



# ***Reforming Health Care – The German Experience***

## **IMF Conference**

### **Public Health Care Reforms:**

### **Challenges and Lessons for Advanced and Emerging Europe**

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Michael Stolpe

Kiel Institute for the World Economy

Christian-Albrechts-Universität Kiel, Germany

[michael.stolpe@ifw-kiel.de](mailto:michael.stolpe@ifw-kiel.de)

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## 1.1 Setup

- Statutory **sickness funds**, financed through payroll taxes at 15.5% of gross wages, cover more than 90% of the population; workers with annual incomes above € 49,500 can opt into private health insurance, but most of them stay as voluntary members in the statutory system, also known as *social health insurance* (SHI).
- **Private health insurers (PHIs)** charge premiums based on individual risk, assessed before signing up, and regulation ensures
  - *all* contracts are for life, terminable only by the insured,
  - may *not* exclude pre-existing conditions,
  - *nor* increase premiums for any other reason than general expenditure increases in the entire pool of insureds.

For all their insureds under financial distress above 55 years of age, PHIs must offer the option of switching to a “cheap” basic care package (*Standardtarif*) that mimics the conditions of SHI.

## 1.2 Legacy

- Successful **expenditure** (“cost”) **containment** in SHI since the 1980s
- Substantial **increases in contribution rates** (payroll taxes) due to rising unemployment since the 1970s, with an extra boost upon German unification due to relatively low labour productivity and high unemployment in the East
- **Low intensity of competition among care providers**, accentuated by a sharp separation of ambulatory and stationary care, *combined with* often **low productivity** in service provision

For example, de Vries et al. (RAND 2008) report:

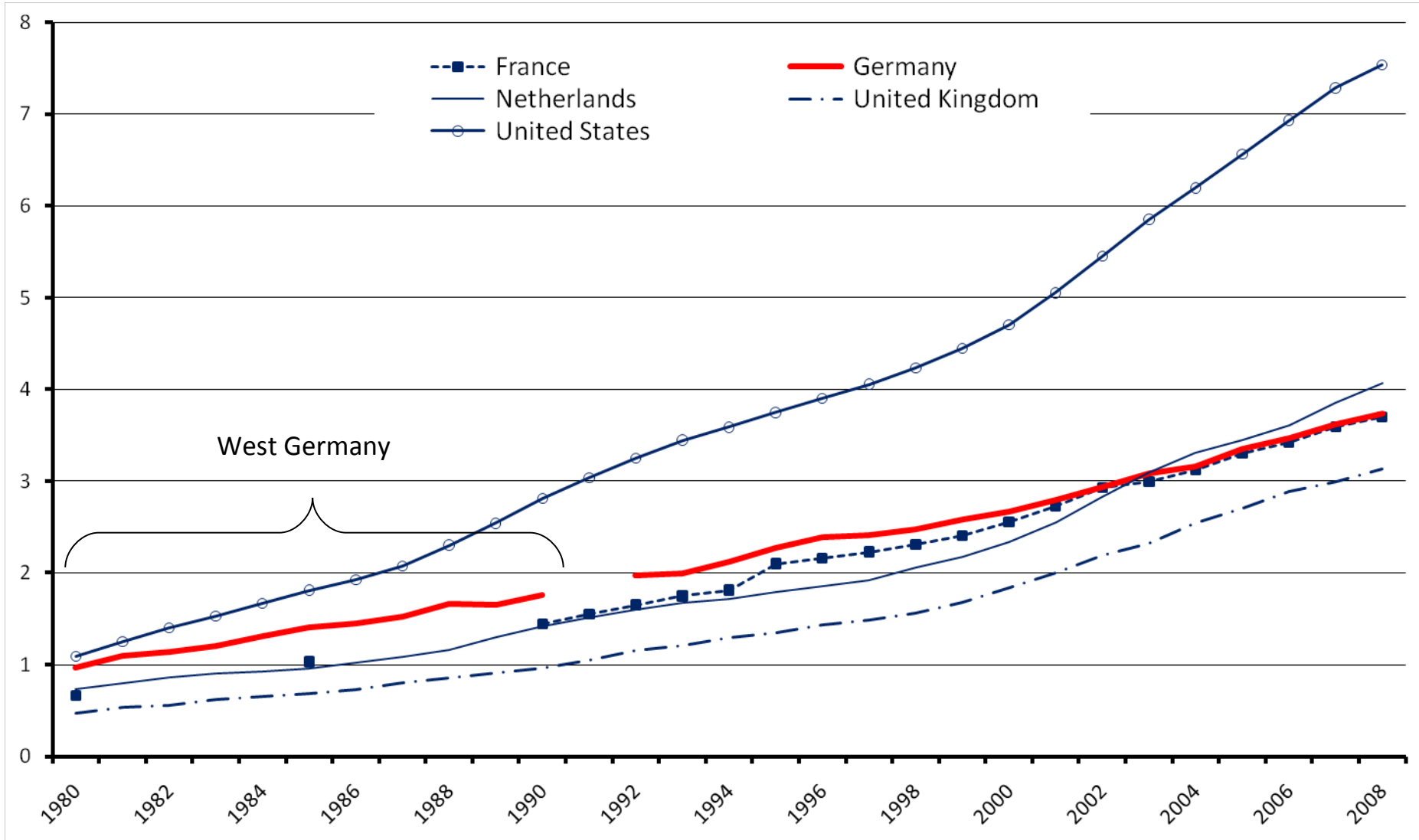
In 2002, the average inpatient length-of-stay for acute myocardial infarction (AMI) was 5.6 days in the US and 10.3 days in Germany.

And from 2001 to 2004, one-year mean expenditure for inpatient care per patient after AMI was US-\$ 39,257 in the US and *ppp* US-\$ 10,608 in Germany.

But holding prices and population characteristics *constant*, the mean cost of treating *US* patients in Germany would have been US-\$ 45,599 and the mean cost of treating *German* patients in the US merely US-\$ 10,196 at *ppp*.

