



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science



Social Capital and the Health-Care System: The German System and the US Health Reform

Prof. Dr Holger Pfaff

**Lecture, University of Michigan, Ann Arbor,
School of Public Health, Department of Health Management & Policy**

February 21, 2011





University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

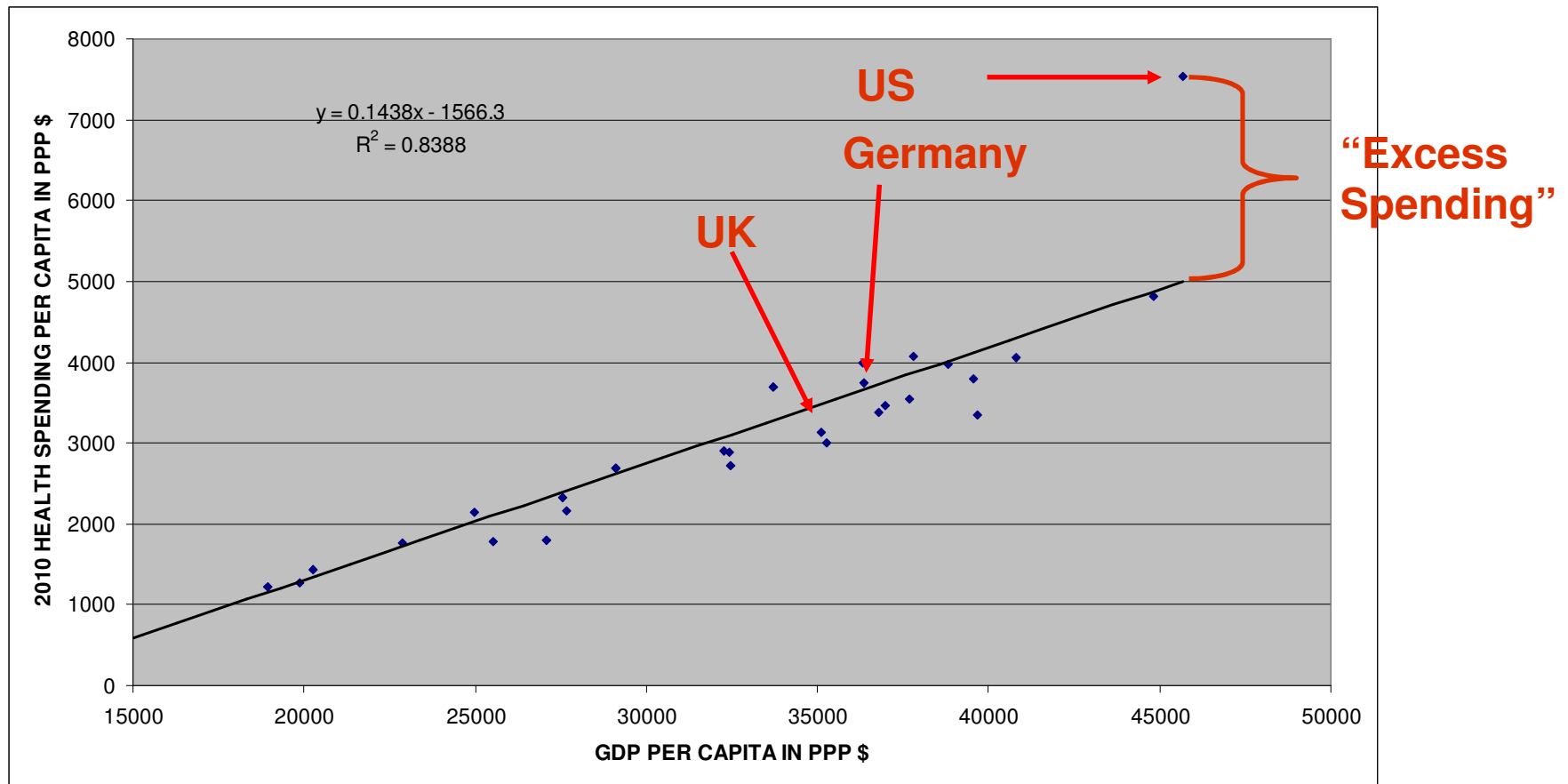
i:mvr

Agenda

- 1. The problem: health spending**
2. Possible explanations for the problem
3. Case 1: The German health-care system
4. Case 2: The US health reform
5. Comparison of the German and US health-care systems: selected facts
6. Discussion
7. Conclusions



Health-Care Spending and GDP per Capita (in PPP)



Source: Own calculations based on OECD statistics.



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Agenda

1. The problem: health spending
- 2. Possible explanations for the problem**
3. Case 1: The German health-care system
4. Case 2: The US health reform
5. Comparison of the German and US health-care systems: selected facts
6. Discussion
7. Conclusions



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Hypothesis

Excess spending is
not a random problem and
not a specific problem of the US.
It is the result of structural decisions
concerning the design of a health-care system.



Presumed Reasons for Excess Spending

(e.g. Reinhardt, 2008)

- Less good explanations
 - Demographic aging
 - Higher burden of disease
 - Better quality of care
 - Better health outcomes

- Better explanations
 - Higher prices for the same health-care goods and services
 - Higher administrative costs
 - Overtreatment (defensive medicine) owing to unique tort law
 - More widespread use of high-tech equipment and procedures

- My hypothesis: the factors behind the “better explanations” are market inefficiency and low social capital.



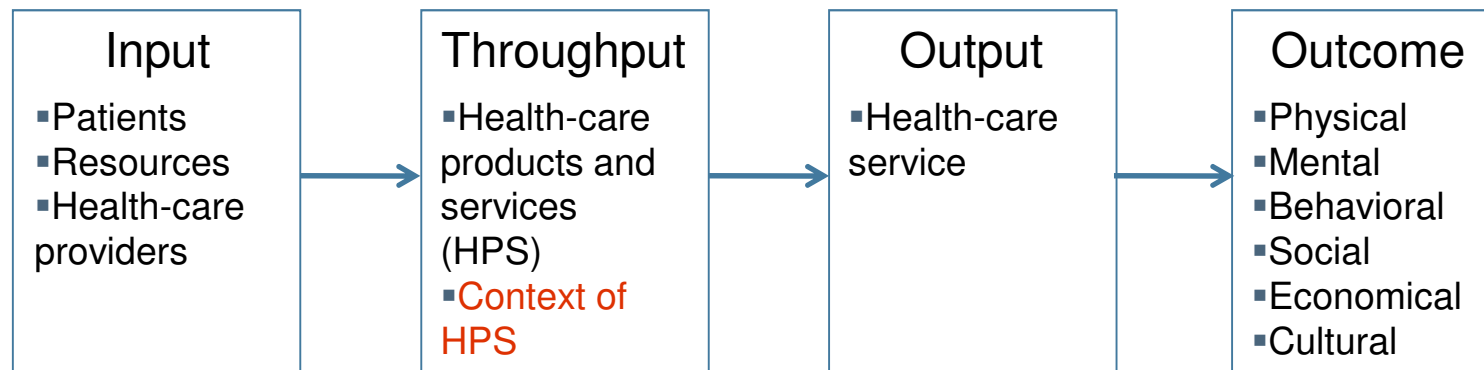
Hypotheses

- H 1: Rising health spending is caused by rising context costs
(or: excess spending is a problem of context costs).
- H 2: Context costs are high if social capital is low
(or: excess spending is caused by low social capital).
- H 3: Context costs are higher in health-care systems coordinated
by the market principle
(or: excess spending is caused by the market principle).



Hypothesis 1: Excess spending is due to context costs.

