenditures. At present, however, the incidence of health care financing is borne *regressively*. As noted earlier, the SHI is currently financed via wage-tax premiums, a proportional tax with a ceiling for the taxable amount, thus creating a *mildly regressive* system.

Market Orientation and Efficiency. (i) Allocative Efficiency: As the current system of statutory health insurance involves contributions ear-

⁶ See Busse and Riesberg (2004, 67) for further details.

marked specifically for the health system, health care need not compete with other public agenda items for financing, thus creating opportunities for allocative efficiency. These potential efficiency "gains" can emerge relative to a system of financing in which health care is vulnerable to annual budget appropriations from the state, such as the system of general revenue financing outlined below in the case of Spain and France.

(ii) Technical Efficiency: In terms of technical efficiency, that is, the maximization of output for a given level of inputs, the current German system fares relatively poorly, as it is unable to benefit from administrative savings or economies of scale that would obtain under a more centrally administered system. Unlike the case of France (discussed below), management and operational responsibilities are devolved to the sickness funds, producing a system whereby the approximately 300 funds individually collect contributions, purchase care, and pay providers.

Of course, administrative expenses and transaction costs vary by sickness fund, with the larger funds (holding a 78.4 percent market share in 2004) able to benefit from large-scale operations and achieve efficiency gains in administration. In 2002, administrative costs ranged from an average of 3.02 percent of all contributions paid by members of the so-called *Betriebskranken-kassen* or "company funds" to 5.75 percent for the remaining SHI funds (Burger et al. 2003). It is noteworthy that funds have an incentive to control administrative expenses, as overhead is, in fact, *excluded* from the risk structure compensation scheme (RSC) for funds, as discussed below.

Thus, individual funds have an incentive to operate efficiently and control administrative expenses in an effort to reduce current deficits (and hence contribution rates) for their enrollees. However, the fragmented administration of the public system at large, characterized by multiple competing sickness funds with strong management and operational responsibilities, leaves

little room for efficiency gains in the current management of SHI.

(iii) Market Failures—Adverse Selection: As consumer choice of funds has facilitated competition, and hence prompted funds to operate more efficiently, it has in turn created incentives for adverse selection by consumers. The option for high-income earners to acquire PHI leads high-income "good" risks to opt into the private system in which their premiums are lower under the risk-rating scheme. Conversely, this encourages the movement of high-income "poor" risks into the public system, driving up SHI expenditures and, consequently, health insurance contributions, as Kifmann (2003) and Wambach and Wigger (2003), among others, have pointed out.

In addition, incentives for adverse selection by consumers exist within the public system of competing sickness funds, as healthier, younger individuals move into cheaper funds. Thus, increased consumer choice may serve to augment (rather than equalize) differences in the risk structures of funds, thereby creating incentives for adverse selection in the SHI's competitive health insurance market.

(iv) Market Failures—Risk Selection: By the same token, insurance providers also have incentives to select "good" risks (i.e., to engage in "cream skimming") and thereby attract healthier (and often wealthier) individuals, as this lowers their expenditures.⁸ Risk selection has been tempered, however, by the *Risikostrukturausgleich* (RSC), a mechanism designed to equalize differences in the expenditures across funds due to the varying demographic and risk profiles of their enrollees.

To date, despite implementation of the RSC, the risk adjustment mechanism across funds remains imperfect, primarily as the public system currently lacks (i) health-based risk adjustment factors (scheduled for implementation in 2007) and (ii) risk sharing.

While Germany's current risk adjustment scheme relies primarily on demographic variables (e.g., age, sex, disability), it requires a more

⁷ In 2004, "company funds" held 78.4 percent of the sickness fund market share, according to Busse and Riesberg (2004, 35–36).

⁸ Perhaps as a result of risk selection, there has been an increase in transfer-sums within the RSC from 7.9 percent of RSC-relevant expenditures in 1995 to 10.9 percent in 2003 (Riesberg 2004).

refined RSC adjustment system to account for health status. As noted by Busse and Riesberg (2004, 65), The Act to Reform the Risk Structure Compensation Scheme (2001) called for further adjustment of the RSC (effective 2007) to account for differences in the morbidity structure of funds, prevent cream-skimming, and provide incentives to offer special treatment for chronically ill patients, so that a new "morbidity-oriented" RSC creates a distinct "high risk" pool covering only the highest cost treatments, as well as distinct RSC categories for individuals participating in Disease Management Programs (DMP).

However, despite recent refinements to the retrospective risk adjustment model, Germany continues to lack the kind of risk sharing that is pervasive in the health systems of Belgium, the Netherlands, and Israel (Van de Ven et. al. 2003). In these countries, risk sharing is a retrospective adjustment scheme in which sickness funds are reimbursed ex post by a solidarity fund for some of the "generally acceptable" costs of their enrollees. This reduces funds' incentives for risk selection ex ante. The lack of risk sharing in Germany means that patient co-payments are the only mechanism to limit the impact of managerial variations in individual risks on sickness funds, so that some incentive to select "good" risks persists.

3 Other Countries' Reform Experiences

3.1 Spain: "A Shift from Bismarck to Beveridge"—The Path of the Bürgerversicherung? 9

The Current Health Care Financing Scheme. Prior to the establishment of the 1982 socialist government, Spain's health care system suffered from weak organization and coordination of care, inadequate financing structures, and lack of universal coverage. Government efforts to con-

tain costs in the 1980s resulted in a backlash characterized by general and sector-specific strikes that forced the government to raise public health care expenditures.

In an effort to support solidarity, expand the financing base, and address the aforementioned concerns, the socialist government (1982–1986) embarked on reforms to increase coverage and revenues. In response, the State enacted The General Health Act (1986) confirming the universal right to health care (as delineated in the 1978 Constitution), and outlined a marked shift in health care financing, as Rico et al. (2000) notes. Essentially, the legislation marked Spain's formal transition from social insurance to a national health system that involved a slow, gradual movement from social security payroll contributions to direct state funding, essentially "a shift from Bismarck to Beveridge," as Rodrígez et al. (2000) have called it.

As an example, from the mid-1970s social security contributions covered two-thirds of total health care expenditures, while the State budget accounted for the remaining third. By 1989, the numbers had nearly reversed to 30 percent social insurance financing and 70 percent state budget financing. Thereafter, social contributions diminished continuously until they virtually disappeared in 1999, supplanted almost entirely by general taxation revenues (European Observatory 2005).

Today, general taxation finances nearly 100 percent of health care expenditures. Taxes are primarily centrally raised and then allocated on a per-capita basis to the Autonomous Communities (Rico et al. 2000, 37). Nevertheless, there are also complementary financing sources, notably out-of-pocket payments and private insurance (European Observatory 2005).

The Private Insurance Sector. It is noteworthy that the public health insurance system is compulsory, so that individuals generally cannot optout of the system (with the few exceptions noted below). Thus, private insurance is purely voluntary, that is, individuals have the option of purchasing additional private insurance. In 1997, private health insurance amounted to 21.3 percent of total health expenditures (Rodrígez et al. 2000, 111). Approximately 12 percent of the

⁹ This section draws on Rodríguez et al. (2000) and on Rico et al. (2000) for factual information.

population has private voluntary insurance, thus having double coverage. This is particularly apparent in regions such as Catalonia, large metropolitan centers, and among high income and professional groups. Interestingly enough, as the size of the private insurance market has increased among industrialized nations in recent years, the size of Spain's private insurance market has remained stable over the past ten years—a sign, perhaps, that individuals are unwilling to incur additional out-of-pocket expenses other than those currently required by the public scheme.

Private insurance is both (i) *supplementary*, covering dentistry, prosthesis, and the 40 percent co-payment for prescriptions required by the public system and (ii) *substitutive*, providing services available for free from the public sector, such as over-the-counter drugs, physician fees, and private insurance premiums for the population at large. ¹⁰

Civil servants and their dependents are, however, exempt from the compulsory public scheme. These individuals can choose between the national health service (NHS) or obtain private health coverage, but payment is indirect via special mutual funds. For those electing NHS coverage (approximately 50 percent), the mutual funds contribute a per-capita sum directly to the NHS. Those who select private insurance, make payments directly to the private insurers themselves.