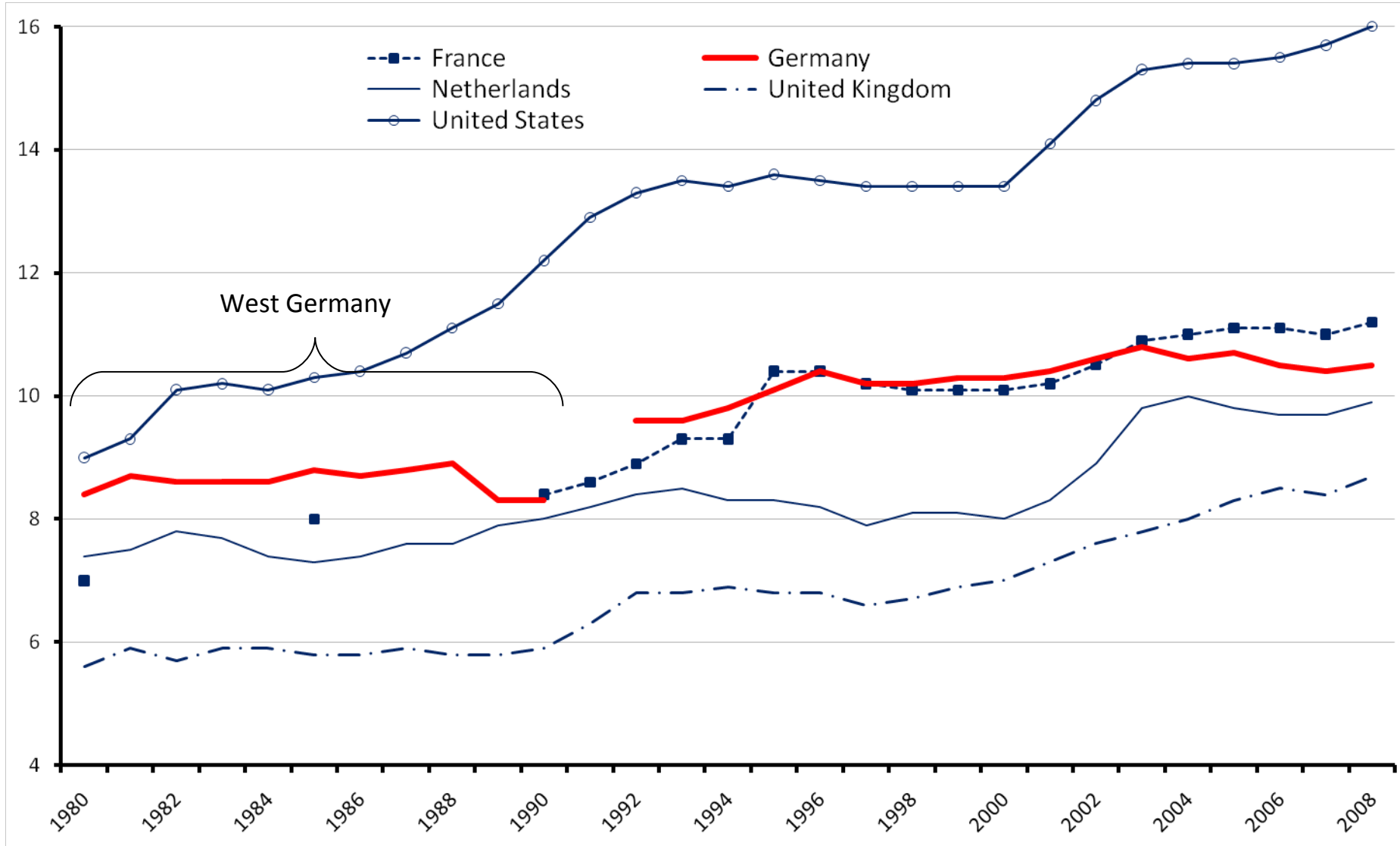
# Spending growth smooth and modest

Total health care spending per capita, thousands US-\$ at ppp



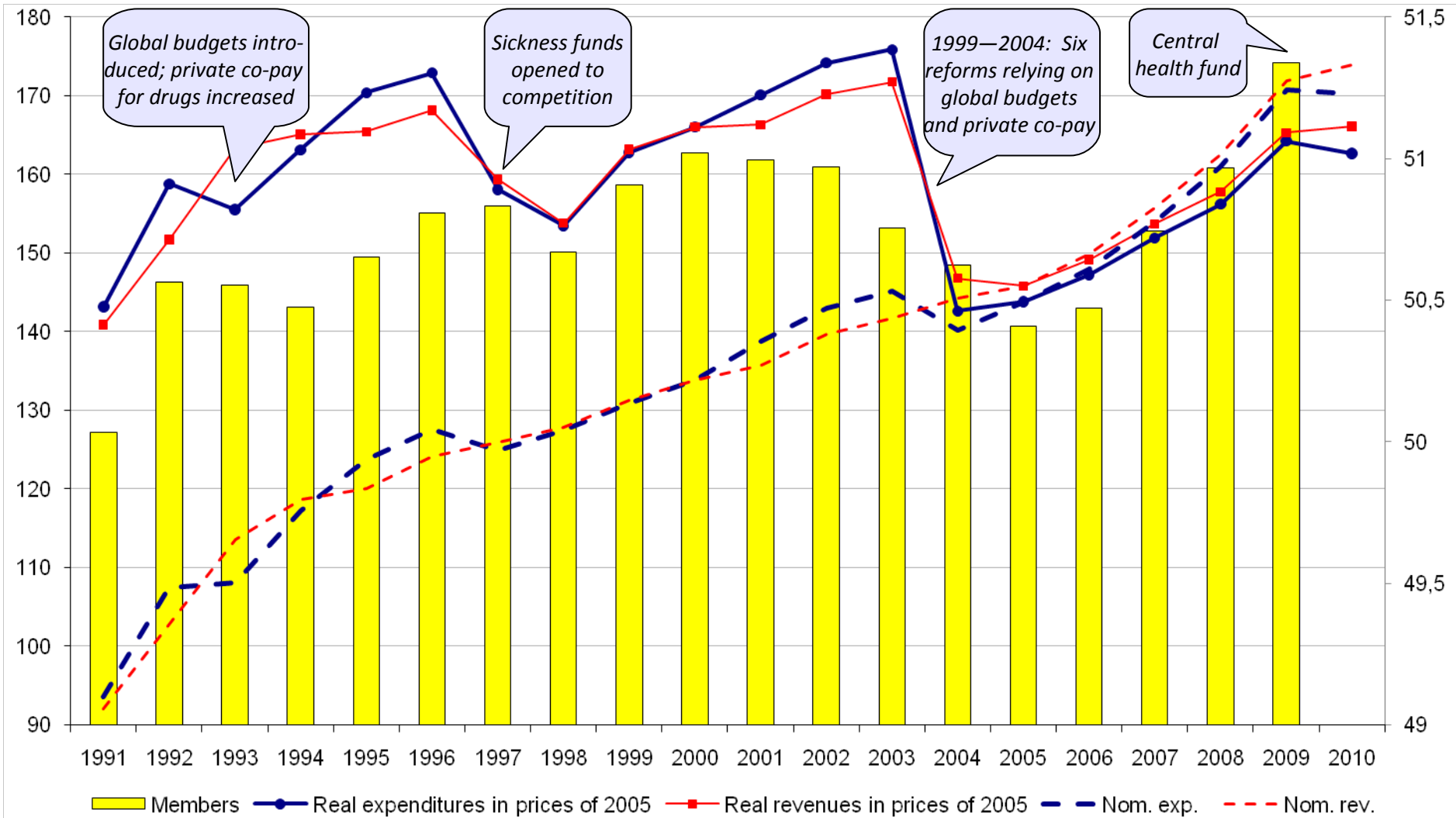
# Share of health care in GDP quite stable

Total health care spending in % of GDP

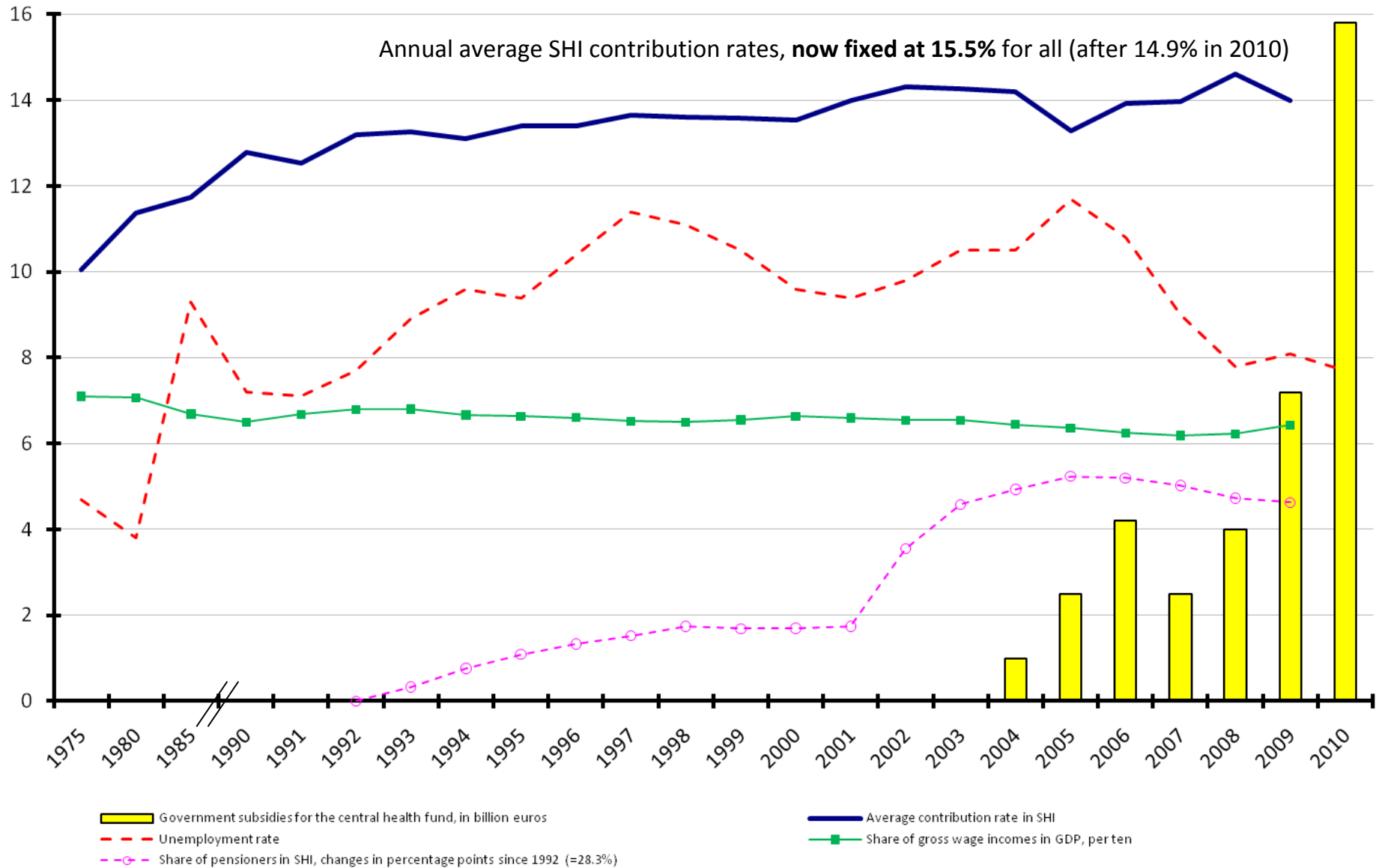


# Past reforms with merely temporary effects

Total expenditures (blue) and revenue (red) of Germany's SHI system, in billion 2005 euros, and contributing SHI membership in millions (right scale)