Health-care costs = costs of health-care products and services
+ cost of the context





Health-care costs =

- Costs of direct care (health-care products and services)**
- + Costs of the context of direct care (context costs)**
 - = Context costs on the level of individual care**
 - Transaction costs
 - Security and safety costs
 - + Context costs on the system and population level**
 - System transaction costs
 - System security costs
 - Inequality costs (unequal care; unequal prevention)
 - Costs of low prevention
 - Costs of the inefficiency of the system



Hypothesis 2: Excess spending is due to low social capital.

Elements of social capital:

- Solidarity and mutual help
- Social cohesion (sense of unity, agreement and we feeling)
- Mutual trust
- Norm of reciprocity
- Common values

One example for measuring social capital in hospitals *(Ernstmann et al, 2009)*

If you think about the hospital as a whole, how strongly do you agree with the following statements?	Strongly disagree	Some-what disagree	Some-what agree	Strongly agree
In our hospital, there is unity and agreement. (mklima1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In our hospital, we trust one another. (mklima2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In our hospital, there is a "we feeling" among the employees. (mklima3)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In our hospital, the work climate is good. (mklima4)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In our hospital, the willingness to help one another is great. (mklima7)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
In our hospital, we share many common values. (mklima8)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Hypothesis 2: Excess spending is due to low social capital.

Deficits in social capital and mutual trust in society and health care lead to

- higher coordination costs,
- higher transaction costs,
- higher security/safety costs
- less social integration and, hence,
- less system performance



Social integration is one out of four functional requirements for system performance (Talcott Parsons).

Adaption	Goal attainment
Integration	Latent pattern maintenance



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Hypothesis 3:

Costs (direct and context costs) are higher if the market principle is used for coordinating the health-care system (excess spending is caused by the market).



System Integration by Coordination: Forms of Coordination (According to Habermas)

		Type of coordination	
		Personalized coordination (living-world coordination)	Depersonalized coordination (systemic coordination)
Flexibility	low	Clan (culture)	Hierarchy (power)
	high	Network (negotiation)	Market (money)



Transaction Costs in Health-Care Systems

Transaction costs are high in health-care systems

Transaction costs

- **Search and information costs**
- **Bargaining costs**
- **Policing and enforcement costs**

Transaction costs for the insured person and care provider and health insurance company

=> If transaction costs are high

- **a hierarchy or**
- **a clan**

is normally a better option for coordinating people and actions than a market.



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

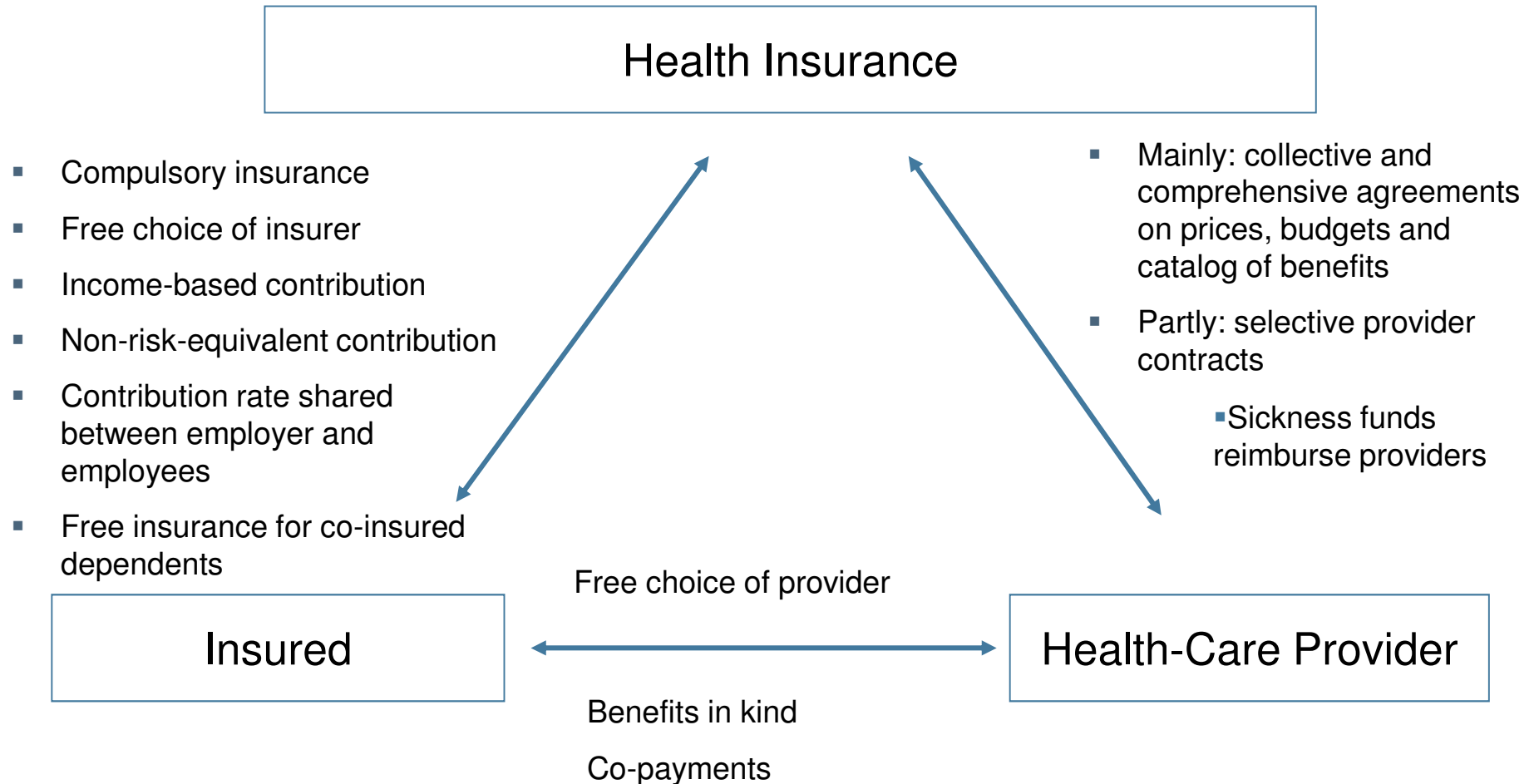
Agenda

1. The problem: health spending
2. Possible explanations for the problem
- 3. Case 1: The German health-care system**
4. Case 2: The US health reform
5. Comparison of the German and US health-care systems: selected facts
6. Discussion
7. Conclusions



Germany: Representing the “Social Health Insurance Model (Bismarck System)”

(following Schwartz et al, 2003: p. 239)





Coverage of the Population by Health Insurance

German population:	82.1 m.
Insured:	
▪ Statutory health insurance:	69.9 m. (85.1%)
▪ Mandatory: 43%	
▪ co-insured dependents: 27%	
▪ Retired: 24%	
▪ Voluntarily: 6%	
▪ Private health insurance:	8.6 m. (10.5%)
▪ Others:	3.6 m. (4.3%)
Uninsured:	0.05 m. (0.06%)



The German Statutory Health Insurance (SHI)

- Origins: mutual self-help groups (risk-sharing by solidarity).
- Introduced by the German government in 1883.
- Social insurance system.
- SHI is mandatory up to a certain income threshold; beyond this threshold, people can choose to enter a private plan (PHI).
 - Contributions depend on individual income and are shared by employer and employee.
 - Spouses and children are co-insured.
 - SHI covers about 70 million people (85% of the population).
 - 2009 total expenditures: €170.78 bn (= \$230.74 bn).
- Sickness funds usually do not hold shares in health-care providers.



Statutory Health Insurance (SHI)

- German SHI is based on three constituent principles:
 - **Solidarity** as the provision of care depends on needs and contributions depend on financial resources. Family members are co-insured and the contributions are shared between employee and employer.
 - **Subsidiarity** as the government gives authority to payers and providers to define the catalog of benefits and to agree on reimbursement.
 - **Benefits in kind** as benefits are provided without up-front payments (out-of-pocket spending) or cost-sharing.