3.2 France: A Hybrid of Beveridge and Bismarck¹¹

The Current Health Care Financing Scheme. Cost containment has remained a long-standing objective in France's health care financing reform efforts, superceding (at least historically) market-orientation or efficiency concerns. In line with the German experience, French health care expenditures as a percentage of national income

have grown in recent years and contribution rates have subsequently increased to compensate for greater health spending. To address concerns over growing health expenditures, the State enacted the Juppé Reform (1996), bringing about a fundamental change in health care financing by shifting the public system's financial base from contributions based on earned income and wages to those based on total income (comparable to a general income tax). 12 To illustrate, from 1946 to 1996 social insurance contributions were based primarily on earned income and wages; however, in the years following the Juppé Reform, income-related contributions declined from 6.8 percent to 0.75 percent of gross earnings for employees (Sandier et al. 2004, 36).

Today, the public health system is financed via contributions based on earnings and total income (i.e., General Social Contributions or CSG). As defined by the Social Security Funding Act (2001), the CSG rate varies according to income source, with a 5.25 percent assessment levied on earned income, capital, and gambling earnings, and a 3.95 percent assessment levied on benefits such as pensions and allowances. Consequently, health revenues are increasingly disconnected from earnings and thus, less vulnerable to the wage or employment fluctuations that currently plague the German model. However, although this has widened the revenue base, it has purportedly *not* increased revenue.

Generally, funding for public health care remains largely financed via employer contributions, employee contributions, and CSG revenue, totaling 87.8 percent of total health insurance revenue. State subsidies and earmarked taxes (e.g., cigarettes, cars, alcohol consumption) finance the remainder.

Notably, changes in the revenue base of statutory health insurance (i.e., universal coverage, transition to contributions based increasingly on total income) illustrate greater State involvement at the expense of sickness funds.

¹⁰ Over-the-counter drugs comprise 16.7 percent of total private expenditures, physician fees 14.1 percent, and private insurance premiums 8.2 percent for the population at large (Rodriguez et. al. 2000, 111).

¹¹ This section draws on Sandier et al. (2004) for factual information.

¹² In 1998, France ranked 11th in the level of per capita health expenditures and 4th for health care expenditures as a percentage of GDP among OECD countries. Increasing health care expenditures have been attributed to volume growth and price increases. Expenditure increases vary, of course, by health sector (Sandier et al. 2004, 36).

The Private Complementary Insurance Scheme (VHI). Due to the growing discrepancy between consumers' out-of-pocket payments and reimbursement by the statutory health insurance scheme, individuals have increasingly purchased complementary private insurance (VHI), amounting to 86 percent of the population in 2000 (compared to 33 percent in 1960 and 50 percent in 1970), according to Sandier et al. (2004, 44). Among OECD countries, France ranks only behind the U.S. and the Netherlands in the percentage of health care financed by private insurance. 13 Private insurance reimburses co-payments required by the public scheme and, as well, provides medical goods and services poorly covered in the public system (e.g., dental, optical).

Most complementary VHI is purchased via employment where the employer contracts with private insurance providers (i.e., mutual insurance associations, private for-profit insurance companies, provident institutions) on behalf of its employees. Premiums are risk-rated.

In sum, complementary VHI covers 86 percent of the population and accounts for 12 percent of total health expenditures. If reimbursement under the public scheme should decrease due to chronic deficits, the number of individuals opting for private insurance, and correspondingly VHI premiums (which have steadily risen in recent years), are likely to increase, as Buchmueller and Couffinhal (2004) have argued.

Ultimately, France's continuing health care financing debacle has led to policies designed to balance cost containment objectives while upholding those of equity and solidarity. The current crisis heeds recent calls for "state-led managed care" (August 2004), as espoused by Minister of Health Philippe Douste-Blazy, quoted in Rodwin and Le Pen (2004). The reforms are designed to incorporate such factors as computerized medical records, practice guidelines, and incentives to use primary care physicians as "gatekeepers." In a sense, the reforms seek to modernize the health system by improving quality and efficiency or resource allo-

cation, beginning to apply U.S.-style managed care techniques to France's traditional state-run system.

3.3 Switzerland: A Blueprint for Redesigning the German Health Care System? The Path of the *Kopfpauschale*?¹⁴

Historically, as defined by the Federal Sickness and Accident Insurance Act (KUVG), Swiss health insurance premiums were risk-rated, culminating in individuals deemed as "high risk" (e.g., elderly, chronically ill) lacking insurance coverage. Additionally, rising health expenditures in the early 1990s prompted reform under the new Federal Sickness Insurance Act (KVG), effective January 1, 1996, as described in Beck et al. (2003). The legislation was designed with the intent of promoting competition between insurance providers and containing costs while preserving solidarity. Switzerland's aims to couple market-oriented reforms while retaining universal access to care have led many German observers to think that the Swiss system can serve as a "blueprint" for redesigning the German health care system. See, for example, Felder (2002).

The Current Health Care Financing Scheme. The KVG introduced premium competition (on the basis of community-rated premiums) between insurance companies in combination with a retrospective risk adjustment scheme to reduce "cream skimming." Insurance companies were obligated to accept all individuals applying for compulsory health insurance. In addition, risk adjustment further ensured that companies did not differentiate between high and low risks, thereby preserving solidarity.

Today, community-rated premiums remain in place, meaning that enrollees of an insurance company within a particular canton or subregion of a canton pay premiums for the same lump sum, regardless of individual risk. Thus, premiums do

¹³ This reflects data collected as of 2003. See Buchmueller and Couffinhal (2004) for details.

¹⁴ This section draws on Minder et al. (2000) for factual information.

not differ by age or sex, but children and dependent teenagers, however, cost less.

Companies calculate premiums based on estimates of health care expenditures in a canton or sub-region of a canton, and The Federal Office for Social Insurance audits premiums before they are introduced. If premiums are too high, the federal government can force companies to reduce premiums. This external auditing system is feasible because Swiss cantons have the right to access insurance company information regarding premium calculations. In sum, *public* health financing, amounting to 59.1 percent of total health expenditures in 1997, can be broken down as: taxes (24.9 percent), compulsory health insurance (27.5 percent), and other statutory health insurance schemes (6.7 percent). ¹⁵

Private Health Insurance. In Switzerland, private health insurance plays a complementary role to the public scheme, covering additional services not included in the public package (e.g., access to single rooms for inpatient care, dental). Estimates reveal that 70 percent of the Swiss population carries such supplementary insurance packages (Van de Ven et al. 2003, 92). In contrast to the public system where premiums are community-rated, premiums under private complementary insurance are risk-rated. Altogether, nonpublic sources of health care financing amount to 38.7 percent of total health expenditures, including out-of-pocket payments (27.6 percent) and supplemental health insurance (11.2) percent), the latter of which included 1.2 percent of total health expenditures from for-profit organizations and 10.0 percent from nonprofit organizations (Minder et al. 2000, 30). 16

It is noteworthy that the number of individuals with supplementary private health insurance has declined due to increasing private insurance premiums and an expansion of compulsory benefits under the public scheme. Interestingly,

companies providing compulsory insurance are also the main providers of complementary insurance.

3.4 The Netherlands: A Hybrid of Private and Public Financing, with a Significant Role for Private Health Insurance¹⁷

Reform of the health care system has been on the policy agenda in the Netherlands for almost 20 years. In March 1987, the Dekker Committee, established by the Dutch government to evaluate the structure and funding of health care, published its report *Willingness to Change*, which included recommendations aimed at reducing health care expenditures via volume and utilization controls, deregulation, and reform of the health insurance system at large. The government's response encapsulated in the report *Change Assured* revealed its vision for health insurance—that of a single system providing universal coverage and comprehensive benefits.

With this proposal, the government sought to remove the divisions between coverage under the various insurance schemes, thereby creating a national health insurance system in which all residents would be obligated to participate. As such, supplementary private insurance would be available for care excluded in the state-defined benefits package. These changes, slated for gradual implementation beginning January 1, 1989, would ultimately erode the distinction between sickness funds and, as well, private insurance, and public servants' insurance schemes. The subsequent implementation of the proposed reforms has been slow.

Generally, this slow implementation illustrates the difficulty in introducing effective market competition while preserving solidarity and equity, a common problem in the German context as well. If anything, Dutch reform efforts highlight the importance of having the appropriate institutional structures in place to "manage"

^{15 &}quot;Other statutory insurance schemes" is defined by the HIT Switzerland 2000 country report as: occupational and non-occupational accident insurance, old age, and disability insurance. See Minder et al. (2000, 30).