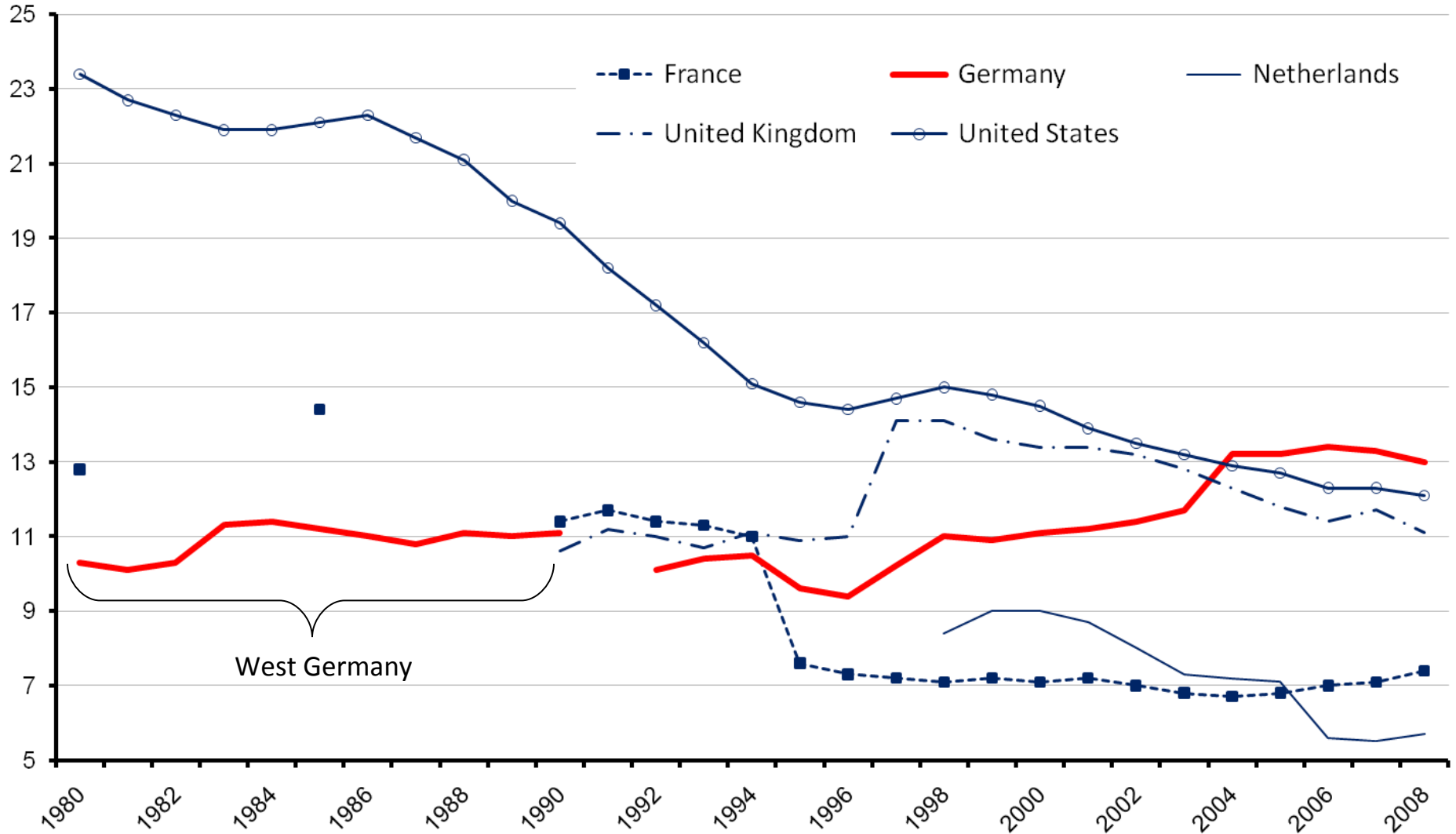


# Growth in contribution rates has slowed



# Out-of-pocket payments up

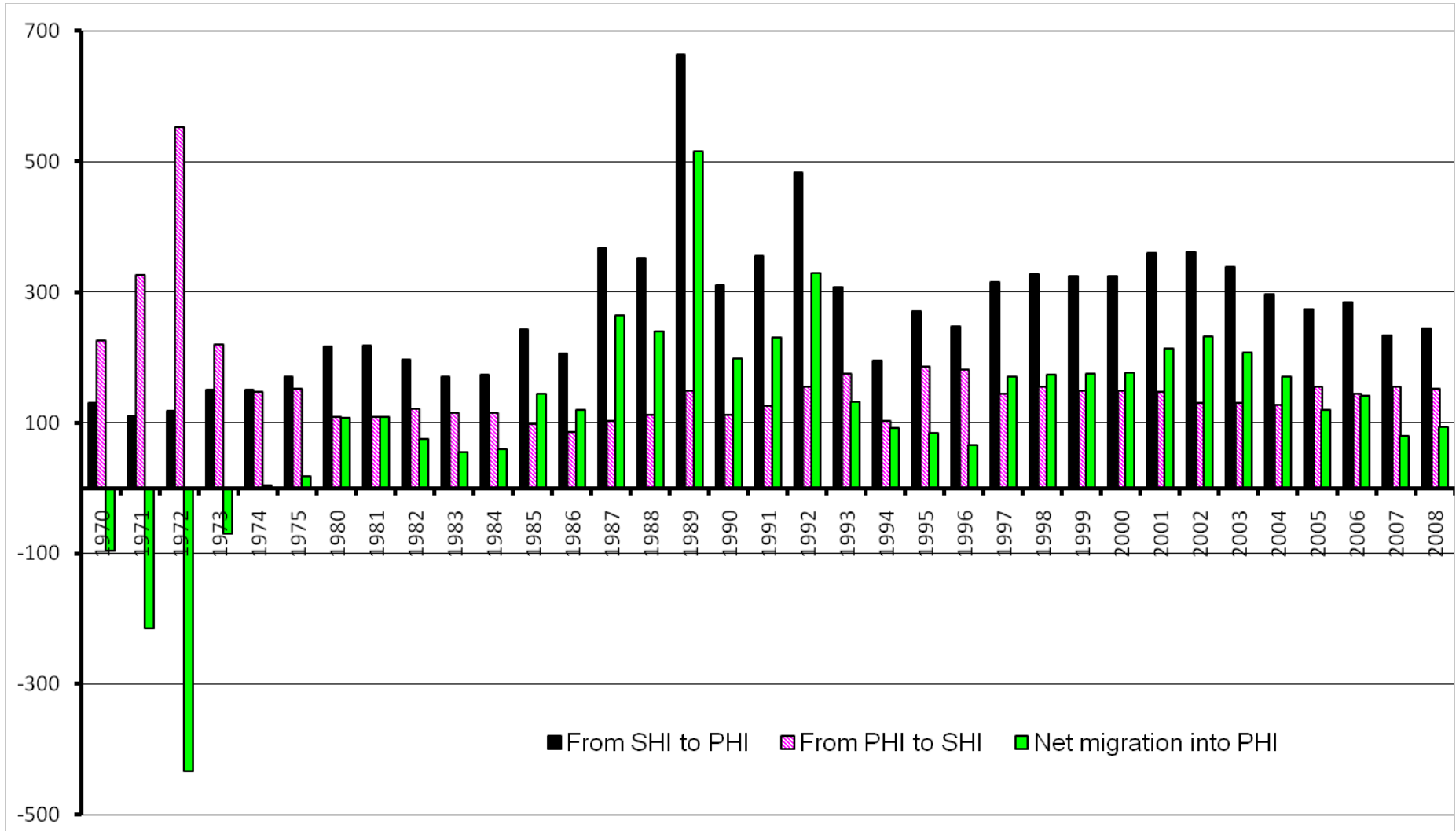
Out-of-pocket payments in % of total health spending





# Competition between statutory (SHI) and private (PHI) health insurance limited

Migrations between Germany's SHI and PHI in thousands



## 2 Recent reforms

### **FINANCE – PROVIDER COMPETITION – DRUG PRICES**

- 2.1** Partial portability of ageing provisions in PHI
- 2.2** Central health fund for SHI
- 2.3** Morbidity-based risk adjustment in SHI (Morbi-RSA)
- 2.4** Prospective payment for hospital care
- 2.5** Diagnosis-related payment of physicians in ambulatory care
- 2.6** Quality control
- 2.7** Pharmaceutical markets (reference pricing and monopsony power of SHI)
- 2.8** Comparative cost-effectiveness research

## 2.1 Partial portability of ageing provisions

### BACKGROUND

Until 2008, competition between *private* health insurers was quite limited because the insureds' could *not* transfer the ageing provisions, accumulated on their behalf, from the old to a new insurer. This contributed to a *socially undesirable* demand for migrations back into SHI.

### REFORM 2009

- **New privately insureds may later transfer to any other *private* insurer the *AGEING PROVISIONS OF THE “cheap” STANDARD CONTRACT.***
- **No privately insured worker is any longer eligible to switch back to SHI.**  
*2007 Gesetz zur Stärkung des Wettbewerbs in der gesetzlichen Krankenversicherung (GKV-WSG).*

*Full* portability in cases other than the standard contract has *not* been achieved.

### FISCAL IMPACT

A clearer separation of PHI from SHI may help make reforms *within* SHI more effective.

## 2.2 Central health fund – € 167 billion in 2009

### BACKGROUND

Historically, the central health fund represents a **compromise** between the social democrats' concept of *Bürgerversicherung* (collecting contributions from all citizens in proportion of their total personal income) and the conservatives' proposal of *Kopfpauschale* (flat-rate premiums).