Conclusion: elements of social capital are part of the health-care system.

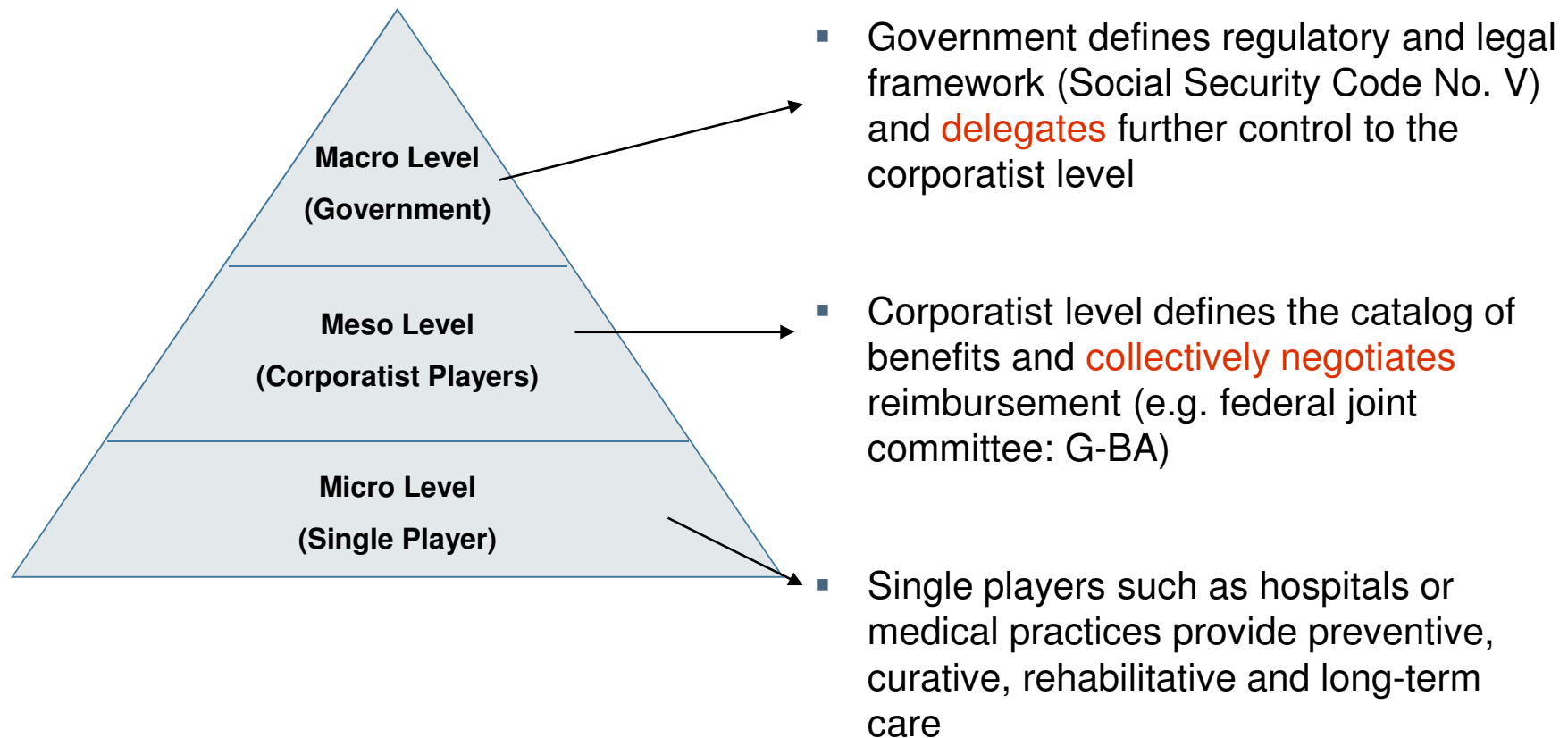


Comparison between Statutory and Private Health Insurance in Germany

	Statutory health insurance	Private health insurance
Population covered	85.1%	10.5%
Insurers	156 (1/2011) (self-governing, non-profit insurers under public law)	49 insurers (profit-oriented insurers under private law)
Access	Compulsory till income exceeds 4,125 euro/month Principle of solidarity	Voluntary medical underwriting; principle of equivalence
Benefits covered	Uniform (G-BA-dependent) Benefits in kind	Based on choice Cost reimbursement
Pre-existing conditions	Not relevant	Relevant for non-basic tariff (higher premiums possible) Not relevant for basic tariff (new)
Premiums	Income-related (14.9% since 7/2009; 14.0% shared between employer and employee; 0.9% employee)	Risk-dependent (premiums shared between employer and employees)
Financing	Pay-as-you-go method	Funding method



The Principle of Subsidiarity (Self-Governing System)



Conclusion: the principle of hierarchy (state level) combined with the negotiation principle (but on the nationwide level) => cost efficient and less centralized.



Corporatist Level

Actors

- GKV-SV: National Association of Statutory Health Insurance Funds
- KBV: National Association of Statutory Health Insurance Physicians
- KZBV: National Association of Statutory Health Insurance Dentists
- KBV: National Association of Statutory Health Insurance Physicians
- DKG: German Hospital Federation

State institutions

- G-BA: Federal Joint Committee
- InEK: Institute for Hospital Pricing
- BewA: Valuation Committee
- IQWiG: Institute for Quality and Efficiency in Health Care



Defining the Catalog of Benefits – The Role of the Federal Joint Committee

- The catalog of benefits is defined by the Federal Joint Committee (G-BA)
 - The G-BA has 10 members equally representing health-care providers and sickness funds and three impartial members, as well as five patient representatives
 - The G-BA's work is under legal *review* by the Federal Ministry of Health (but not part of it)
 - The G-BA appraises evidence and defines the catalog of benefits according to the principles of “efficiency,” “adequateness,” “necessity” and “appropriateness” (the Social Security Code No. V)
 - Sickness funds have to grant the *entire* catalog of benefits
 - Sickness funds jointly contract with health-care providers
 - Health-care providers (or their representatives) can thus either contract with *all* or with *no* sickness funds

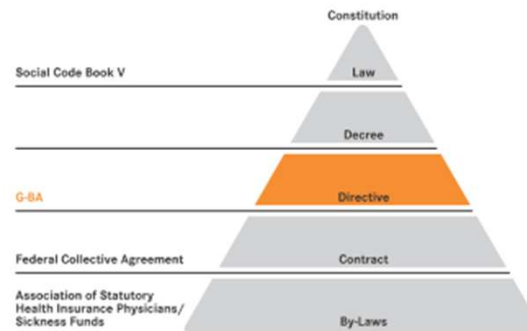
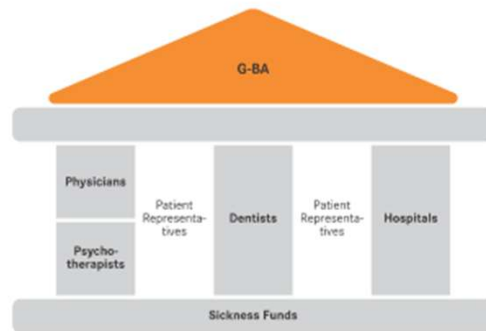