^{16 &}quot;Other statutory insurance schemes" is defined by the HIT Switzerland 2000 country report as occupational and non-occupational accident insurance, old age, and disability insurance.

¹⁷ This section draws on den Exter et al. (2004) for factual information.

competition in a way that does not sacrifice these policy objectives.

The Health Care Financing Scheme Up to 2005. A unique feature of the Dutch health system is that it is composed of three "compartments," each under different regulatory regimes. ¹⁸ The Netherlands therefore lacks a coherent national health plan. Nonetheless, the Dutch system provides near-universal coverage under these compartments:

(1) National health insurance for "exceptional medical expenses" (AWBZ). The first compartment of the Dutch health system consists of statutory insurance covering exceptional medical expenses due to long-term care or high-cost treatment, as stipulated in the AWBZ. With few exceptions, individuals resident in the Netherlands are covered under this first "compartment," which accounts for 40 percent of total health expenditures.

This scheme is financed via percentage contributions and government funds. Employees make payroll-based contributions and those liable for tax/social security contributions make percentage contributions. Individuals without taxable income do not contribute to this scheme. Thus, nearly all residents of the Netherlands are by law required to make contributions and those electing not to contribute must pay an additional income tax (Tapay and Colombo 2004).

(2) Normal/short-term medical care: compulsory sickness funds and private insurance. The second "compartment" of Dutch health care covers general practitioner (GP), specialist, and inpatient care. This is funded via both compulsory sickness fund insurance and voluntary private insurance (PHI). To qualify for insurance under this compartment, the government establishes income eligibility criteria; thus, individuals (e.g., workers, welfare recipients, elderly) earning below €32,600 annually are required to purchase this social health insurance package

(2004). In sum, approximately 63 percent of the population holds this obligatory insurance coverage (2004).

Financing the second compartment involves both income-related and flat rate contributions. Employees make smaller (1.75 percent) contributions, whereas employers make larger (6.35 percent) contributions in 2001 (Tapay and Colombo 2004, 18). The government determines incomerelated premiums and social insurance providers determine the amount of flat rate payments. Tapay and Colombo note that, although the flat rate contribution has historically been held to quite low levels (€188 annually in 2000), this amount has increased nearly three-fold in recent years, amounting to €750 in 2003.

Individuals that do not qualify for this compulsory (statutory) insurance scheme include approximately 5.1 million persons (approximately one-third of the population), due to income eligibility criteria (Tapay and Colombo 2004, 18). Nearly all of those ineligible opt for voluntary private insurance (PHI). The remaining 5 percent are covered under special insurance schemes such as those for local government employees (i.e., civil servants and police officers).

(3) Voluntary supplementary health insurance. The third compartment provides health services not included in the first two compartments (e.g., luxury hotel services during hospitalization, adult dental care, prolonged physical therapy), and thus reflects a "supplemental" insurance package, on which Lamers et al. (2003) provide detailed information. For these services, individuals can voluntarily purchase risk-rated supplementary health insurance from a private insurance provider. Importantly, more than 90 percent of all sickness fund enrollees have some form of supplementary insurance.

Recent Reforms. 19 Given the complexities inherent in the current system, the implementation of recent reforms to dissolve the distinction

¹⁸ The following information is based on a summary report written by André den Exter, Herbert Hermans, Milena Dosljak, and Reinhard Busse, *Health Care Systems in Transition: Netherlands 2005*, (Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies; available at http://www.observatory.dk; Internet, 1 (accessed 15 July 2005).

¹⁹ This paragraph is based on the *Finalization of Health Insurance Act*; available at http://www.minvws.nl/en/nieuwsberichten/staf/2005/finalization-of-health-insurance-act.asp; Internet, 1 (accessed 17 November 2005); and additional information from *Health Insurance in the Netherlands*; available at http://www.minvws.nl/en/folders/z/2005/health-insurance-in-the-netherlands.asp; Internet, 1 (accessed 17 November 2005).

between public and private health insurance may come as little surprise. On October 4, 2005, the Dutch Upper House agreed to introduce and amend the Health Insurance Act (Zorgverzekeringswet), which, as of January 1, 2006, requires that all residents in the Netherlands take out a basic package of health insurance at a flat rate of approximately €90 per month, supplemented by a payroll-tax at 6.5 percent. All sickness funds will be abolished in their current form and private profit-seeking insurers are allowed to compete on prices as well as on the basis of special contracts with selected suppliers of care. But, every health insurance company in the Netherlands is legally obligated to accept any individual applying for health insurance. In effect, the new health insurance system supplants the existing national health insurance, private health insurance, and civil service health insurance schemes.

4 Health Care Financing Reform Proposals in Germany

4.1 The Bürgerversicherung or Citizens' Health Insurance

Overview. The Citizens' Health Insurance proposal entails a broadening of the contribution base for the public health insurance scheme via three primary levers, as described in Busse and Riesberg (2004). First, social insurance contributions would remain income-dependent, that is, proportional to an individual's gross monthly earnings. However, the contribution assessment limit would be increased by approximately onethird to €5,100 of gross monthly income, from the existing level of €3,525 in 2005. Second, the proposal entails an expansion in the definition of "contribution income" to include other types of revenue (e.g., capital, rent, interest). Third, the reform calls for an obligatory SHI scheme for all individuals (including those currently exempt, such as civil servants, self-employed, farmers, retirees), by abolishing the income eligibility limit (monthly gross income earnings below

€3,825 as of January 2003) that enables high-income groups earning above the threshold to choose between public and private insurance. In sum, the *Citizens' Health Insurance* would relegate private health insurance to a supplementary role, solely for benefits not covered under SHI, and end its current substitutive role for high-income earners, as Kifmann (2003, 6) explains.

Outstanding Issues. As mentioned previously, the difficulties in evaluating either reform proposal lie in the lack of details. In the context of the Citizens' Health Insurance, issues that require further elucidation include:

Income Sources. As of Spring 2005, the Green party favored the inclusion of all income sources (e.g., capital, rent, interest), whereas the SPD favored the inclusion of only interest income (in addition to salaries and wages) when calculating social insurance contributions (Mosebach 2005, 5). However, the SPD currently states that it seeks to include "interest and other capital income."²⁰

Co-insurance for Dependents. The Green party previously challenged (Spring 2005) the co-insurance status for individuals that do not care for children or the elderly, claiming that both spouses should make individual contributions to the public scheme (Mosebach 2005, 5). Thus far, the SPD has not challenged the co-insurance status for dependents provided for in the existing health care financing scheme.

Administration. Another important issue that remains is whether social insurance contributions, if they include all sources of income, will be collected by the general tax authorities (Finanzämter) or continue to be collected by Germany's approximately 300 sickness funds. In addition, it is yet to be determined how the various income sources will be identified in a seamless, cost-effective fashion without increasing transaction costs.

²⁰ Die Bürgerversicherung: gerecht und solidarisch!; available at http://www.spd.de; Internet, 1 (accessed 30 August 2005).

4.1.1 What Could the *Citizens' Health Insurance* Achieve?

Would the Citizens' Health Insurance Prevent Contribution Rates from Rising?

One of the factors plaguing the German health system today is the steady increase in contribution rates. Rates have been mounting due to sickness funds' increasing deficits and, correspondingly their 100 percent financial responsibility for deficits/surpluses as the German health system lacks risk sharing.

As illustrated above, the subsequent rise in contributions has been driven largely by macroeconomic factors (e.g., unemployment, growth of "mini" jobs) that either do not involve contributions or minimize contributions to SHI funding. Thus, the Citizens' Health Insurance would do little to alter macroeconomic factors that are dependent, instead, upon GDP growth and gains in full-time employment. In addition, as the sickness funds' 100 percent financial responsibility would remain intact, they would be forced to continue financing deficits via contribution rate increases. In sum, expanding the health care financing base by including all persons might provide temporary relief for rising contributions but is not likely to ameliorate the long-term problem of contribution increases to the extent necessary. Rather, genuine long-term contribution reductions under the Citizens' Health Insurance would require some form of risk sharing and, more fundamentally, macroeconomic recovery.

Would the Citizens' Health Insurance Reduce Labor Market Dependency?

