



1st Annual Meeting of Senior Budget Officials (SBO) Network on Health Expenditure;  
OECD Conference Centre, Paris, 21-22 November 2011

## **Improving value for money from a health economics perspective**

Klaus-Dirk Henke, TU Berlin

Short introduction: **A new understanding of health**

- » **Perspective 1:** A functional approach by objectives
- » **Perspective 2:** An institutional approach by sources of funds
- » **Perspective 3:** The empirically based economic benefit of the health economy (value added, export, import, employment etc.)
- » **Perspective 4:** Improving value by avoiding inefficiencies

Summary: **Improving value for money**

# Short introduction: A new understanding of healthcare

Towards an open health society

## OLD UNDERSTANDING

## NEW UNDERSTANDING

Part of healthcare



is the health economy

Instead of mainly public financing



new financing methods, second health market; new methods of paying providers (P4P)

Less of input orientation



better quality, more outcome orientation

Instead of health care as cost factor



growing sectors, increasing work force, new career opportunities

Instead of healthcare consumption



investment in health to promote growth and productivity

Instead of separate silos, e.g. the Statutory health insurance



health in all areas of life and lifelong; less fragmentation



### **Economic Resources – how to use them?**

1. From a macroeconomic point of view (top down)
2. From a mesoeconomic point of view (sectoral/ regional)
3. From a microeconomic point of view (bottom up)

# Perspective 1: A functional approach by objectives

From a macro- and mesoeconomic point of view

## Economic Resources – how to use them (top down)?

Macrolevel

Education, science,  
research

Mass transit,  
Transportation

Environment,  
climate protection

Defense

Old-age incomes,

Family policy, child care

Development assistance

**HEALTH**

etc.

Mesolevel 1

Prevention and  
health promotion

Medical treatment of patients  
with acute and chronic  
diseases and healthy  
persons including

drugs, remedies and  
Medical appliances

Rehabilitation

Sick pay

Dental treatment

Psychosocial care

Nursing care

**Objective**

**conservation, promotion and regeneration of health**



# Perspective 1: A functional approach by objectives

## From a health economics perspective

**Macrolevel: There is no optimal Health Expenditures Quota.**

**Mesolevel 1 : There is no optimal structure within health care.**

- » But: Resources should be invested, where the health benefit is the highest or
- » „Value defined as the health outcomes achieved per dollar spent“ (M. E. Porter);
- » On the basis of evidence-based-medicine (EBM) and health technology assessment (HTA)

**Solution:** An Ex-ante-Macro-Allocation of resources is indispensable!

But: through whom, which mechanism and through which institution? NICE and similar institutions? The role of competition, of ministries and of the parliament?