University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

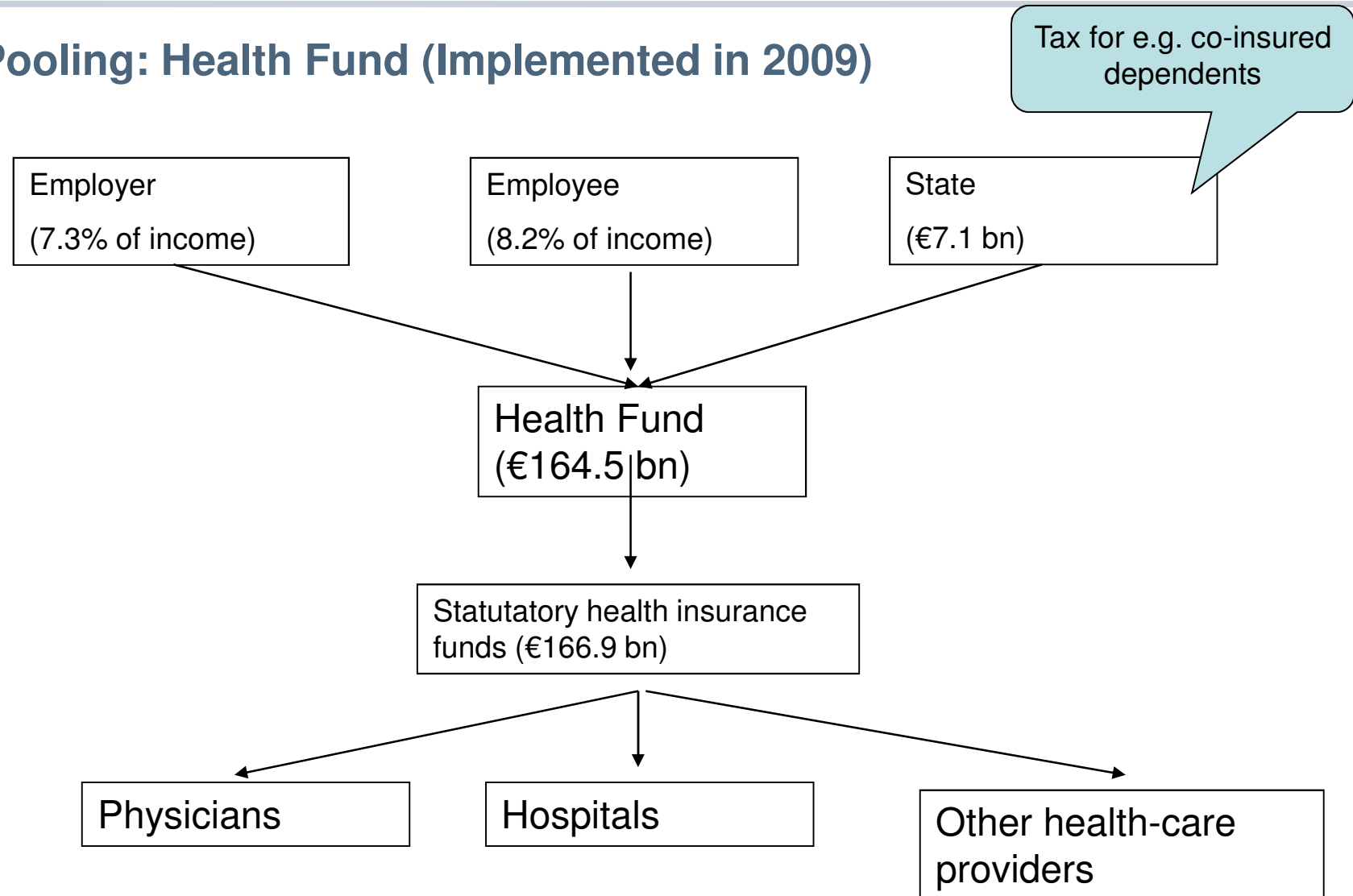


Federal Joint Committee & Institute for Quality and Efficiency in Health Care



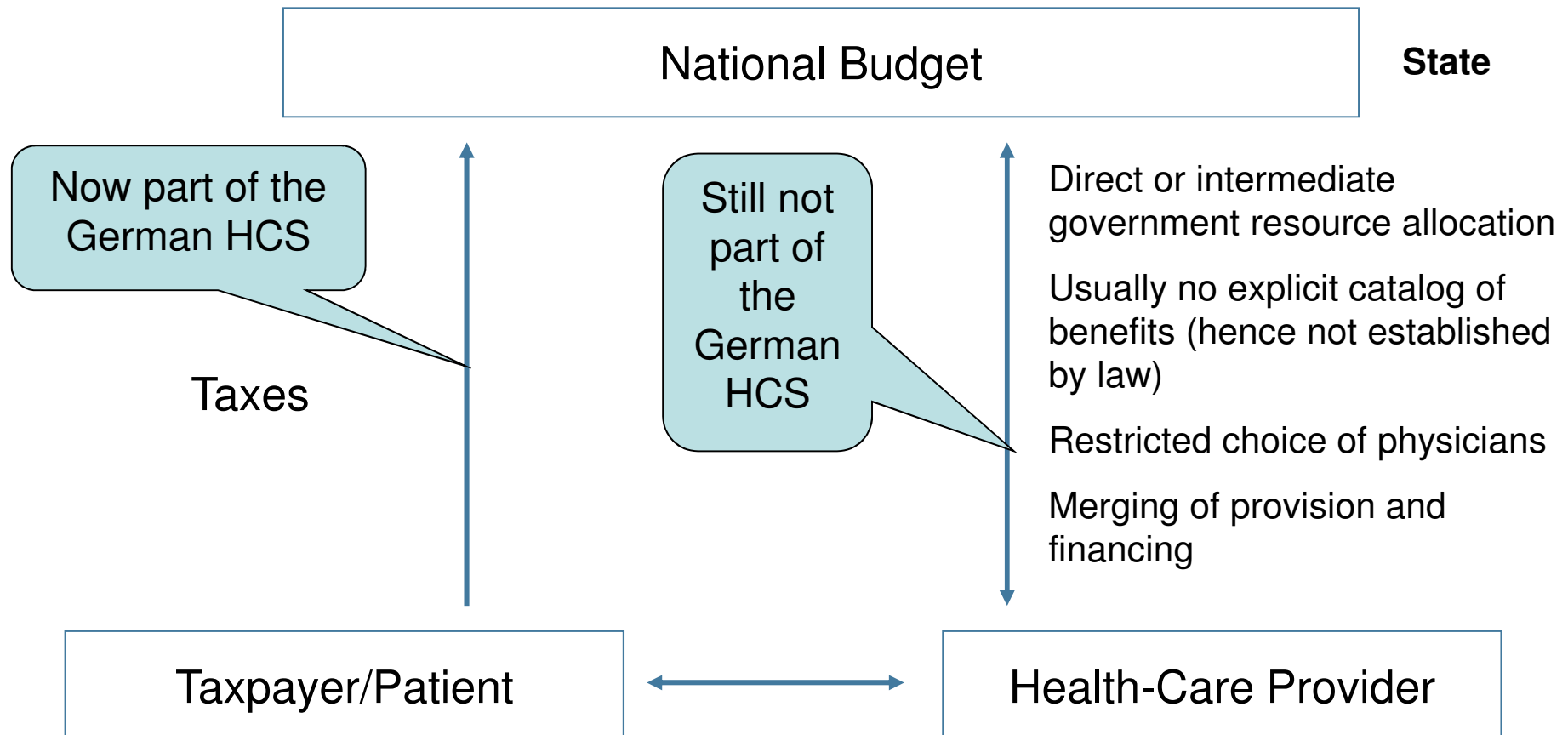


Pooling: Health Fund (Implemented in 2009)





The State Model (following Schwartz et al, 2003: p. 239)





University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Problems with the Implementation of the Law

- Germany is implementing elements from the US (e.g. managed care)
- Germany uses the top-down approach (deductive method)
- There is a roll-out of untested new health-care innovations (no pretest)
- Laws are usually implemented in a good way
- Trial and error system



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Problems in Germany

- Less transparency of care
- Low income opportunities of physicians and lack of medical staff
- Problems in implementing evidence-based medicine (guidelines)
- Competition between sickness funds
- (Labor) cost containment
- Financial gap of SHI as contributions are linked to labor income (no capital income and assets included)



Conclusion with Regard to the Hypotheses

Hypothesis 1:

- No data

Hypothesis 2:

- The German system is based on the principles of solidarity and mutual help and, hence, on elements of social capital.