Although the *Citizens' Health Insurance* might relax the health care system's dependence on the labor market, as contributions would become linked to income sources other than pure wages and salaries, it would not entirely eliminate this dependence. Particularly with the addition of interest income only (as previously advocated by the SPD and in contrast to the inclusion of all income sources) in health contribution assessments, statutory health insurance would remain largely vulnerable to labor market volatility.

What Would the Wider Economic Impact Be?

As the health care system depends on the labor market for funding (i.e., as contributions are levied according to wages and salaries), social insurance contributions as they stand presently and would continue under the *Citizens' Health Insurance* would also weaken the vitality of German industry.

Social contributions under the *Citizens'* Health Insurance would continue to be a "tax" on labor and would contribute to rising nonwage labor costs, particularly if they are levied primarily on wages and salaries. This would continue to place the German industry at a comparative disadvantage relative to other global players. Thus, given the comparatively higher labor costs caused by this unqualified tax on labor, disincentives for companies to operate in Germany would persist. Moreover, this might also deter investment by multinational companies, and foreign and domestic firms with relatively low international relocation costs, and might further increase unemployment.

How Would the Bürgerversichung Accommodate Demographic Change?

The aging of Germany's population has resulted in health care payments being borne unequally across generations, so that relatively fewer younger individuals pay for the needs of a growing elderly population. This is so because the present system does not incorporate age-related contributions, calculated to cover average expenditures within a specific age group for a given period of time.²¹ Such age-related contributions would imply, however, that both the young and middle-aged save privately to afford rising future health care costs, approaching a system of private medical saving accounts (as found in Singapore).

Similarly, building up capital to finance future medical care, which can be expected to become more expensive, could be used in the German context to remedy this intergenerational financing burden. The *Citizens' Health Insurance* proposal, however, offers no such solution and thus would not remedy the health care financing

²¹ See Breyer (2004, 684) for a discussion of this issue.

concerns engendered by an aging populace. Rather, the proposal calls for a continuation of the pay-as-you-go financing scheme, as opposed to a system of capital accumulation whereby savings would be pooled to finance individuals' future health expenditures.

How Would the Citizens' Health Insurance Meet Other Policy Objectives?

In striving for the appropriate balance between state intervention and market orientation, it is important to evaluate the ability of the *Citizens' Health Insurance* to adequately address Germany's health care reform objectives as outlined above. In doing so, it helps to draw upon international comparisons and lessons learned from countries pursuing similar health care reform objectives. Both the Spanish NHS and the French hybrid of social insurance and general contributions can offer Germany insights as it moves forward with much-needed health care financing reform.

Solidarity. In defining solidarity as equal access to medical care, regardless of income or social status, coverage would remain unchanged under the Citizens' Health Insurance. In sum, it appears to retain the solidarity principle in health care, as it would do the following. (i) It would maintain equal access to medical care regardless of income or social status. As such, medical care would continue to be provided according to need and ability to pay. Contributions would remain income-dependent, as a percentage of gross monthly earnings, albeit with a ceiling or contribution assessment limit. (ii) It would maintain comprehensive benefits for the entire population. As noted earlier, a social safety net currently exists to protect low-income or "vulnerable" groups (e.g., unemployed, low-income earners) and the Citizens' Health Insurance would leave this social safety net unaltered.

An important question remains whether the *Citizens' Health Insurance* (with its incorporation of additional, if not all, income sources) would approach a general-revenue financing scheme, similar to Spain's, which could have implications for the preservation of solidarity. Despite the Spanish NHS's provision of near-universal coverage and comprehensive benefits,

Spain's transition from social insurance contributions to general taxation funding (i.e., its transition from "Bismarck to Beveridge") has led to claims that the system is in fact underfunded, characterized by long wait-lists for hospital procedures and an "ineffective" primary care sector that, in turn, have contributed to growing public dissatisfaction (Rodrígez et al. 2000, 117–119). Thus, underfunding jeopardizes Spain's future commitment to provide universal accessibility to comprehensive medical care.

If the *Citizens' Health Insurance* does, in fact, entail the inclusion of all income sources (thereby approaching a general taxation scheme), why not supplant the current system of competing sickness funds with a general taxation revenue system with a special tax earmarked for health-care? Why operate via the near 300 sickness funds that collect contributions? The downside of such a general tax financing system, as cited in the Spanish example, would be its subjection to national budget appropriations to health care, thereby instilling a sense of unpredictability (and perhaps volatility) in health funding from year to year.

The German model of health care financing can also draw upon lessons learned from France's current hybrid of Beveridge- and Bismarck-style health systems, that is, strong state intervention in tandem with sickness funds. Like the German and Spanish systems, the French system preserves solidarity by providing equal access to medical care, regardless of income or social status. However, despite the universality of the system, the coverage provided by the public sphere is incomplete, culminating in 86 percent of the current population electing to have private complementary insurance to reduce the burden of cost-sharing and/or obtain benefits poorlycovered by public insurance, such as dental and optical benefits (Buchmueller and Couffinhal 2004, 4).

In line with the current German debate, France has attempted to expand its health care financing base via the inclusion of all income types in "contribution income" calculations. However, the French transition from social insurance to total income-based financing (mandated by the 1996 *Juppé Reform*) has purportedly *not* increased

revenues (Sandier et al. 2004, 37). In fact, the current system is in a state of crisis, carrying a €32 billion deficit (2004), as actual health expenditures consistently exceed federally mandated targets (Jemiai 2004). In sum, the financial instability of the French health system, plagued by chronic deficits, has prompted the state to limit health care accessibility for those eligible for state-provided medical aid (AME) and short-term residents (i.e., individuals residing in France for less than three months).

Similarly, solidarity may be jeopardized in the German context if financing reforms continue to prove inadequate. Given that approximately 10 percent of the current population (82.5 million) is privately insured, the entrance of potentially 8.25 million new enrollees into the public system under the Citizens' Health Insurance (with the inclusion of all citizens) could generate substantive revenues.²² However, as the contribution assessment limit would remain capped (albeit at a greater level of €5,100 of gross monthly income), there are limitations to the earnings potential under this scheme. Moreover, Germany's health care financing base has already been gradually expanded to include greater and greater income eligibility thresholds (as noted above) and these too have proved inad-

Equity. Defining equity as the incidence or burden of health care financing across income groups, the Citizens' Health Insurance would appear, overall, to be regressive. At first glance, the proposal seems to enhance equity because contributions remain income-dependent, burdening higher income groups proportionally more than lower-income groups. However, the financing of the system would remain regressive due to the proposed ceiling, or cap (although increased to \mathfrak{S} ,100 of gross monthly income), up to which contribution assessments can be levied (Busse and Riesberg 2004, 59).

Moreover, if the Citizens' Health Insurance (in its call for a move toward the inclusion of all income types) marked a transition toward general revenue financing, this might have positive equity implications, as health care would be funded by Germany's already-progressive taxation system.²³ Interestingly, however, Spain's transition toward a general revenue scheme has not brought about the anticipated equity in health care financing. Rather, the introduction of VAT and other indirect taxes after Spain's accession to the European Union in 1986 created what in effect amounts to an almost proportional taxation scheme whereby individuals pay a fixed proportion of their income, independent of their total income level (Rico et al. 2000, 40). In an international context, Spain ranked intermediate in terms of equity in Western Europe throughout the early 1980s and 1990s, as the progressive nature of income taxes was tempered by the regressive nature of the VATs. The Spanish experience reveals that funding via general taxation requires a holistic view, in light of parallel taxation systems, and may not directly translate into a more equitable financing system.

Turning again toward the French model, lessons can be drawn from the French hybrid of social insurance contributions and total-income related (CSG) contributions. Although the CSG is proportional to income, a lower rate applies to those receiving benefits, making the CSG in fact progressive. Additionally, the 2001 Social Security Funding Act reduced the CSG contribution for low-income earners, thus providing a social safety net for those with limited ability to finance their own health care. However, French equity may be jeopardized by the impending finance reforms that will reduce the progressive income tax by 10 percent (benefiting high-in-

²² These population and insurance statistics reflect data in the European Observatory on Health Care Systems' Health Care Systems in Transition (HIT): Germany 2004 country profile. Since the time of the HIT publication, these statistics may have changed (Busse and Riesberg 2004, 1 and 57).