### REFORM 2009

- **The central fund collects the insureds' contributions** (fixed at 15.5% of gross wages), as well as federal government infusions, **and distributes the money among ca. 150 autonomous sickness funds.**
- **Sickness funds receive a FIXED PAYMENT** for each insured, ca. 50% of which is determined by the prospective *risk equalization scheme* Morbi-RSA.

### CONSUMER CHOICE AND COMPETITION

Sickness funds in financial difficulty must request **supplementary flat-rate payments** directly from the insureds. Since the insureds *in turn* are free to switch to another sickness fund, the flat-rate rule is thought to impose **competitive pressure on sickness funds' management ex ante** to improve efficiency – for example by generating savings in administration or in contracts with care providers.

## 2.2 Central health fund – controversial issues

### EXPENDITURE DYNAMICS

- **Sickness funds are expected to collect an increasing share of their total revenue through flat-rate premiums** directly from enrollees if medical care becomes more expensive in the future – e.g. through costly new technologies.  
*The Federal Insurance Office already forecasts a doubling of the average supplementary premium from € 8 per month in 2012 to € 16 in 2014.*

### GROWING FEDERAL SUBSIDIES, EQUITY AND CONSUMER INCENTIVES

- **MEANS-TESTED FEDERAL SUBSIDIES** will kick in to *offset the average flat-rate premium* expected across all sickness funds at the beginning of a new year once the premium exceeds 2% of a worker's gross wage income. – The subsidies will *reduce the income-related contributions of eligible insureds to the central fund.*
- With the size of these subsidies linked to the *average* expected flat-rate premiums, **the insureds still have incentives to search for “efficient” sickness funds.**

### INDUSTRY EVOLUTION

**Sickness funds can go bankrupt** (as City BKK did in 2011), in which case the insureds are covered by another sickness fund of their choice. **Adverse selection may trigger further bankruptcies** and lead to an increasing concentration of the sickness funds industry.

## 2.3 Morbi RSA

### BACKGROUND

In the preceding risk adjustment scheme – operated merely on the basis of sex and age – sickness funds had strong incentives for *cream skimming*, i.e. to get rid of the chronically ill and attract young and healthy individuals into their pool of insureds.

### REFORM 2009

To eliminate incentives for risk selection by sickness funds, the Morbi-RSA categorizes the insureds into **152 RISK GROUPS**, including

- 40 age- and sex-categories,
- 6 earnings capacity categories and
- 106 morbidity categories, which in turn are based on 80 well-defined chronic conditions, such as HIV/AIDS, diabetes and schizophrenia, and in some cases differentiate the severity of the condition.

**Based on diagnoses made by hospitals or general practitioners**, sickness funds report the relevant diagnoses annually to the Federal Insurance Office. Hospital diagnoses are considered immediately reliable, whereas GPs must provide a second confirmation of the relevant chronic condition within 6 months; and **some of these diagnoses must be further validated** by evidence of appropriate drug treatment.

### ISSUES

**Some observers criticize incentives to manipulate the coding of medical diagnoses** (up-coding) with the aim to obtain more money from the central health fund.

**Some hope** the Morbi-RSA will induce sickness funds to offer **more selective contracts** to doctors participating in **disease management programs** for insureds with specific chronic conditions.

## 2.4 Prospective payment for hospital care

### REFORM 2003

- Australian-inspired **diagnosis-related groups (DRG)** and **uniform state-level base rates** (i.e. prices for units of service) were implemented gradually between 2003 and 2009 and now cover all stationary care, with the notable exception of psychiatric care.
- Additional regulation and competitive pressure under DRG have forced hospitals into **INCREASING SPECIALIZATION to meet quality standards and increase productivity**, both requiring and inducing new investments in medical technology as well as physical and human capital.

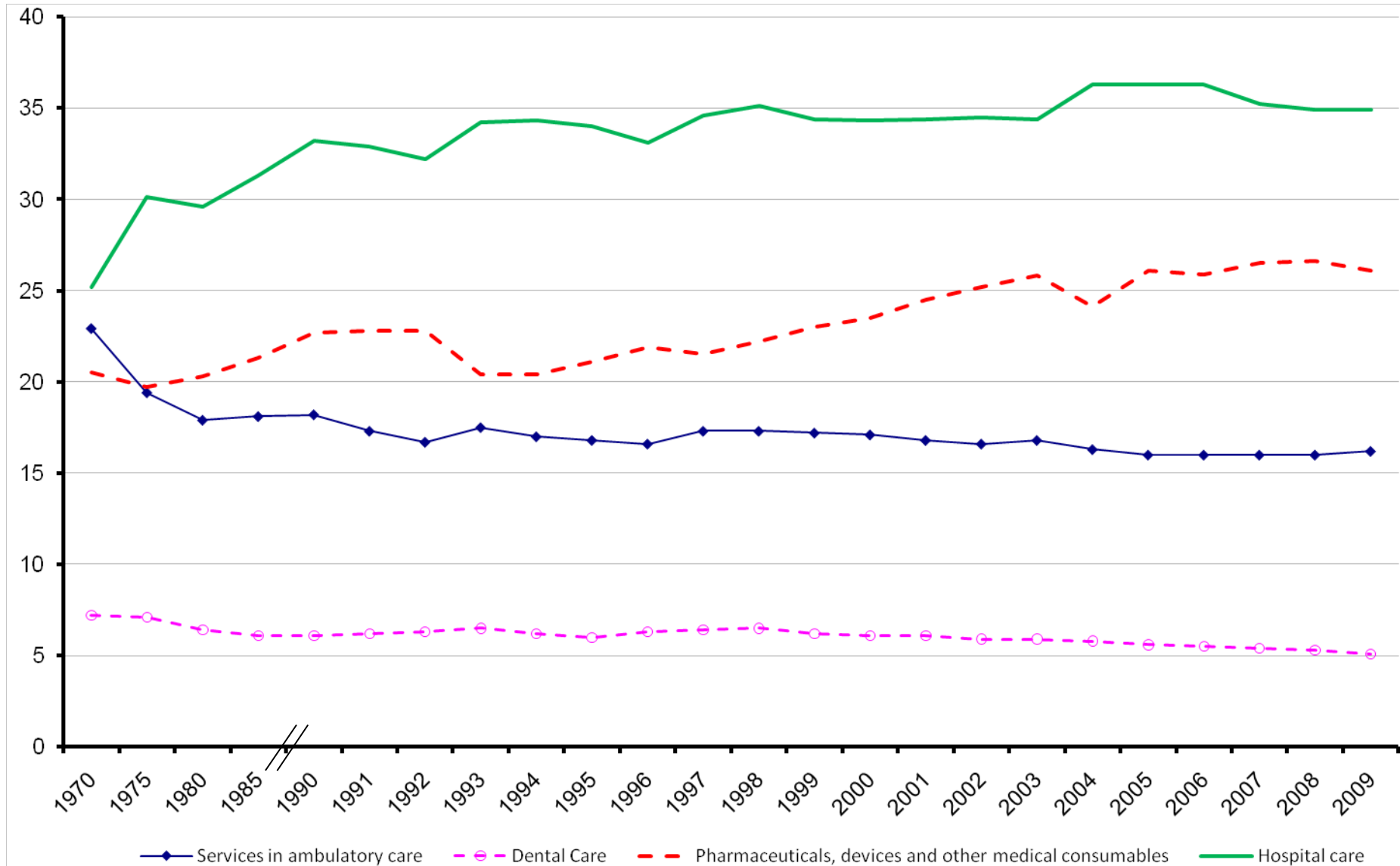
### FISCAL IMPACT

- The need to raise financial capital for investments has led to **privatizations**, especially among municipal hospitals in rural areas and Eastern Germany (and one university hospital in *Hessen*), often to large publicly-listed hospital chains.

With more than 85% of German hospital beds still publicly owned in 2009, some observers see potential for further privatizations, yet compared with other countries, there still seems to be a massive **oversupply of beds** per capita of the population.