Hypothesis 3:

- The German system is based on a mixture of
 - Hierarchy: state stewardship with delegation to the relevant actors in the form of a self-governing system (subsidiarity);
 - Negotiation: collective bargaining of benefits and prices on the self-governing level;
 - Market: free choice of insurer and of health provider.
- You can call it: state governance by setting the frame.



Germany: An Example of Polycoordination: Hierarchy and Negotiation and Market (State and Self-Governing System)

		Type of coordination	
		Personalized coordination (living-world coordination)	Depersonalized coordination (systemic coordination)
Flexibility	low	Clan (culture)	Hierarchy (power)
	high	Network (negotiation)	Market (money)

Germany



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

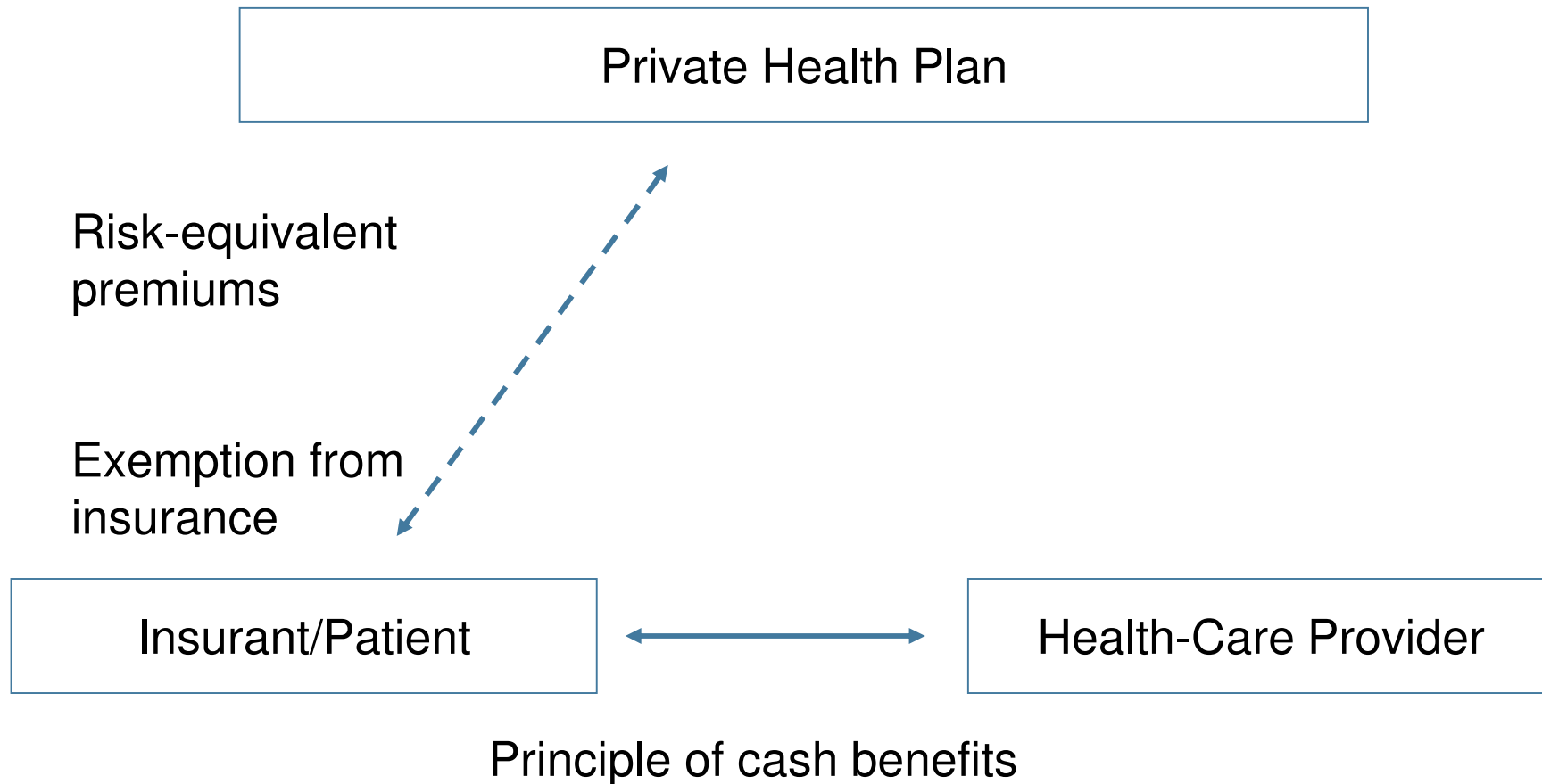
i:mvr

Agenda

1. The problem: health spending
2. Possible explanations for the problem
3. Case 1: The German health-care system
4. **Case 2: The US health reform**
5. Comparison of the German and US health-care systems: selected facts
6. Discussion
7. Conclusions



The US: Representing Mainly the “Market Model”





How Does the Health Reform Affect the Health-Care System with Regard to Social Capital?: I

Health-reform elements ¹	Evaluation with regard to social capital
Aim: 94% covered in 2019 32 million uninsured will be covered	More solidarity
In 2019 16 million uninsured covered by Medicaid (133% poverty level)	Solidarity State model
“Insurance plans will no longer be able to turn people away because of pre-existing medical conditions.” ¹	Element of the social health insurance model
People with health conditions will no longer “be charged higher premiums than healthy people.” ¹	Element of the social health insurance model
State-based health insurance exchanges (“families with incomes between \$33,000 and \$88,000 a year will be eligible for premium subsidies for plans purchased through the exchanges” ¹).	State model Not an element of the social health insurance model

¹ The Commonwealth Fund (2010)



How Does the Health Reform Affect the Health-Care System with Regard to Social Capital?: II

Health-reform elements ¹	Evaluation with regard to social capital
<p>Uninsured “Out-of-pocket costs for direct medical expenses for families with incomes between about \$22,000 and \$55,000 would be reduced and ceilings established for maximum out-of-pocket expenses for families up to \$88,000 in income.”¹</p>	<p>Limits to the market</p>
<p>Underinsured “All plans sold to individuals through the insurance exchanges will have to cover all health services included in the standard benefits package”¹ (federal premium subsidies for qualified families).</p>	<p>State model Social health insurance model Solidarity</p>
<p>Small businesses “State insurance exchanges will ensure that individuals not covered by employers and small businesses with up to 50 to 100 employees will (...) have access to affordable coverage.”¹</p>	<p>Business solidarity</p>

¹ The Commonwealth Fund (2010)



How Does the Health Reform Affect the Health-Care System with Regard to Social Capital?: III

Health-reform elements ¹	Evaluation with regard to social capital
<p>Older adults (aged 50 to 64) “Health reform places limits on insurers’ ability to raise premiums based on age. Premiums will not be allowed to vary by more than 3 to 1.”¹</p>	<p>Limits to the market</p>
<p>Medicare beneficiaries Expanded coverage for preventive care (free preventive care); Medicare Part D prescription drug coverage gap (between \$2,830 and \$6,440 annually) “will be phased out completely by 2020.”¹</p>	<p>Solidarity</p>

¹ The Commonwealth Fund (2010)