²³ Taxation in Germany; available at http://en.wikipedia.org/wiki/Taxation_in_Germany; Internet, 1 (accessed 24 August 2005).

²⁴ This information is based on a summary report written by Simone Sandier, Valérie Paris, and Dominique Polton, Health Care Systems in Transition: France 2004, (Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies; available at http://www.observatory.dk; Internet, 3 (accessed 15 July 2005).

come earners) and raise the general social contribution tax (Jemiai 2004, 2).

Both the Spanish and French experiences illustrate that policy-makers must heed caution in implementing financing changes in Germany, particularly as equity may be jeopardized if reforms prove inadequate. As the *Citizens' Health Insurance* currently stands, it retains a cap on social insurance contributions. Therefore, Germany's existing health care financing scheme would remain mildly regressive, as in its present form.

Market Orientation and Efficiency. (i) Allocative Efficiency: In terms of the resource allocation to health care relative to other sectors, the continuation of social health insurance under the Citizens' Health Insurance would promote allocative efficiency because contributions for health care remain earmarked or determined by revenue specifically raised for the health care sector.

If the *Citizens' Health Insurance* marked a future transition toward general revenue financing that included all income types, allocative efficiency concerns might emerge, since annual health sector allocations would remain vulnerable to budget appropriations, driven by the competing needs of other national budget items. Such is the case in Spain and France, where the stability and predictability in health financing, due to national budget constraints, varies from year to year. Spain's general revenue-based financing system implies that health care competes annually with other national budget items, perhaps contributing to the health sector's current underfunding.

In the French context, allocative efficiency concerns remain, as health expenditure targets are established at the national level via the national ceiling for health insurance expenditures (ONDAM) established annually by the National Assembly (Sandier et al. 2004, 32). It is noteworthy that, since ONDAM's introduction, the national health expenditure target was attained only in the first year (1997), whereas in subsequent years actual health spending largely exceeded the target.

In the context of Germany, as long as health care contributions remain earmarked for the health sector, such allocative efficiency questions would not come into play because health sector allocations would remain independent from the annual budgeting by the government. However, allocative efficiency concerns would emerge if the *Citizens' Health Insurance* signaled a transition toward a general revenue-financing scheme.

(ii) Technical Efficiency: Assuming that individual sickness funds continue to collect contributions, technical efficiency gains would be minimized under the *Citizens' Health Insurance*. In this scenario, Germany's approximately 300 sickness funds would continue to act as the purchasers of care for their enrollees, minimizing the potential for economies of scale obtainable under a more centrally administered financing system.

Levels of technical efficiency depend, of course, on the details of the reform package. Questions to consider include: Which entity/ entities will measure and track the various revenue sources (e.g., capital, interest, rent) to be included in social insurance assessments? Which revenue sources will be included? And will contribution assessments vary by income source, as in the case of France—and, if so, by how much? In sum, as the administration of the system increases in complexity—that is, as there are more revenue sources to identify and contribution assessments to levy—technical efficiency wanes.

The benefits of a more centrally administered system can be witnessed through the Spanish and French experiments with health care financing reform. The Spanish NHS retains a relatively high level of technical efficiency, as taxes are raised primarily centrally, since regional and local governments have limited fiscal independence from central authorities.²⁵ From an administrative standpoint, however, the financing of the French system appears complicated and incongruous with varying contribution assessments applied to different sources of income.²⁶

²⁵ Health Care Systems in Transition: Spain Summary 2002; available at http://www.observatory.dk; Internet, 3 (accessed 15 July 2005).

²⁶ As defined by the Social Security Funding Act (2001), the CSG rate varies according to income source, with a 5.25 percent assessment levied on earned income, capital, and gambling earnings, and a 3.95 percent assessment levied on benefits such as pensions and allowances (Sandier et al. 2004, 37).

Administration of health care is further exacerbated by France's struggle to decentralize and centralize decision-making simultaneously, due to tension between the government and health insurance funds.²⁷ Moreover, although the decision-making capacity of the National Assembly has been increased (via the annual determination of the ONDAM, for example), the responsibilities of individual actors remain unclear. Such administrative complexities hamper technical efficiency in the long-term.

Again, the *Citizens' Health Insurance's* call for the continued presence of Germany's approximately 300 sickness funds and, moreover, inclusion of additional (if not all) income sources and individuals to finance the health system would be likely to reduce *technical efficiency* and increase administrative expenses, as such a multi-faceted financing proposal would only complicate the management and administration of health care policy, as opposed to the implementation of a more centralized, streamlined approach to health management.

Additionally, although the *Citizens' Health Insurance* would preserve competition between sickness funds, there would (in a sense) be *less* competitive pressure for funds to operate efficiently, as sickness funds would no longer have to compete with the private insurance market for high-income earners.

(iii) Market Failures—Adverse Selection and Risk Selection: The advent of the *Citizens' Health Insurance* would resolve the problem of adverse selection caused by consumers choosing between private and public insurance, because PHI would assume a solely supplementary role. Of course, incentives for adverse selection might persist between statutory sickness funds themselves, due to imperfect information when insurers know more about their health status than the insurance provider. However, an uneven distribution of consumer risks across sickness funds is mitigated (to some degree) by Germany's current risk equalization scheme.

However, the *Citizens' Health Insurance* proposal, in its current form, would not neces-

sarily lessen the problem of risk selection in Germany's health insurance market. Incentives for risk selection would remain as they currently stand, due to the imperfect risk adjustment mechanism in place, which is characterized by: (i) the lack of health-based risk adjustment factors, which would not be implemented until 2007, and (ii) the absence of risk sharing.

In terms of lessons learned abroad in preempting selection, there is little that can be drawn from the Spanish and French models. As the Spanish health care system is nationally funded, the federal government serves as the insurer or purchaser of care for the entire population. Spain lacks a system of competing insurance providers in which perverse incentives for adverse- and risk-selection could exist.

The French system is unique in that it retains a hybrid of strong state intervention and sickness funds within the three primary health insurance schemes: general, agricultural, and nonagricultural self-employed, as explained in Sandier et al. (2004). Each of the three predominant schemes has, in turn, a national health insurance fund with local structures that vary depending upon the scheme's geographical distribution. In sum, the health insurance schemes function as managers of the public health insurance system, carrying out the mandate (e.g., managing budgets/expenditures) established at the federal level.

In contrast to the German system of competing sickness funds, French health insurance funds do not "compete" as insurers or purchasers of health care. In fact, the consolidated nature of the sickness funds' organization accords authority primarily to the national fund in state-fund negotiations. Moreover, the funds do not hold a high degree of management responsibility as the government has traditionally assumed financial and operational oversight (i.e., the determination of premiums/contribution levels) over statutory health insurance at large (Sandier et al. 2004, 8). In sum, the incentives for adverse selection or risk selection between public sickness funds are not generally an issue in the French system. Nor is selection between public and private insurers problematic, as private insurance plays a complementary role, providing goods/services not covered or poorly covered by the public system.

²⁷ Health Care Systems in Transition: France Summary 2004; available at http://www.observatory.dk; Internet, 8 (accessed 15 July 2005).

Given this decision-making paradigm, the French model can offer little guidance for Germany in reducing incentives for selection. However, as illustrated below in the discussion of the *Flat Rate Insurance*, the Swiss and Dutch models offer some interesting guidance.

4.2 The *Kopfpauschale* or Flat Rate Health Premiums

After initial disagreement regarding the content of their joint health care reform proposal, the CDU-CSU reached a compromise in November 2004 in favor of income-adjusted flat rate insurance premiums. The following analysis outlines the compromise reform package in terms of its ability to address the aforementioned policy objectives and the inadequacies of Germany's existing health care financing scheme.

Overview. The Flat Rate Insurance involves implementation of flat rate, community-rated, per capita premiums or contributions, uniform for individuals below a given income threshold. High-income earners would remain eligible to opt into PHI. Thus, in a sense, the Flat Rate Insurance retains a parallel, two-tiered insurance system, with private insurance playing the substitutive role it does today (see Kifmann (2003, 6) and Mosebach (2005, 5)).