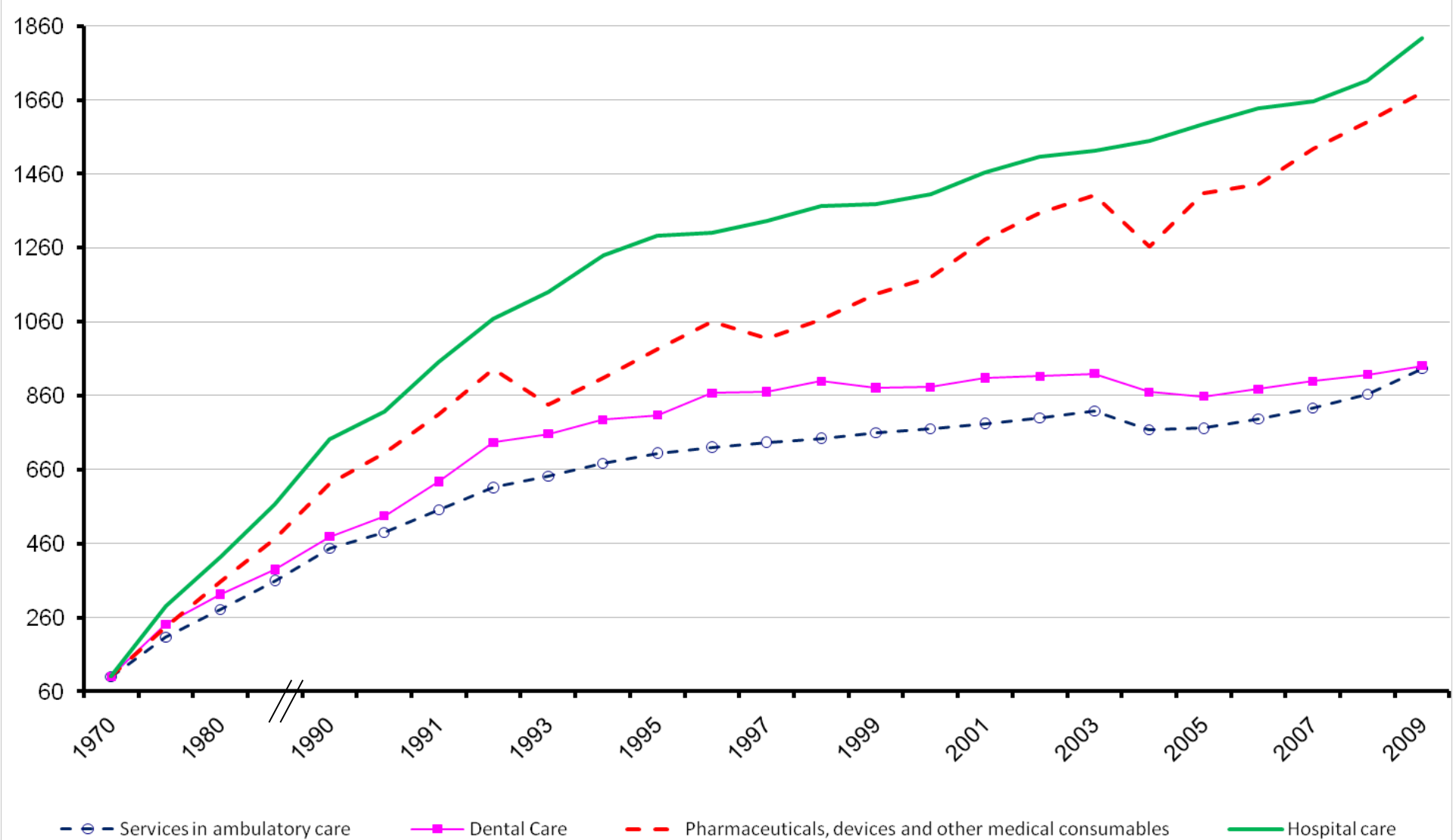
In some cases, **anti-trust issues** have prompted the Federal Cartel Office to intervene.

# Spending shares of SHI on hospital care and pharmaceuticals up (in % of all SHI spending)





# Nominal SHI spending on physician services flat since the early 1990s (1970=100)



## 2.5 Diagnosis-related payment of physicians in ambulatory care

### BACKGROUND

Until 2008, a **periodic fixum** (based on capitation) *limited* the growth of physicians' aggregate pay to the growth of workers' aggregate gross wage incomes. Remuneration for the treatment of SHI enrollees was paid *via* doctors' regional associations, known as “*Kassenärztliche Vereinigungen (KV)*,” in proportion to the volume of services provided in the preceding 3-months period. The remuneration per unit of service fluctuated *over time* and varied *between regions*, which contributed to substantial **inter-regional variation in physician density** with unmet medical needs in some and supplier-induced demand for excessive care in other regions.

### REFORM 2009

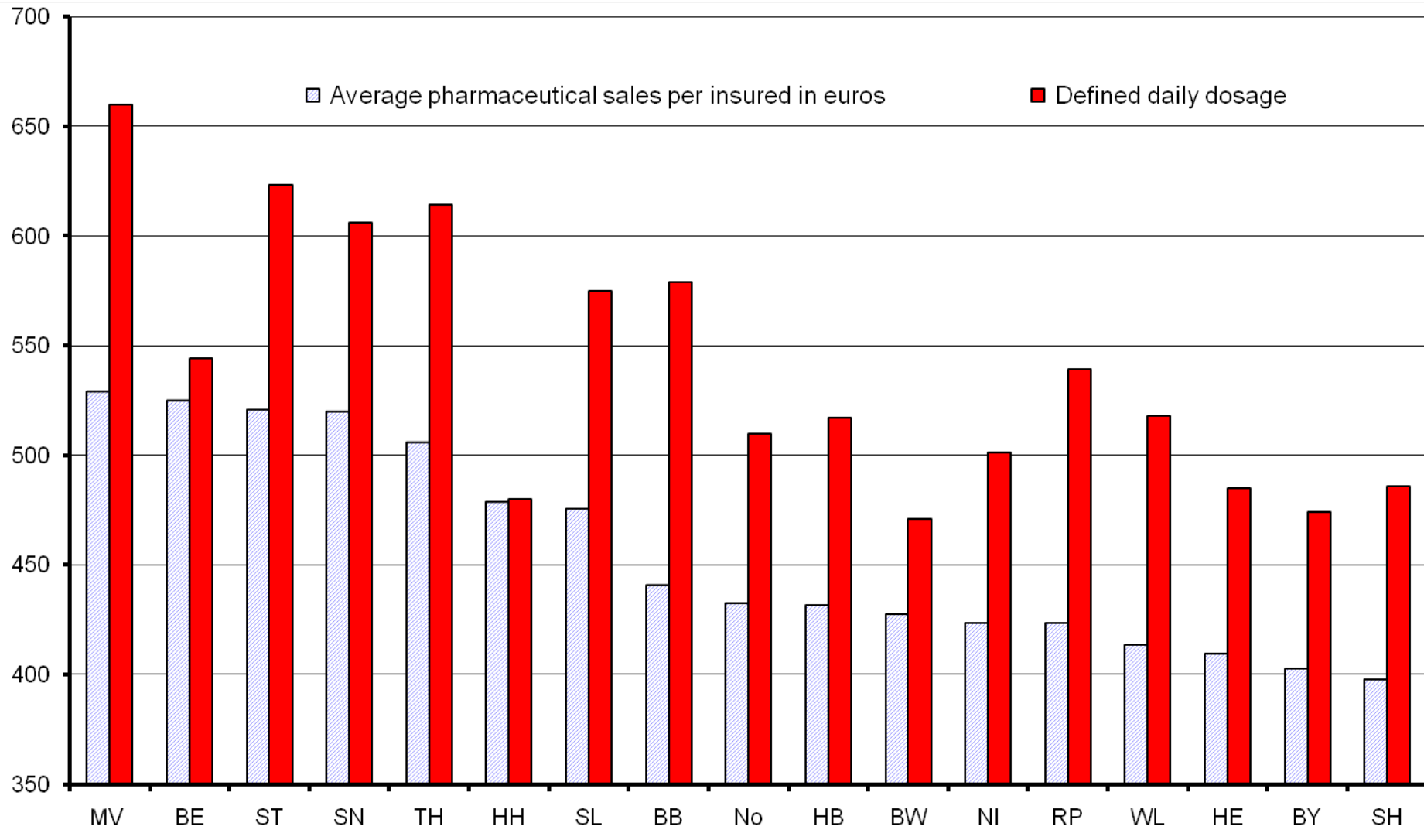
- The **NEW SYSTEM** uses some principles of prospective payment and **combines fee-for-service with morbidity-related payments and euro prices** – listed in the Federal Health Minister's list – **with the aim to encourage investments in doctors' offices and realign their incentives**, e.g. to move into under-served fields of care or neglected regions.
- **To prevent supplier-induced demand**, the *full* price is paid only for services within pre-announced volume **limits** (*Regelleistungsvolumina*) that are specific to each doctor or group practice and depend on the type of medical specialization, regional physician density and morbidity of patients, approximated by age and sex.
- **Additional selective contracting** between individual doctors or groups of doctors and sickness funds is possible, but the bulk of services is still subject to *collective* contracts negotiated and administered by the regional “KV.”

### ELEMENTS OF MANAGED CARE

- **General practitioners** have benefited from a requirement since 2007 that all sickness funds offer their enrollees at least two different *elective contracts*, one of which (*Hausarztvertrag*) must offer reduced patient co-payments in exchange for a binding commitment to see a registered primary physician, who will act as a **gatekeeper**, before consulting any specialist or a hospital. Yet, how much *extra pay* this justifies is still controversial.