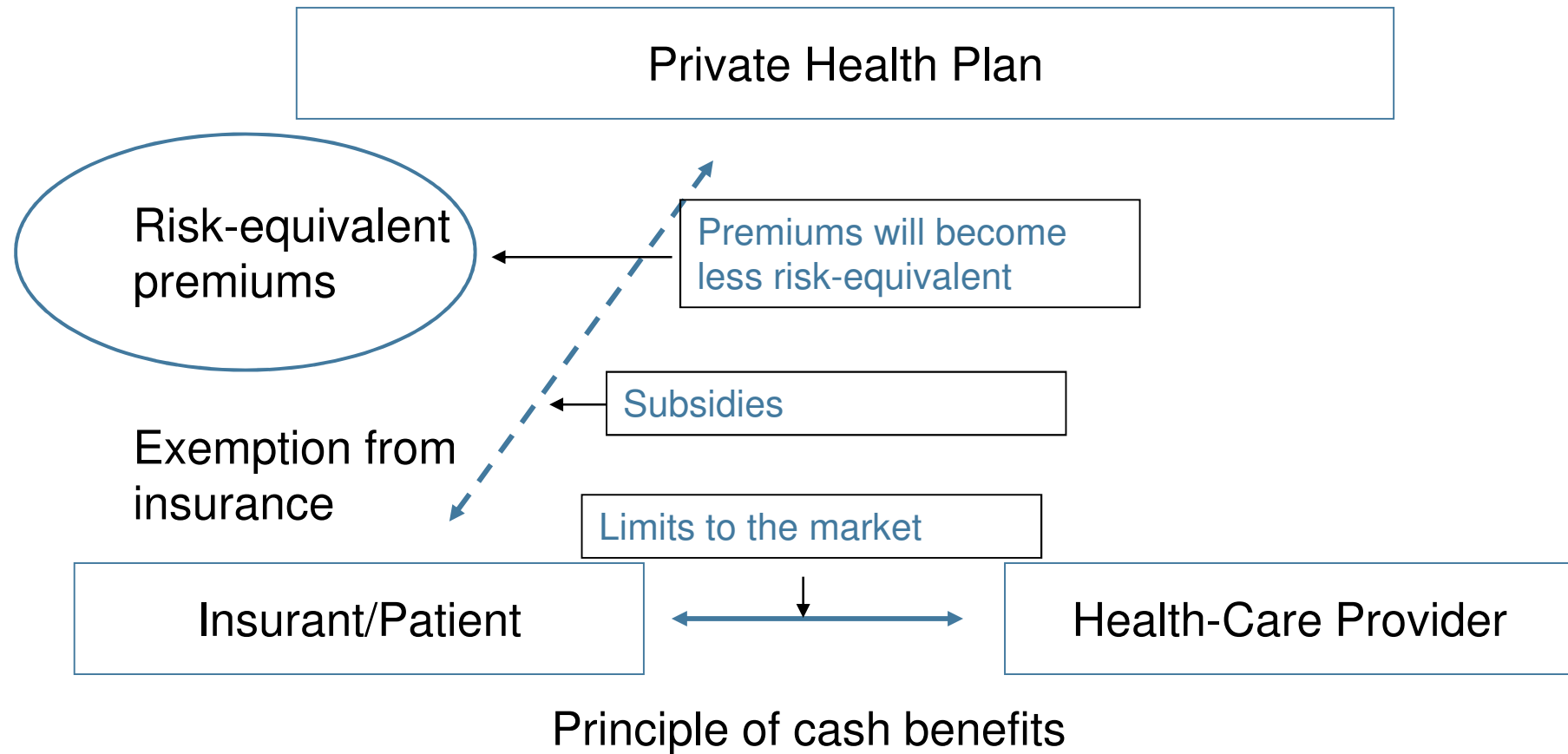
How Does the Health Reform Affect the Health-Care System with Regard to Social Capital?: IV

Health-reform elements ¹	Evaluation with regard to social capital
Young adults Young people “will be allowed to remain under their parents’ coverage until age 26. (...) Medicaid will be available to all adults with incomes at or below 133 percent of the federal poverty level.” ¹	State model solidarity
Young adults “will be able to buy coverage through insurance exchanges, where two-thirds of young adults (those with incomes below four times the poverty level) will receive help paying premiums and medical bills.” ¹	State model solidarity
Children “Insurers will no longer be able to deny coverage to children with preexisting conditions.” ¹	Limits to the market
“Federal matching funds for states will be increased, helping states to expand coverage.” ¹	State model

¹ The Commonwealth Fund (2010)

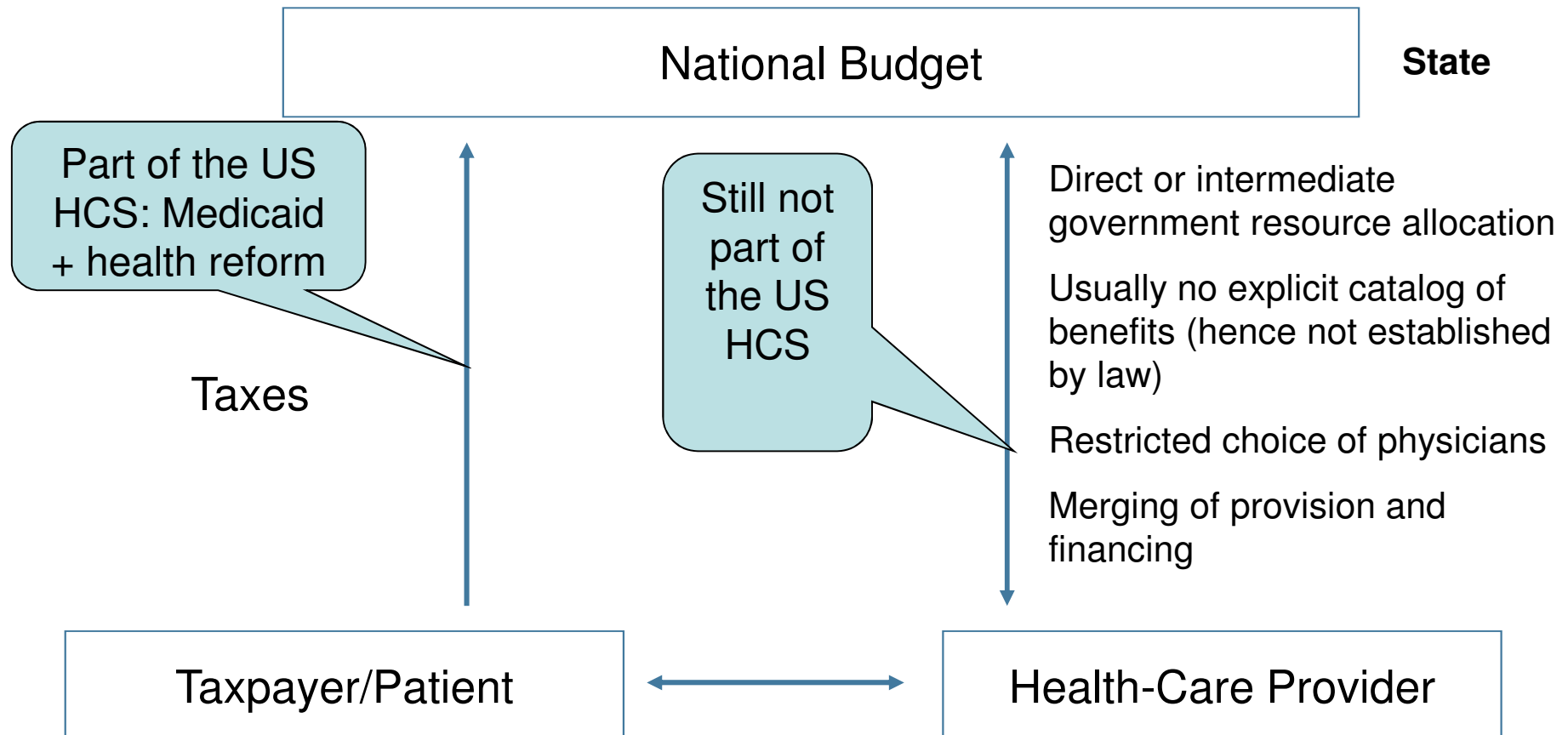


Transformation of the “Ideal Type”





More Elements of the State Model (following Schwartz et al, 2003: p. 239)





Conclusion with Regard to the Hypotheses

Hypothesis 1:

- No data

Hypothesis 2:

- The US health reform is based on the principles of solidarity and family orientation: hence, on elements of social capital.