The monthly individual contribution of €169 would include a maximum individual incomeadjusted rate paid by the employee (7 percent of gross income, with a ceiling of €109) and an income-related contribution paid by the employer (6.5 percent of the employee's gross income, uncapped), reports Mosebach (2005, 6). If the sum of the employers' and employees' payments exceeds the €169 target, the excess would be pooled into a government-run "Employers' Solidarity Fund." If payments fall below the target, however, revenue from the fund would make up the difference. Consequently, low-income earners would pay correspondingly lower health contributions.

Outstanding Issues. The details of the reform package remain ambiguous and several outstanding issues remain:

Income sources. How will the contributory income sources be defined, that is, would the income-adjusted contributions (7 percent of gross income for employees) be assessed upon all income sources (e.g., capital, rent, wages)?

Premium subsidies. The establishment of an "Employers' Solidarity Fund" would require building up capital over time. Prior to the establishment of the fund, would of premium subsidies for low-income earners be financed via the tax system, as conceptualized by the CDU's initial reform proposal?²⁸

4.2.1 What Could the *Flat Rate Insurance* Achieve?

Would the Flat Rate Insurance Prevent Contribution Rates from Rising?

The CDU-CSU compromise of a €169 flat rate contribution would provide a certain consistency in health care contributions, as payments would remain the same across individuals from year to year. As mentioned earlier, if payments exceeded the €169 target, the excess would be pooled into a solidarity fund, whereas payments below the target would draw upon solidarity fund revenues to make up the difference. What remains uncertain, however, is what would happen between now and the time the solidarity fund becomes operational, that is, the time it has built up sufficient reserves to finance premium subsidies for low-income earners. Moreover, it is important to consider whether the flat rate would increase if the solidarity fund consistently lacked sufficient revenues to finance consumer payments below the €169 target. Could flat rate premiums also experience an upward spiral, similar to the current rise in social insurance contributions, particularly if consumer payments consistently fall below the target payment, as would occur under continued unemployment and economic stagnation?

²⁸ The CDU initially recommended a capital-funded flat rate insurance scheme to replace the current SHI system in 2013, once a build-up of capital funds had be completed (Mosebach 2005, 5).

Would the Flat Rate Insurance Reduce Labor Market Dependency?

The income-adjusted contributions based on the CDU-CSU compromise would seem to reduce future labor market pressure, particularly if all sources of income (as opposed to just salaries and wages) were included in premium calculations. However, given that both employee and employer contributions are income-dependent (and thus dependent on salaries and wages earned), ties to the labor market would remain, albeit not to the extent apparent in the current system.

What Would the Wider Economic Impact Be?

By de-linking health care financing from the labor market, nonwage labor costs (i.e., contributions) would be less subject to health expenditure increases. This would serve as a necessary measure to preserve the vitality of German industry, which is currently strained by the rise in nonwage labor costs (i.e., wage-based social insurance contributions) that effectively serve as a tax on labor. However, the *Flat Rate Insurance* proposal would not necessarily curtail future growth in nonwage labor costs because employer contributions to the public system would remain uncapped at a rate of 6.5 percent of the employee's gross income. Thus, nonwage labor expenses would remain linked to health spending.

How Would Flat Rate Insurance Accommodate Demographic Change?

As discussed previously, without age-related contributions in place whereby younger generations "save" to finance future health expenditures (as would occur under a system of private health accounts), there would be little relief for the existing strain on health resources due to Germany's aging populace. Indeed, neither reform proposal contains provisions for capital accumulation to finance future health expenditures and, in its current form, the *Flat Rate Insurance's* solidarity fund would simply finance the needs of low-income groups, rather than those of posterity.

How Would the Flat Rate Insurance Meet Other Policy Objectives?

In evaluating the *Flat Rate Insurance*'s incidence and its ability to sufficiently address the aforementioned reform objectives, it is beneficial to examine the reform package in tandem with similar health care financing models in the European context. In particular, the Swiss model of flat rate, community-rated premiums and the Dutch three-tiered model of national health insurance, compulsory sickness funds, and private supplementary insurance provide interesting lessons for Germany in its drive toward health care financing reform.

Solidarity. Switzerland, often deemed as a "blueprint" for redesigning the German system, maintains solidarity because the health system ensures equal access to care, regardless of income or social status, as enshrined in legislation under the Federal Sickness Insurance Act (KVG). The compulsory (statutory) health insurance system is applicable to all Swiss permanent residents, with few exceptions (Minder et al. 2000, 27). Solidarity is further retained because insurance companies cannot compete based on the comprehensive benefits package as pre-defined by the act; all companies must offer the same package.

An examination of health reforms in the Dutch context can also prove illustrative for German policy-makers. Although the Netherlands lacks a *national* health insurance plan, it is able to provide near-universal coverage through the culmination of its three insurance compartments and government intervention. Direct state intervention ensures that health care remains affordable, even for high-risk groups (Tapay and Colombo 2004, 5). For example, individuals without taxable income do not contribute to the compulsory (statutory) health insurance scheme of the second compartment.²⁹ In sum, less than 1 percent of the population remains uninsured,

²⁹ The following summary information is based on a report written by André den Exter, Herbert Hermans, Milena Dosljak, and Reinhard Busse, *Health Care Systems in Transition: Netherlands 2005*, (Copenhagen: WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies; available at http://www.observatory.dk; Internet, 4 (accessed 15 July 2005).

primarily illegal residents and groups refusing insurance due to religious reasons (Tapay and Colombo 2004, 11). Solidarity is further retained in the Dutch system via the comprehensive benefits package of compulsory (statutory) insurance, as detailed in a bylaw to the Sickness Fund Act.³⁰ Importantly, co-payments are virtually absent from the basic insurance package, strengthening solidarity.

Similarly, regardless of the reform package Germany pursues (*Citizens' Health Insurance* or *Flat Rate Insurance*), maintaining a strictly defined benefits package standard for all SHI enrollees (as defined by the Social Code) is necessary to preserve solidarity. In contrast to the Dutch model, however, Germany's comprehensive benefits package is accompanied by a controversial system of co-payments.³¹ In recent

Chronically ill is defined as an individual that has been treated for at least one year and is associated with at least one of the following characteristics: (i) A need for long-term care grade II or III, (ii) a 60 percent severe disability or a 60 percent incapacity to work OR, (iii) a certificate from the treating physician that the omission of continuous health care (at least one physician contact per quarter for the same disease) would cause a life-threatening aggravation, a reduction of life expectancy, or a long-term reduction in the quality of life (Busse and Riesberg 2004, 74–75).

Currently, Germany ranks as one of the highest countries in the WHO European Region in terms of utilization, averaging 6.5 physician visits per capita and an average length of hospital stay of 9.3 days in 2001, in contrast to France years, co-payments have been designed, in part, to reduce Germany's comparatively high utilization rates that have driven medical expenditures upward. In an international context, Germany ranks among the highest in the WHO European Region in terms of utilization. As an example, in 2002 Germany averaged 20.5 admissions per 100 persons and an average length-of-stay of 9.3 days, compared to the EU average of 18.1 admissions and 7.1 days.³² In sum, Germany's existing co-payment requirements are unavoidable and in fact necessary (although insufficient) to reduce the seemingly excess utilization of health care resources in Germany's already resource-scarce system.

Equity. Switzerland retains a high degree of equity in health care financing despite the flat rate premiums that, at first glance, appear regressive. This occurs because health insurance premiums for low-income earners are subsidized by the Swiss Confederation and the cantons through Switzerland's progressive taxation system (Minder et al. 2000, Felder 2002, 3). Means-tested subsidies ensure that premium subsidies vary according to the wealth or income of the insured. In sum, the flat rate financing scheme, combined with means-tested subsidies, ensures that lower-income groups do not pay proportionally more than higher-income groups in financing the public health system.

Despite the promotion of universal access to medical care, the financing of Dutch social health insurance (second compartment) via both income-related and flat rate contributions is, in part, regressive because the flat rate contributions do not vary by income. Moreover, as Tapay and Colombo (2004) report, these payments have nearly tripled in recent years from €188 (2000) to €750 annually (2003). As noted by a recent

³⁰ There is current discussion taking place regarding changes to the detailed way in which the Dutch benefits package is described. Currently, benefit descriptions are in terms of providers, impeding sickness funds from denying payment for treatment if a more efficient alternative exists so that care can be delivered by an alternative provider (Lamers, et. al. 2003, 51 and 53).