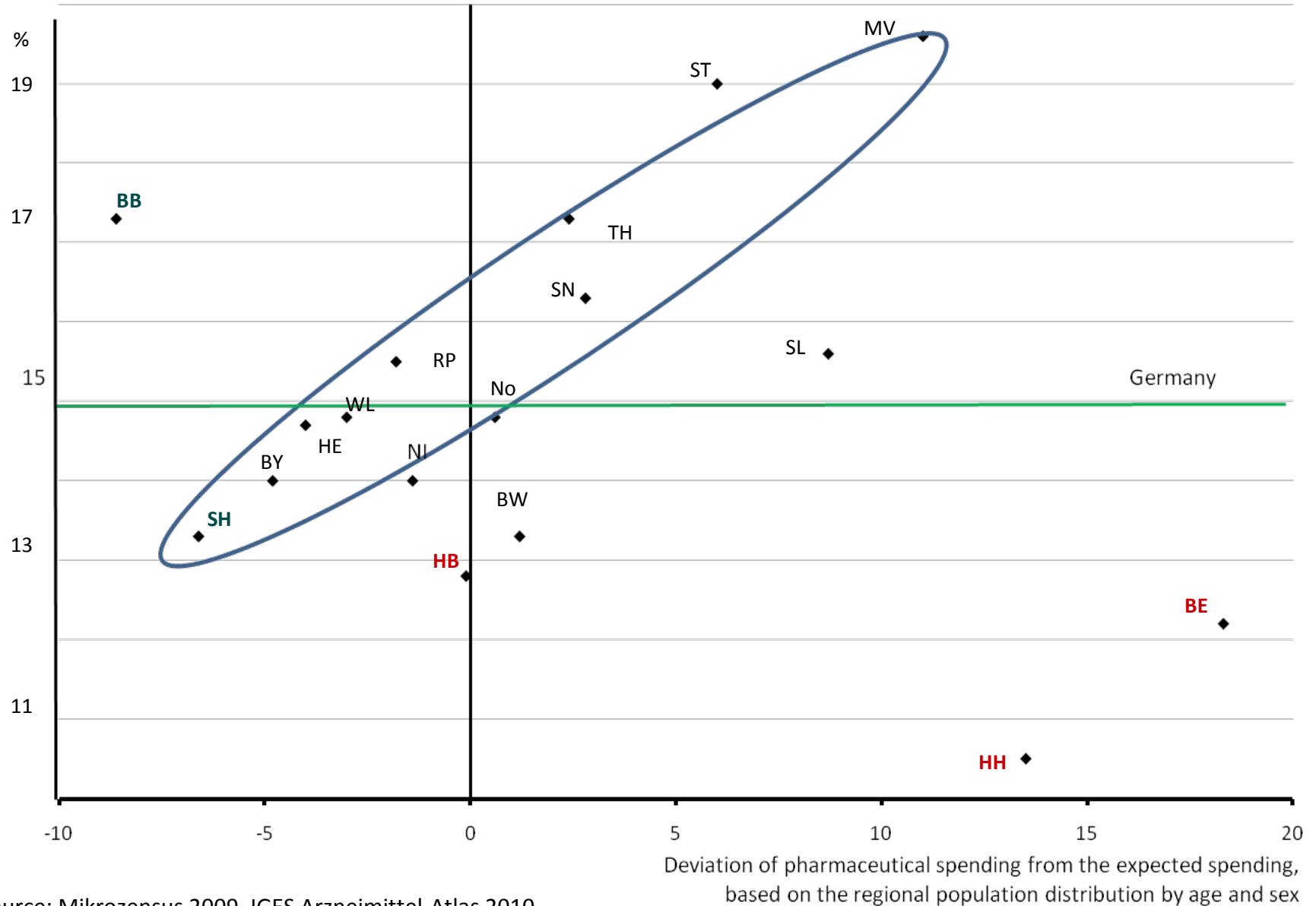
# Pharmaceutical consumption suggests large regional variations in medical practice

Average pharmaceutical sales in euros and consumption in defined daily dosages per insured in 2009, by region



# Chronic conditions help explain the regional variation of pharmaceutical spending in 2009

Population share with BMI>30



## 2.6 Quality control

### BACKGROUND

The economics of information asymmetry suggests provider competition without stringent **external quality controls** could deteriorate into a race-to-the-bottom or trigger systematic discrimination against costly-to-treat patients. Policy makers seem to have understood the need for **quality standards and continuing improvements** as provider competition is unleashed.

### REFORM 2005

- **Hospitals have to publish STRUCTURED QUALITY REPORTS** on a regular basis with information that can be used by all stakeholders, in particular *the insureds, patients, general practitioners* and *sickness funds*.
- **Oversight is provided by the Federal Joint Committee (G-BA)**, the key decision-making body at the interface of sickness funds, doctors' associations and the hospital sector.
- The G-BA has developed **standards for the quality of structures, processes and outcomes** in the hospital sector and has the mandate to also do so for ambulatory care.
- **Quality control for general practitioners** in private office is still partly under oversight by the chambers of regional physicians (*Ärzttekammern*), with particular emphasis on continuing training and its certification and financial penalties in the remuneration of patient care in case of doctors' non-compliance.

## 2.7 Pharmaceutical markets

### BACKGROUND

**Sickness funds are generally required to reimburse retailers** for part of the cost of any prescription drug with the chemical entity ordered by a medical practitioner for the insured and **pharmacists obliged to sell the cheapest drugs** in each therapeutic class. **Patient co-payment** is at 10% of the drug's price up to a €10 per refill and up to 2% of the insured's income annually.

- ***Past reforms mainly aimed at expanding the use of generics.***

**Reference prices for generics since 1989** and global budgets for pharmaceutical spending in SHI during the 1990s and early 2000s, with global budgets in 2002 replaced by *prescription target volumes for individuals physicians*, who were made financially liable for the costs of all prescribing more than 25% above target.

**Sickness funds** have been free to **negotiate** volume and other **rebates** for generics and branded prescription drugs directly with suppliers *since 2003* and may restrict reimbursement to one brand in each therapeutic category *since 2006*, coupled with lower patient co-payments or a waiver.

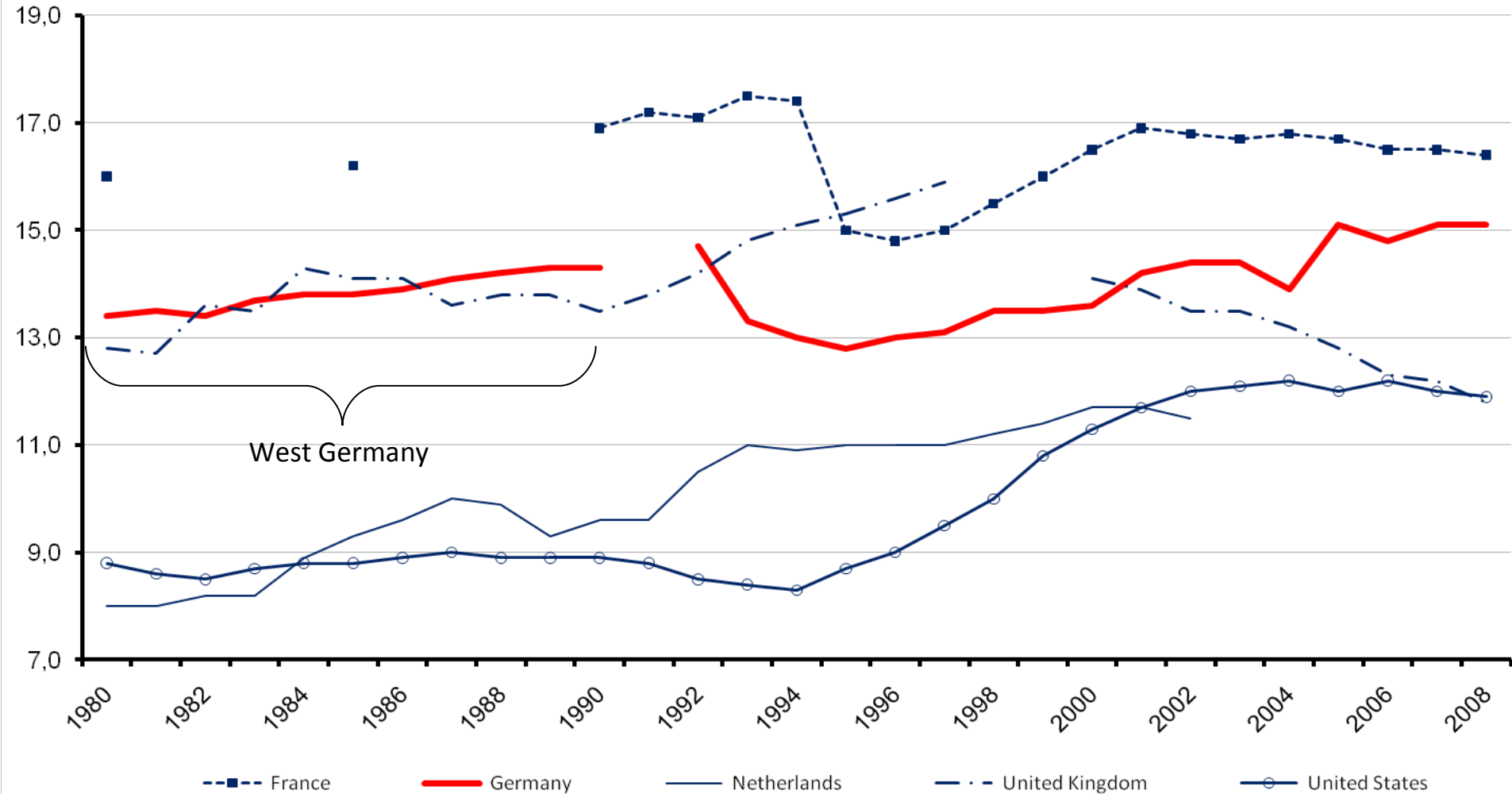
- ***But there was no regulation to limit the prices of new prescription drugs.***

### REFORM 2011

- **To target new prescription drugs, the *Arzneimittelmarktneuordnungsgesetz (AMNOG)*, mobilizes sickness funds' collective monopsony power for negotiations with producers about **MAXIMUM REIMBURSEMENT LEVELS, based on proven incremental therapeutic benefits.**** AMNOG mainly aims to limit the costs of new drugs with only *marginal* improvements on the benefit side, i.e. “fake” innovations.