Hypothesis 3:

- The US health reform is based on a mixture of
 - State model: Medicaid and premium subsidies;
 - Market: limits to the market, but still strong;
 - Solidarity elements of the social health insurance model.



US: An Example of Combining Market and Hierarchy

		Type of coordination	
		Personalized coordination (living-world coordination)	Depersonalized coordination (systemic coordination)
Flexibility	low	Clan (culture)	Hierarchy (power)
	high	Network (negotiation)	US Market (money)



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Agenda

1. The problem: health spending
2. Possible explanations for the problem
3. Case 1: The German health-care system
4. Case 2: The US health reform
5. **Comparison of the German and US health-care systems:
selected facts**
6. Discussion
7. Conclusions



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science



Do Americans Suffer More Often from Economically Important Diseases?

Bias Variable	United States	Germany
Prevalence of Obesity**	25.3% (as of 2005)	13.6% (as of 2005)
Prevalence of Diabetes Mellitus***	8.3% (as of 2010)	8.0% (as of 2007)

*American Heart Association. (2009)

** OECD (2011)

*** Deutscher Gesundheitsbericht Diabetes (2011)

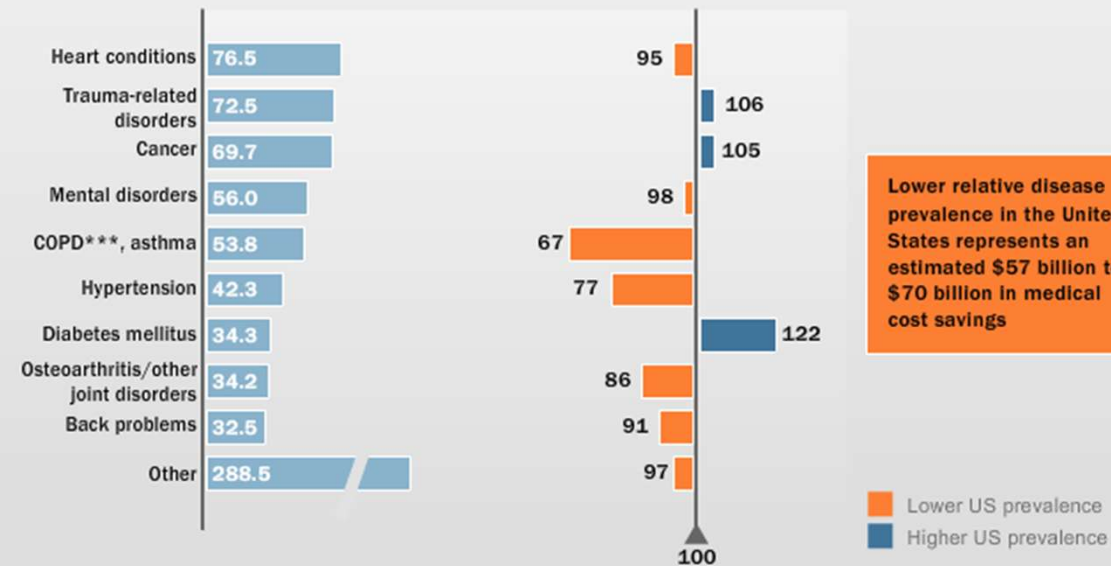


Higher Prevalence of Diseases?

Higher health care spending is not due to the disease mix: Disease prevalence in the United States is lower than in peer countries for most high-cost medical conditions

US health care expenditures by
disease condition *
\$ billion

Disease prevalence:
United States vs. peer countries **
US prevalence = peer countries at 100



* Includes 35 of 60 medical conditions surveyed by US Medical Expenditure Panel Survey; the costs of these diseases represent 35 percent of total US health expenditures.

** Peer countries are France, Germany, Italy, Spain, and the United Kingdom.

*** Chronic Obstructive Pulmonary Disease

Source: Medical Expenditure Panel Survey (MEPS), 2005; Decision Resources 2006; McKinsey Global Institute analysis



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Input Variable	United States	Germany
Number of doctor consultations per capita in 2007	4.0	7.5
Hospital discharge rate, all causes, in 2006	13,009 discharges per 100,000 population	22,038 discharges per 100,000 population



Outcome: Better Quality of Care in the US Compared with Germany

Outcome Variable	United States	Germany
Five-year breast cancer survival**	83.7%	75.5%
Five-year colon cancer survival m/f**	58.6%/60.0%	50.1%/55.0%
Five-year non-Hodgkin's lymphoma survival*** Males, aged 55–64/65–74	70.0%/64.0%	Western Europe 63.0%/51.0%

*WHO Global Health Observatory

**Coleman, M. P. et al (2008)

***Van de Schans, S. A. M. et al. (2011)



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science



Outcome: Life Expectancy and Health-Adjusted Life Expectancy

Outcome Variable	United States	Germany
Life expectancy at birth in 2007*	77.9 years	80.0 years
Health-adjusted life expectancy at birth in 2007*	70	73

*WHO Global Health Observatory

**Coleman et al (2008)

***Van de Schans et al. (2011)



Prices for Medical Procedures Vary Considerably between Germany and the US

Procedure	Charges in the United States	Charges in Germany
Bone marrow transplant	\$207,000	\$134,412
Appendectomy	\$22,900	\$3,408
Cesarean section	\$12,500	\$4,253
Arthroplasty knee	\$31,800	\$10,757
Hysterectomy	\$15,900	\$4,735



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Due to Higher Administrative Costs of the Insurer?

Germany

German SHI: 5.2% in 2009.

http://www.bmg.bund.de/fileadmin/redaktion/pdf_statistiken/krankenversicherung/Kennzahlen-und-Faustformeln.pdf

USA

9–16% (*Sherlock, 2009*)

Additional costs:

Administrative costs: insured person

Administrative costs: business

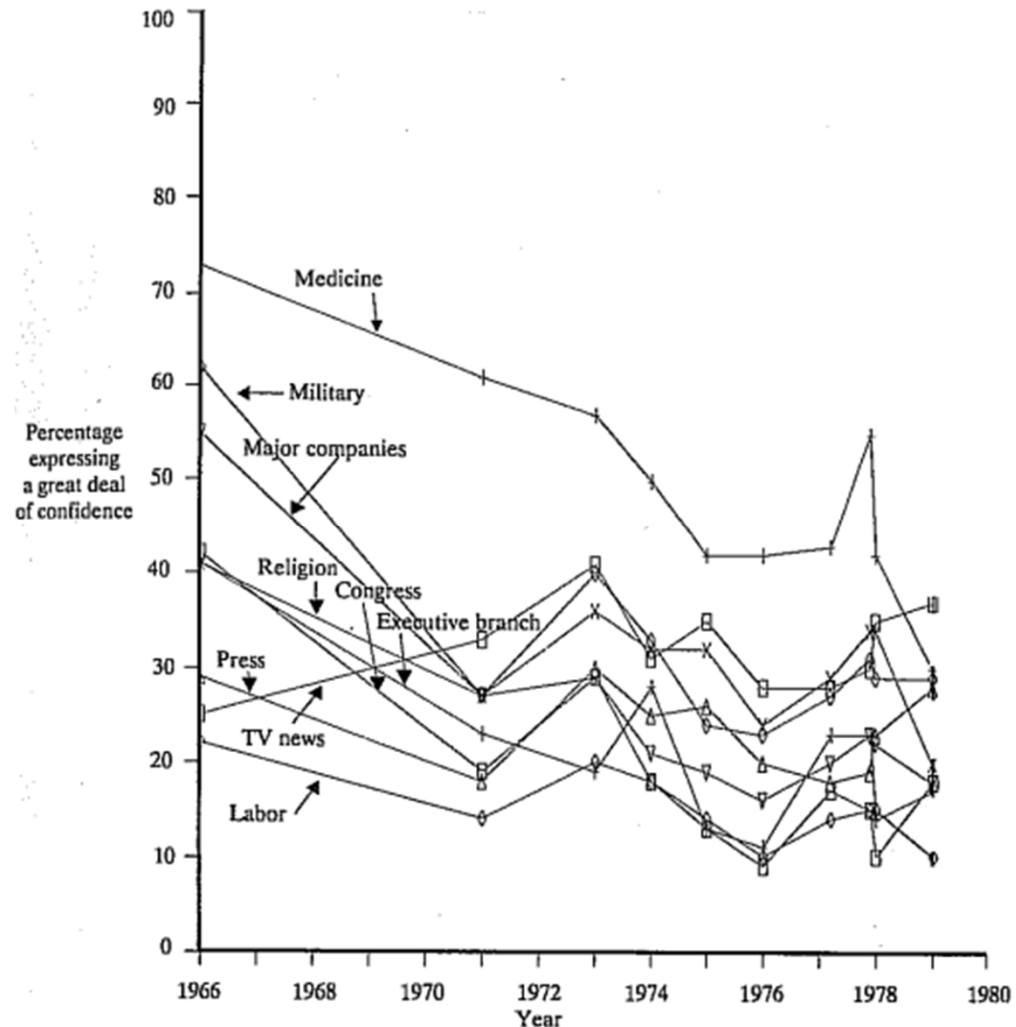
Administrative costs: health-care provider



Due to Higher Costs for Defensive Medicine?

Hypothesis

- Declining trust leads to defensive medicine
- Percentage of respondents who had “a great deal of confidence in people” running nine institutions in the United States, 1966–1979. (Coleman, J. 1990)





University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Agenda

1. The problem: health spending
2. Possible explanations for the problem
3. Case 1: The German health-care system
4. Case 2: The US health reform
5. Comparison of the German and US health-care systems: selected facts
- 6. Discussion**
7. Conclusions



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Limitations

- Exploratory analysis
- No in-depth study of the US health-care system
- Basis: only case studies
- Necessary: more data for comparisons between the US and Germany



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Food for Thought I

- Market and hierarchy are solutions if social capital is low.
- Market is an expensive coordination principle in health care (transaction costs).
- The price mechanism can not reflect all the aspects (economic, ethical, social, religious) that have to be considered to make good decisions in health care.
- Hierarchy (state) combined with collective negotiation of solutions on the self-governing level (subsidiarity) is more efficient on the system level.



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Food for Thought II

Incorporating the values of solidarity and mutual help into the health-care system leads to:

- more social capital
- more dialogs between the actors (stakeholders)
- and thus
- more social control (of unhealthy behavior or excess spending)
- mutual understanding and
- better “holistic” decisions and solutions (discussing all the relevant aspects of a problem together)



My Opinion

The US system is

- complex, decentralized and fragmented
- still missing a nationwide framework of rules and regulations
- perhaps missing the corporatist level (self-government)
- perhaps missing a benchmark goal on the system level

The US health reform leads to

- more solidarity
- but not to the necessary dialog between the social actors (physicians, hospitals, insurers, government, patients, researchers)

Social capital and social dialog create

- social consciousness and social awareness
- awareness of the collective consequences (e.g. health spending) of individual actions



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Agenda

1. The problem: health spending
2. Possible explanations for the problem
3. Case 1: The German health-care system
4. Case 2: The US health reform
5. Comparison of the German and US health-care systems: selected facts
6. Discussion
7. **Conclusions**



Conclusions

Tentative conclusions (exploratory case analysis):

- Excess health spending could be due to context costs (transaction costs, safety costs, system costs)
- Context costs are partly due to low social capital
- Market + hierarchy + dialog = a good mix



References

- American Heart Association. (2009) *Heart and Stroke Statistics 2009 Update*
- BMG (2011) *Gesetzliche Krankenversicherung. Kennzahlen und Faustformeln*. [Online] Available from: http://www.bmg.bund.de/fileadmin/redaktion/pdf_statistiken/krankenversicherung/Kennzahlen-und-Faustformeln.pdf. (Access: 02.02.2011)
- Coleman, J. S. (1990) *Foundations of Social Theory*. Cambridge: Harvard University Press
- Coleman, M. P. et al (2008) Cancer survival in five continents: A worldwide population-based study (CONCORD). *Lancet Oncology*, 9, 730-756.
- The Commonwealth Fund (2010). What will happen under health reform – and what's next? *Columbia Journalism Review*, supplement to the May/June issue.
- *Deutscher Gesundheitsbericht Diabetes 2011. (2011) Mainz*. [Online] Available from: http://www.diabetes.org/diabetes-basics/diabetes-statistics/?utm_source=WWW&utm_medium=DropDownDB&utm_content=Statistics&utm_campaign=CON. (Access: 02.02.2011)
- Ernstmann, N. et al. (2009) Social capital and risk management in nursing. *Journal of Nursing Care Quality*, 24, 340-347
- Federal Joint Committee (2011). *About Us* [Online] Available from: http://www.g-ba.de/downloads/17-98-2804/2010-01-01-Faltblatt-GBA_engl.pdf. (Access: 02.02.2011)
- Klusen, N. (2009) The German Health Care System in an International Context, Lecture, University of Michigan, 8th September 2009.
- McKinsey Global Institute (2008) *Accounting for the Costs of U.S. Health Care: A New Look at Why Americans Spend More*.
- Mulford, C. (1976) Comment on measurement of effectiveness. *Administrative Science Quarterly*, 21, 156-157.
- OECD. (2011) *Health Data 2010*. [Online] Available from: http://www.oecd.org/document/30/0,3343,en_2649_34631_12968734_1_1_1_1,00.html. (Access: 02.02.2011)



References

- Pfaff, H. & Schrappe, M. (2010) *Einführung in die Versorgungsforschung*. In: Pfaff, H. et al (eds.) *Lehrbuch Versorgungsforschung*. Stuttgart, Schattauer. p. 4
- Reinhardt, E. (2008) Why Does U.S. Health Care Cost So Much? Part I. *The New York Times*, November 14, 2008.
- Schwartz, F. W. et al (eds.) (2003) *Das Public Health Buch : Gesundheit und Gesundheitswesen*. 2nd edition. München: Urban & Fischer
- Sherlock, D.B. (2009) Administrative Expenses of Health Plans. Sherlock Company.
- Social Security Code No. V.
- WHO Global Health Observatory. [Online] Available from: <http://apps.who.int/ghodata/?vid=720> (Access: 02.02.2011)
- Van de Schans, S.A.M. et al. (2011) Improving Relative Survival, but Large Remaining Differences in Survival for Non-Hodgkin's Lymphoma Across Europe and the United States from 1990 to 2004. *Journal of Clinical Oncology*, 29,192-199



University of Cologne
Faculty of Human Science
Faculty of Medicine

Institute for
Medical Sociology,
Health Services Research
and Rehabilitation Science

i:mvr

Contact

Univ.-Prof. Dr Holger Pfaff

holger.pfaff@uk-koeln.de

www.imvr.de

IMVR
Eupener Str. 129
50933 Cologne
Germany
+49 221 47897100