³¹ In response to the growth in co-payment exemptions and the rise in health care expenditures, user charges have increased and exemption rules tightened under the Statutory Health Insurance Modernization Act of 2004. Recent legislation incorporates the following changes. (i) Introduction of new co-payments: €10 per quarter for the first contact at a physician or dentist's office and €10 for each contact with other physicians without a referral during the same quarter. (ii) Standardization of co-payments across sectors at 10 percent, with a minimum of €5 and maximum of €10 per good or service. (iii) Revised exemption rules: continued co-payment exemptions for children less than 18 years of age, prenatal care, and preventive services. However, exemptions for the poor have been abolished. (iv) Co-payment ceilings: 2 percent annual gross household income, 1 percent for chronically ill. Annual financial burden of co-payments capped at 1 percent. Deductions for spouses and children still apply (Busse and Riesberg 2004, 74–75).

^{(5.5} days), Austria (6.0 days), and the United Kingdom (5.0 days) (Busse and Riesberg 2004, 112–113).

³² Data reflects 2002 or latest available year.

[•] France: 20.4 admissions per 100 population, 5.5 days average length-of-stay

Netherlands: 8.8 admissions per 100 population, 7.4 days average length-of-stay

[•] Spain: 11.5 admissions per 100 population, 7.5 days average length-of-stay

Switzerland: 15.1 admissions per 100 population, 6.4 days average length-of-stay

OECD Health Report, this portion of social insurance financing is made further regressive as income levels rise, and is further exacerbated by the fact that social insurance premiums do not vary with the enrollee's family size or number of dependents (Tapay and Colombo 2004, 30).

Similar to the Swiss model, the *Flat Rate Insurance's* premium subsidies for low-income earners would mitigate the regressive effects of the income-based flat rate financing scheme, made regressive in part due to the ceiling for the maximum employee contribution (7 percent of the employee's gross income with a cap of €109). As proposed, premium subsidies would be financed via excess employer-employee contributions pooled into an "Employers' Solidarity Fund" and, for children, via Germany's already-progressive tax system. The culmination of these factors would help preserve equity in health care financing, especially when compared to the current regressive system.

Market Orientation and Efficiency. (i) Allocative Efficiency: The financing of the Swiss health system provides that health care does not compete with other national agenda items for funding, thereby instilling a certain predictability in health funding from year to year. Although state intervention in health care at the federal level has been minimized and the responsibility for health care administration (i.e., financing, organizing, delivering) devolved to the cantons, municipalities, private insurance companies, and private providers, federal law does not differ substantially between cantons (Beck et al. 2003, 63). This provides a certain consistency in both the administration of health policy and delivery of care, in a sense, ensuring that health care is maximized given the limited resources available.

It is noteworthy that the financing of health care through premiums does not distort individual decisions in the labor market, since premiums reflect services consumers' expect from the insurer (Felder 2002, 4). This optimizes consumers' decisions with regard to the utilization of health resources and prompts more efficient, cost-effective use of services at an individual or micro-level.

Under the *Flat Rate Insurance*, the potential for allocative efficiency should resemble that ap-

parent in Switzerland, particularly as the system of flat rate premiums earmarked for health care would entail that the health sector does not compete with other sectors for annual budgeting. Moreover, Germany would also benefit from the more cost-efficient use of health care resources by consumers under a system of premium-based financing, especially given its comparatively high utilization rates noted above.

In the Dutch context, the market-oriented thrust of recent reforms will allow for resources to be allocated increasingly by the market in subsequent years, with the potential to optimize output and efficiency but also creating opportunities for market failures. However, as discussed below, the potential for "selection" in the Dutch system's competitive insurance setting is limited due to the robust risk adjustment and risk sharing models in place.

(ii) Technical Efficiency: Although, as noted earlier, there is no clear evidence that funding methods determine technical efficiency, administrative or transaction costs may be associated with revenue collection (Mossialos and Dixon 2002, 13).

In the Swiss model, premiums are subject to auditing that may entail higher administrative expenses. It is noteworthy that premiums are calculated by canton or region and may differ across regions. In terms of premium subsidies, cantons have some authority to define the criteria for premium subsidies and, to some extent, determine the amount of the actual subsidy, e.g., as a percentage of the insured's income (Minder et al. 2000, 29). This greater regional autonomy in decision-making may reduce the technical efficiency of the system. Such a lack of uniformity in premium and premium subsidy determinations (and it is noteworthy that premiums differ substantially between cantons) may also drive administrative expenses and transaction costs (Felder 2002, 4).

Given the current complexities of the multitiered Dutch system and the transactions involved in each, recent reforms aim at uniting the disparate systems and realizing administrative efficiencies in the creation of a national health system. As noted above, under the Health Insurance Act (Zorgverzekeringswet), residents in the Netherlands are obligated to have health insurance.³³ The legislation also creates a new health insurance system to supplant the existing national health insurance, private health insurance, and civil service health insurance schemes.

Regarding lessons learned for Germany in terms of technical efficiency, the Flat Rate Insurance would preserve the existing two-tiered system. It is plausible that the continued presence of a private system parallel to the public system would force sickness funds to operate efficiently as they "compete" for high-income earners, thereby minimizing transaction costs and overhead. Under the Flat Rate Insurance's proposal for tax-based financing of children's premiums, administrative expenses would be lower, as the taxation system is already in place to regulate this subsidization. By the same token, the pooling of subsidies for low-income earners via a central fund would also generate efficiencies in the administration of health care financing, as funds would be channeled and managed via a central entity.

(iii) Market Failures—Adverse Selection and Risk Selection: In the Swiss model, private health insurance is complementary *only*, covering additional services not included in the public package. This reduces possibilities for adverse selection between the public and private insurance spheres whereby only low or "good" risks enter the private arena and high or "bad" risks enter the public sphere, thereby increasing public expenditures.

In contrast, the dual system of public and private insurance (the latter available solely for high-income earners) under the *Flat Rate Insurance* would retain the current incentives for adverse selection whereby high-income, high-risk populations would opt-into the public scheme. Conversely, high-income low-risk individuals would elect private insurance because their risk-rated premiums under the private scheme would be lower relative to flat rate SHI premiums. As "costlier" high risks enter the public system, public health expenditures would

increase, thus straining Germany's already-scarce health resources and perhaps placing pressure on health authorities to increase flat rate payments to compensate for expenditure growth.

In contrast to the German model, adverse selection between the public and private insurance spheres does not threaten the Dutch system. In the second insurance compartment, as an example, private insurance is voluntary, covering "normal" medical expenses for approximately the top-third of income earners ineligible for social insurance (Tapay and Colombo 2004, 18). The remaining 63 percent of the population is obligated to purchase a compulsory insurance package run by the public system.³⁴ Within the third compartment, private insurance plays only a supplementary role for "luxury" goods not offered by the first and second compartments (Tapay and Colombo 2004, 18). The first compartment provides national insurance against "exceptional" or catastrophic medical expenses for the entire population as protection against long-term and high-cost treatment (Lamers et al. 2003, 51). Thus, private and public insurers do not compete for consumers in either compartment of Dutch health care, removing incentives for adverse selection.

As noted above, a recent study by Van de Ven et. al. (2003) claims that, due to imperfect risk adjustment structures in Germany and Switzerland, insurance providers have financial incentives for risk selection, which may culminate in high-risk groups (e.g., elderly, sick, poor) lacking insurance. In the Swiss model, risk-adjustment for the compulsory insurance scheme compensates for the varying age-sex distributions of enrollees across insurance providers; however, as this risk adjustment scheme is imperfect, relying predominantly on demographic rather than health status variables, risk selection strategies remain profitable (Beck et al. 2003, 63). Although Germany's risk adjustment scheme currently relies on demographic variables, new adjustments to RSC will incorporate health status factors (effective 2007), creating a more

³³ Finalization of Health Insurance Act; available at http://www.minvws.nl/en/nieuwsberichten/staf/2005/finaliz ation-of-health-insurance-act.asp; Internet, 1 (accessed 17 November 2005).

³⁴ Health Care Systems in Transition: Netherlands Summary 2005; available at http://www.observatory.dk; Internet, 4-5 (accessed 15 July 2005).

refined risk adjustment tool relative to that found in Switzerland.