# Pharmaceutical markets – in Germany since 1989 under reference pricing and varying global budget caps

Expenditure on pharmaceuticals and other medical non-durables  
in % of total health spending



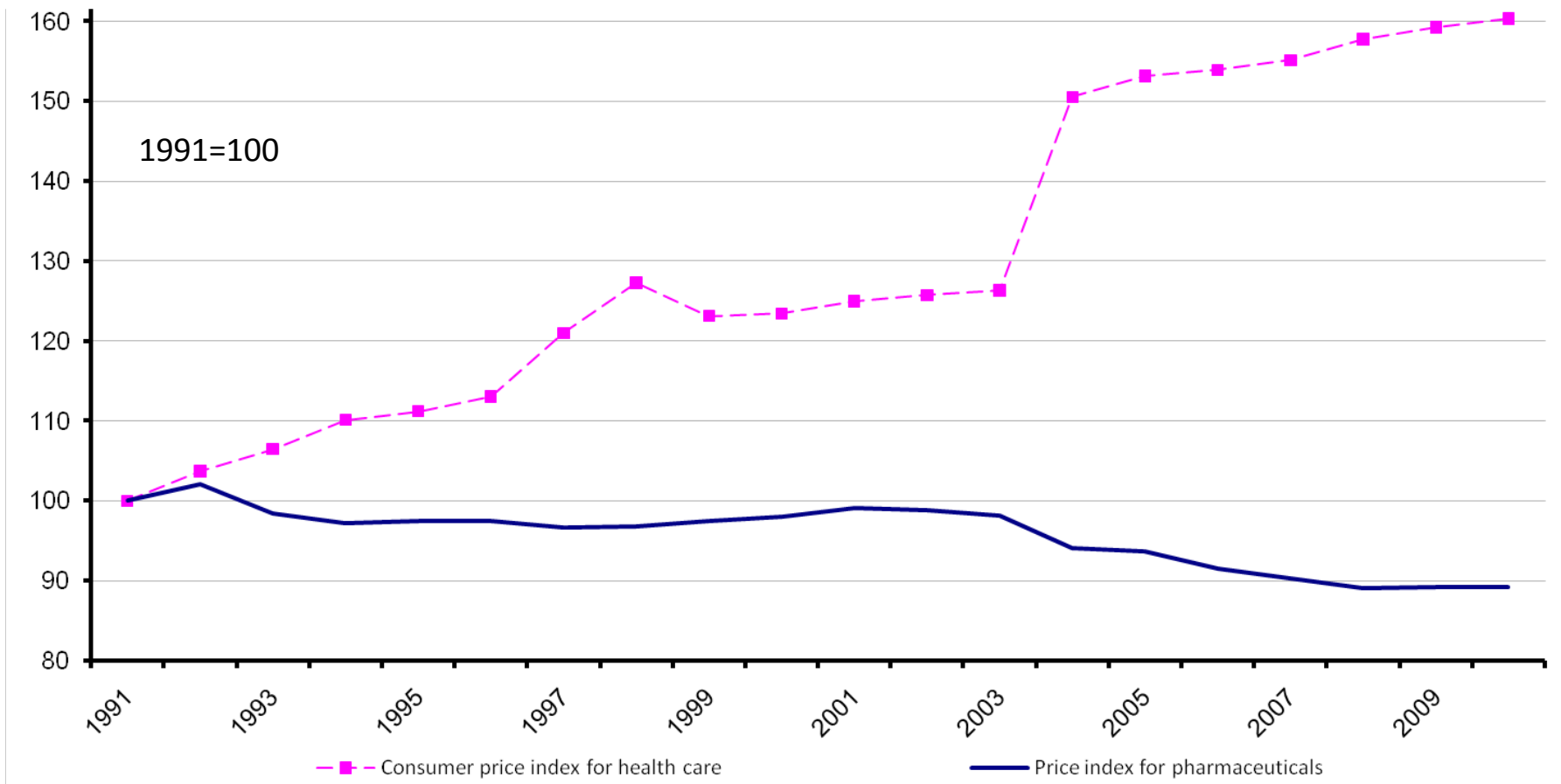
## 2.7 Pharmaceutical markets

### Prices of branded prescription drugs under patent still higher in Germany than elsewhere in Europe

Drummond et al. (2011) report the following off-pharmacy-prices in euros for 2009:

	Germany	Netherlands	Sweden	UK
- Cholesterol-lowering Ezetimibe 10 mg	1.88	1.54	1.26	1.34
- Insulin analogue Glulisine inj. 100 E/ml patron 3 ml	13.82	7.17	8.19	8.42
- TNF a Blocker Etanercept 50 inj. mg/ml WWSP 1.0 ml	456	288	302	226
- Schizophrenia atypical Risperidone 1 mg	2.12	0.99	0.84	0.82

### Price index for all pharmaceuticals in SHI versus consumer price index for health care



Data source: GKV-Arzneimittelpreisindex/WIdO. Note that since 1989 the prices of branded prescription drugs under patent have *increased* by ca. 25%.



## 2.8 Comparative cost-effectiveness studies

### BACKGROUND

- **Efficient filtering and utilization of medical technology** is key to creating value for money in health care; Germany is late in the game.
- **Reference pricing versus structured health technology assessments (HTAs)** – are these competing approaches or complements?

In 2000, the *Deutsches Institut für Medizinische Dokumentation und Information* (DIMDI) under oversight by the Federal Minister of Health created the *Deutsche Agentur für Health Technology Assessment* (DAHTA) and has since produced a large number of HTA reports, apparently with limited impact on medical practice so far.

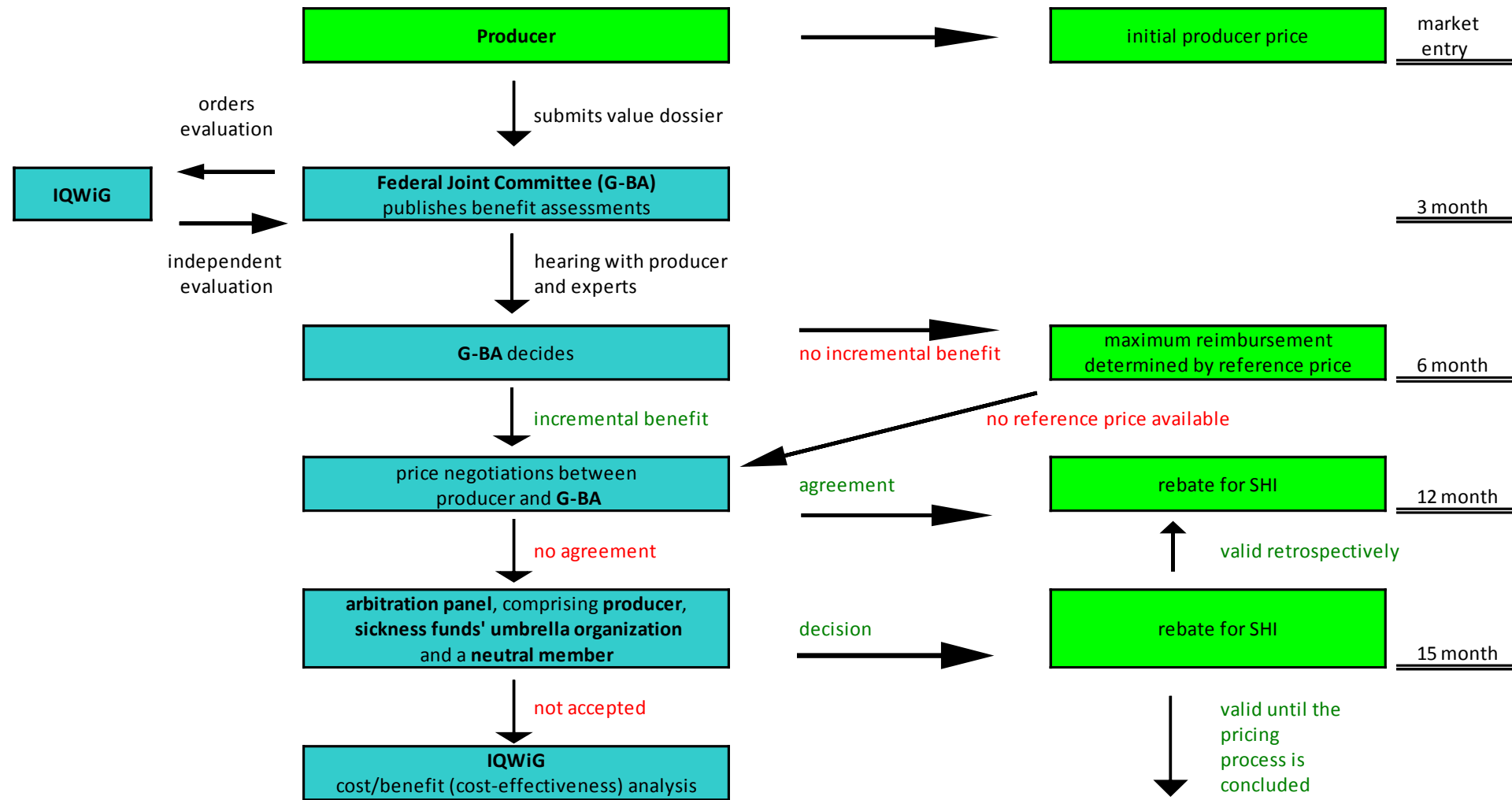
### REFORMS 2004 – 2011

- In 2005, a new and *independent* agency for cost-effectiveness research, the ***Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG)***, was created with a legal mandate to
  - assess the *medical benefits* of new and established technologies and procedures *and*
  - help create *treatment guidelines* for specific diseases, using *evidence-based medicine*.

### METHODS CONTROVERSY

IQWiG was also mandated to develop *methods* for its economic evaluations, based on established international standards. Yet, its 2008 **methods paper provoked controversy**, with leading European health economists arguing it neglected important economic aspects and damaged an “historic” opportunity of moving towards European coordination in regulation and reimbursement.

# Initial *benefit* assessment, *pricing* and *cost-effectiveness* analysis for new drugs in SHI

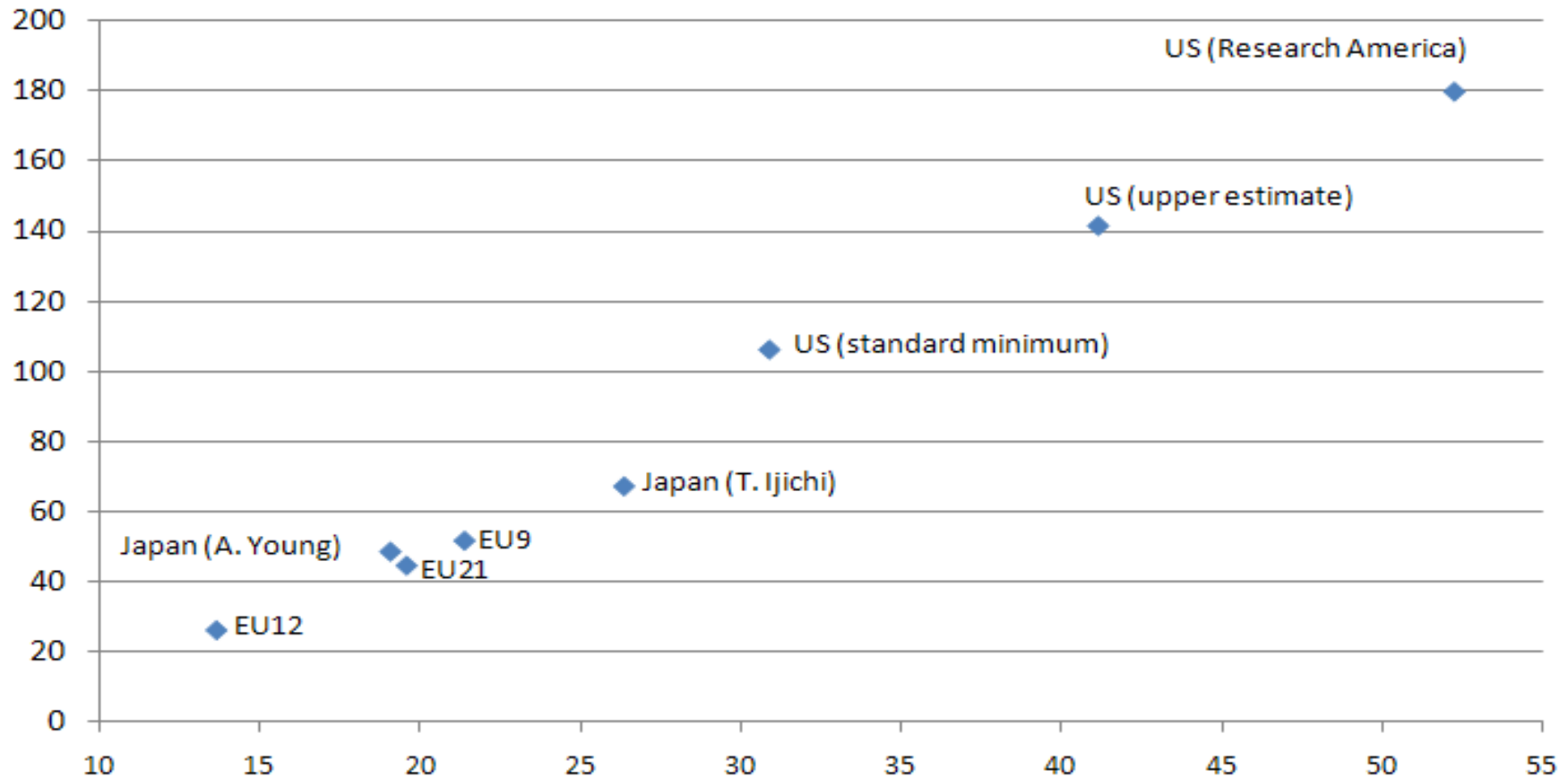


## 3.1 The challenge of demographic change

- Recent evidence in support of the **compression-of-morbidity** hypothesis suggests population ageing per se is *not* likely to become a major exogenous driver of health care costs.
- Instead, population ageing may provide an unprecedented opportunity to make **public and private health investments** with particularly *high* social rates of return in the long term.
- If much of population ageing is ultimately driven by an **income elasticity of individual demand for *health* above one**, policy makers should allow health care's share in GDP to rise even in the absence of increasing costs per unit of care.

# Europe's deficit in biomedical research

Per-capita of the population non-market spending on *health* R&D in ppp US-\$ and its percentage share in *all* non-market research expenditures, 2007



Notes: EU9 includes Denmark, Finland, France, Germany, Italy, Norway, Spain, Sweden, and the United Kingdom. EU12 includes Austria, Belgium, the Czech Republic, Greece, Hungary, the Netherlands, Iceland, Ireland, Poland, Portugal, Slovakia and Slovenia. EU21 is the joint set of EU9 and EU12. Values of medical research expenditure are from Alison Young except for (1) Japan, which is from Tomohiro Ijichi, (2) France, which is from Laurence Esterle and uses 2007-2008 data, and (3) the US, which is from Research America, Inc. For Italy, nominal expenditure on medical research is from the year 2006. Values of research expenditures in all fields of sciences are from the OECD except for (1) Italy, which is from Alison Young, and (2) France, which is from Eurostat. Per capita pop ppp \$ means that expenditures on the vertical axis are expressed in US-\$, in terms of 2007 purchasing power parities, per capita of the total population in the respective country or group of countries.

## 3.2 Preparing for the future: investment in health research

- **6 new national centers for health research** created in 2011 symbolize Germany's commitment of public resources to find better treatments for *diabetes, cardiovascular diseases, lung diseases, neuro-degenerative diseases, cancer and infections*.

Critics say the list of priorities should include *psychiatric conditions*, whose prevalence seems to be rising fast.

- **Economies of *scale* in the development, adoption and utilization of medical technology** suggest policy makers should help create a common (*more integrated*) *European* market for health technology and care. *In terms of annual public investments in biomedical R&D, Europe is still far behind – spending less than half as much, per capita of the population at ppp, as the United States, where these investments have more than doubled in real terms since 1995. Germany's per capita spending and relative concentration of public research resources on health are close to the average of the European Union's 9 leading performers of biomedical R&D in the public sector.*
- Instead of the *ad-hoc* policies of the past, such as global budgets, questionable price controls and spending caps with little regard for the value of health, Europe should embrace a **NEW STRATEGY** and **make health care more cost-effective through investments in the relevant public goods and allow it to expand in line with people's increasing willingness-to-pay.**

# Concluding remarks

- **The long German experience with health care reform** provides some insight into the effects of policies that focus *mainly* on containing aggregate demand and use monopsony power to suppress prices. Policies of this type risk preserving *low productivity in the delivery of care*.
- To fully meet the challenge of population ageing and mobilize resources for innovation, a greater **focus should be placed on the supply side**. Under careful regulation to ensure equity in access and quality of care, provider competition may help to better *align* providers' financial incentives with patients' needs and societal priorities and values.
- In addition, governments should **invest more in the relevant public goods**, *including* health research, translational medicine and a modern information infrastructure in health care delivery. Society's values and patients' needs require more *extensive* use of **evidenced-based medicine**, whose continuous development, dissemination and implementation involves substantial investments in public goods.

***The end. Thank you for your attention.***