Importantly, both Germany and Switzerland lack risk sharing, which is pervasive in the health systems of Belgium, the Netherlands, and Israel (Van de Ven et al. 2003). In its absence, insurance providers bear 100 percent of their financial responsibility, creating strong incentives for the targeted selection of "good" risks.

Opportunities for risk selection in the Dutch system are mitigated largely by two factors, namely health-status-oriented risk adjustment and risk sharing, thus providing guidance for Germany as it contemplates reform. To preempt risk selection in the Netherlands, sickness funds receive a prospective risk-adjusted premium subsidy per enrollee from the Central Fund (CVZ), as reported in Van de Ven et al. (2004, 46). Subsidies equal the national predicted per capita expenses in the enrollee's risk group, minus a fixed amount, and do not vary with the fund chosen. In sum, the CVZ adjusts for part of the difference between the budget and expenditures of funds.³⁵ Risk sharing via a central fund is deemed necessary so that sickness funds do not bear 100 percent of their financial risk that would, in turn, prompt them to target "good" risks.

In addition to the risk-sharing mechanism through the CVZ, individuals today pay premium contributions directly to funds and these contributions remain the same across all enrollees of the same fund. This further mitigates the possibility of risk selection; meanwhile each fund can set its own premiums, thereby allowing for competition between funds and greater efficiency (Van de Ven et al. 2004).

In its efforts to promote competition while maintaining solidarity, the Dutch government has decided to pursue managed competition alongside implementation of health-based risk adjustment factors (Van de Ven et al. 2004, 45) In 2004, both diagnosis cost groups (DCGs) and pharmacy-based cost groups (PCGs) were used to determine the premium subsidies for com-

In sum, irrespective of the reform package chosen, the *Citizens' Health Insurance* or the *Flat Rate Insurance*, effective risk adjustment and risk sharing are necessary in a system of competing insurance providers to prevent the targeted selection of "good" risks, which, in turn, could threaten the accessibility and affordability of health care. Although a more refined risk adjustment mechanism is scheduled for implementation in 2007, it is noteworthy that neither reform proposal addresses possibilities for the incorporation of risk-sharing tools to mitigate current incentives for selection.

5 Discussion

The lack of consensus regarding the direction of health care financing in Germany has led to the advent of alternative reform models, albeit with a dearth of economic analysis and international comparisons. Importantly, many of the analyses regarding the *Flat Rate Insurance* are outdated, as they were written prior to the November 2004 CDU-CSU compromise.

In summarizing the competing notions of reform present in the existing literature, we highlight just a few researchers. Kifmann (2003) advocates long-term health care financing via collective capital formation within statutory health insurance (SHI) and, as well, individual private insurance in addition to SHI. In contrast, Wrede (2002) supports mandatory insurance for all, a reduced benefit package in the public scheme, and incentives for private insurance to reduce costs. Similarly, Wambach and Wigger (2003) consider expanding the SHI scheme while limiting mandatory coverage to lower income earners (as occurs today), but they fail to

peting sickness funds. According to Van de Ven et. al., these adjusters appear to be effective in preventing risk selection and, hence "cream skimming" by insurers.³⁶

³⁵ Health Care Systems in Transition: Netherlands Summary 2005; available at http://www.observatory.dk; Internet, 9 (accessed 15 July 2005).

³⁶ See also *Health Care Systems in Transition: Netherlands Summary 2005*; available at http://www.observatory.dk; Internet, 10 (accessed 15 July 2005).

provide a detailed operational proposal outlining how to do so.

Despite the heterogeneity in these views, there seems to be a uniform notion that the current reform proposals are, in fact, a necessary but *insufficient* means to finance health care in the long-term. It is noteworthy that, to date, the details of each plan remain unclear. As Germany's coalition-based government entails compromise, it is no surprise that each political party leaves many details open so that a coalition has a greater opportunity of finding a compromise, filling those gaps as part of the bargaining.

Finally, we have also argued that demographic and technological change makes it necessary to consider the dynamic efficiency of the reform proposals. Raising sufficient revenue to finance the expansion of the health care sector that dynamic efficiency requires will be a major task for the future. This raises two issues that a private competitive health insurance market cannot solve easily: (i) the portability of individual aging provisions and (ii) the financing of future advancements in medical technology that may only be obtained via borrowing against the future benefits of improved health care technologies, which involves future generations and can therefore only be achieved through government intervention, if at all. For both reasons, private competitive health insurers, which cannot extract the full current consumer surplus, are likely to raise too little revenue, so that unregulated premium increases amid population aging will eventually be inefficiently high and technological change may be too slow.

To be sure, the Herzog commission did attempt to take these broad changes into account, albeit in a rather clumsy way. The idea of the Herzog commission's proposal was to combine a flat rate health premium with capital accumulation to finance future increases in per capita health spending related to either aging or expensive medical technology. For this reason, flat rate premiums were to be introduced only after a transitional period in which sufficient capital was accumulated so that the excess spending of the elderly, relative to the general flat rate premium, could be paid from the returns of this capital stock. Like all such proposals, the Herzog

commission's recommendation failed to specify how to determine the optimal level of capital accumulation and, moreover, how to resolve issues of intergenerational equity, particularly during the transition period.

Historically, one can argue that the German system of statutory health insurance has moved from actuarial fairness, when the main obligation of sickness funds was to replace lost wage income during times of sick leave, towards something like a Ramsey tax scheme for the financing of a public good, that is, from a static point of view, the guaranteed universal access to modern health care and, from a dynamic point of view, the growth of medical technology, which is likely to be the greatest source of welfare gains in the 21st century.

Aggregate expenditure risks associated with the introduction of new medical technology are an important feature of health insurance markets in the 21st century. They tend to undermine the whole notion of actuarial fairness, as this notion only makes sense when risks are uncorrelated across the insured. The design of sustainable health care financing reform will have to take the changing role of medical technology into account. More research will be needed to better understand how technological innovation changes the opportunities and constraints in which health insurance markets operate.

6 Concluding Remarks

It was outside the purview of this discussion paper to propose entirely new financing solutions. Rather, the scope of our research was relegated to an analysis of the advantages and disadvantages of each coalition's reform proposal, in the context of the policy objectives highlighted above and drawing upon lessons learned from abroad. In sum, we view the "borrowing" and integration of foreign concepts as illustrative in Germany's quest for innovative approaches that coalesce the need for quality, universal care, and financial prudence.

Given the inadequacy of Germany's long legacy of reforms to sustain the financial viability

of the health sector, both the SPD-Green and CDU-CSU coalitions have put forth ambitious reform packages designed to infuse the health system with much-needed revenues. The SPD-Green proposal, the *Citizens' Health Insurance*, reflects an extension of the current system predicated upon social insurance contributions; it continues to follow German health care's traditional pattern of incremental reforms versus outright structural change.

It is commonplace in the literature to distinguish between the Bismarck model and the Beveridge model of publicly provided health insurance. Germany's statutory system of sickness funds has not departed dramatically from Bismarck's original design in the 19th century. By broadening the tax base to include all sources of income and all citizens as contributors, the introduction of the Citizens' Health Insurance would represent a move toward the Beveridge model, the tax-financed national health system found in Britain, Scandinavia, Italy, and Spain. The introduction of the Flat Rate Insurance would represent a move in the other direction, toward a system based on market competition, in which regulation serves to enforce large-scale community rating at the national level and effectively eliminates all discrimination on the

basis of demographic factors such as age, sex, or pre-existing health risks.

The Flat Rate Insurance reform package hence offers the more ambitious financing reform strategy, based on flat rate contributions similar to those found in the Swiss and Dutch contexts. We recognize that, given the scant details available, it is difficult to predict the incidence of the reform packages directly. Therefore, we have based our discussion on the experiences of other countries with similar financing schemes. Drawing upon such cross-national learning, it appears that the Flat Rate Insurance would produce the more favorable impact on the labor market, while preserving Germany's long-standing tradition of solidarity. The Citizens' Health Insurance proposal would not eliminate and perhaps not even reduce the marginal burden on producer wages very much, but would likely succeed in tapping a relatively large share of consumers' aggregate willingness to pay, an important aspect of a dynamically efficient health care financing system under conditions of endogenous growth in medical technology.

Ultimately, what remains uncertain is whether Germany is prepared to embrace long-overdue structural reforms, or whether politics will dictate the extension of incrementalism in health reform.

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