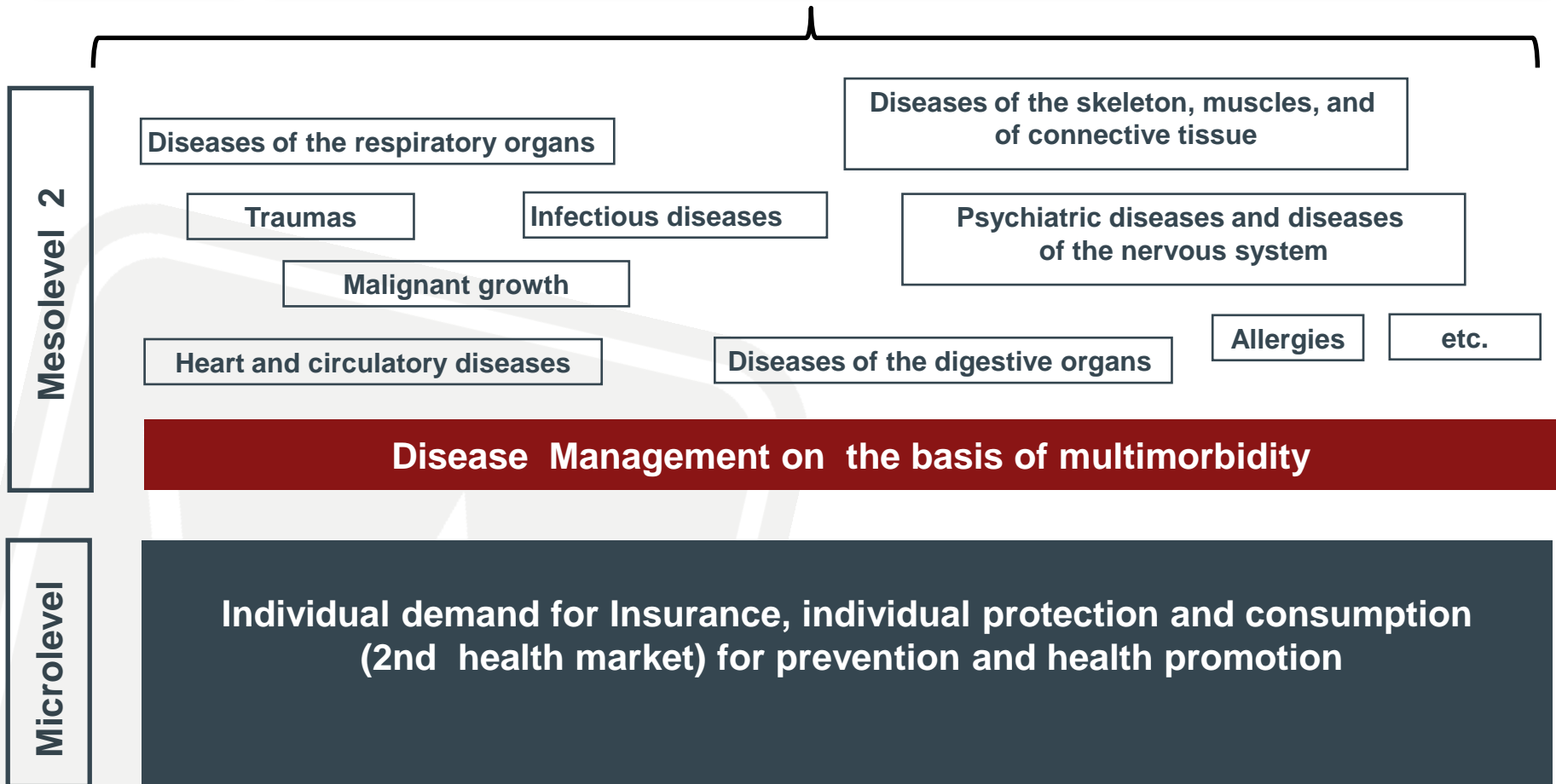


# Perspective 1: A functional approach by objectives

Economic Resources – how to use them (bottom up)?

**Objective**

**Avoidable Mortality, Morbidity and Invalidity**



# Perspective 1: A functional approach by objectives

## From a health economics perspective

- » **Mesolevel 2:** Cost-of-illness studies show us the most expensive diseases according to expenditures, life years lost etc. and are a basis for priority setting
- » **Microlevel:** Empowerment of the patient. Enabling the population to enjoy a healthy lifestyle
- » Freedom to choose health insurance coverage, the doctor, the hospital etc. as far as possible
- » **Challenge:** The correlation between health and growth (three hypotheses)





# Perspective 1 : A functional approach by objectives

A positive correlation between health and growth

## Three key hypotheses



**Healthy aging raises productivity and thus gives a supply-side boost to growth and quality of life**



**Healthy aging gives a demand-side boost to GDP by growing private demand for non-reimbursable health-related goods and services**



**A healthy society saves money on treatment, rehabilitation and nursing care and stabilizes expenditures**

# Perspective 2: An institutional approach by sources of funds

## Eight financing agents in a Bismarckian System

Total expenditures on health, € 278,3 bn. (2009), 100%

1	2	3	4	5	6	7	8
Private households private non-profit organisations	Private health insurance	Statutory health insurance	Statutory pension insurance	Social long-term care insurance	Statutory accident insurance	Employers	General government excl. social security funds
€ 37,50 bn	€ 25,96 bn	€ 160,86 bn	€ 4,01 bn	€ 20,31 bn	€ 4,46 bn	€ 11,60 bn	€ 13,66 bn
13,5%	9,3%	57,8%	1,4%	7,3%	1,6%	4,2%	4,9%

### Forms of Financing

Out-of-pocket payments	Risk-oriented premiums	Social insurance contributions: Employer and employees			Risk-oriented social insurance contributions (only employer)	Continued (sick)pay	General revenue, i.e. mainly taxes
------------------------	------------------------	--	--	--	--	---------------------	------------------------------------

Source: [www.gbe-bund.de](http://www.gbe-bund.de)



# Perspective 2: An institutional approach by sources of funds

From a health economics perspective

## Are 8 fiscal agents necessary? Are single-payer systems better?

1. Should hospital financing (current outlays and investment expenditures) be in one hand? **YES**
2. Should statutory health insurance and long term insurance be in one hand? **YES**
3. Should rehabilitation (currently divided between health insurance and pension insurance) be in one hand? **YES**
4. Does the current „system“ of private and statutory health insurance in Germany need a reform? **YES**



# Perspective 3: The economic benefit of the health economy

## German Health Satellite Account (GHSA)

- » The Technical University Berlin together with Roland Berger and BASYS / WifOR and in close cooperation with the **Federal Statistical Office** was **commissioned by the Federal Ministry of Economics and Technology** (BMWi) to create a so-called satellite account on the basis of the National Accounting System
- » The research project with the Federal Ministry of Economics and Technology (BMWi) runs until the end of 2012



# Perspective 3: The economic benefit of the Health economy

## Basic values of the German health economy from 2005 to 2008

### Key figures [EUR bn]

	2005	2006	2007	2008 <sup>1)</sup>	change 08 to 05	
<b>Total output of goods</b>	373.98	392.61	412.61	428.34	54.36	14.54%
Share of overall economy	7.80%	7.64%	7.63%	7.67%		
<b>Production value</b>	327.14	339.06	353.32	367.54	40.40	12.35%
Share of overall economy	8.08%	7.94%	7.86%	7.96%		
<b>Gross value added</b>	203.22	208.79	214.64	223.74	20.52	10.10%
Share of overall economy	10.04%	9.96%	9.86%	10.06%		
<b>Consumption expenditures</b>	273.47	281.31	289.36	299.33	25.86	9.46%
Share of overall economy	17.33%	17.44%	17.77%	17.88%		
<b>Exports</b>	54.78	63.78	71.51	72.84	18.06	32.98%
Share of overall economy	6.09%	6.19%	6.41%	6.29%		
<b>Employed persons [tsd.]</b>	5.315	5.342	5.439	5.593	278	5.24%
Share of overall economy	13.69%	13.67%	13.69%	13.89%		

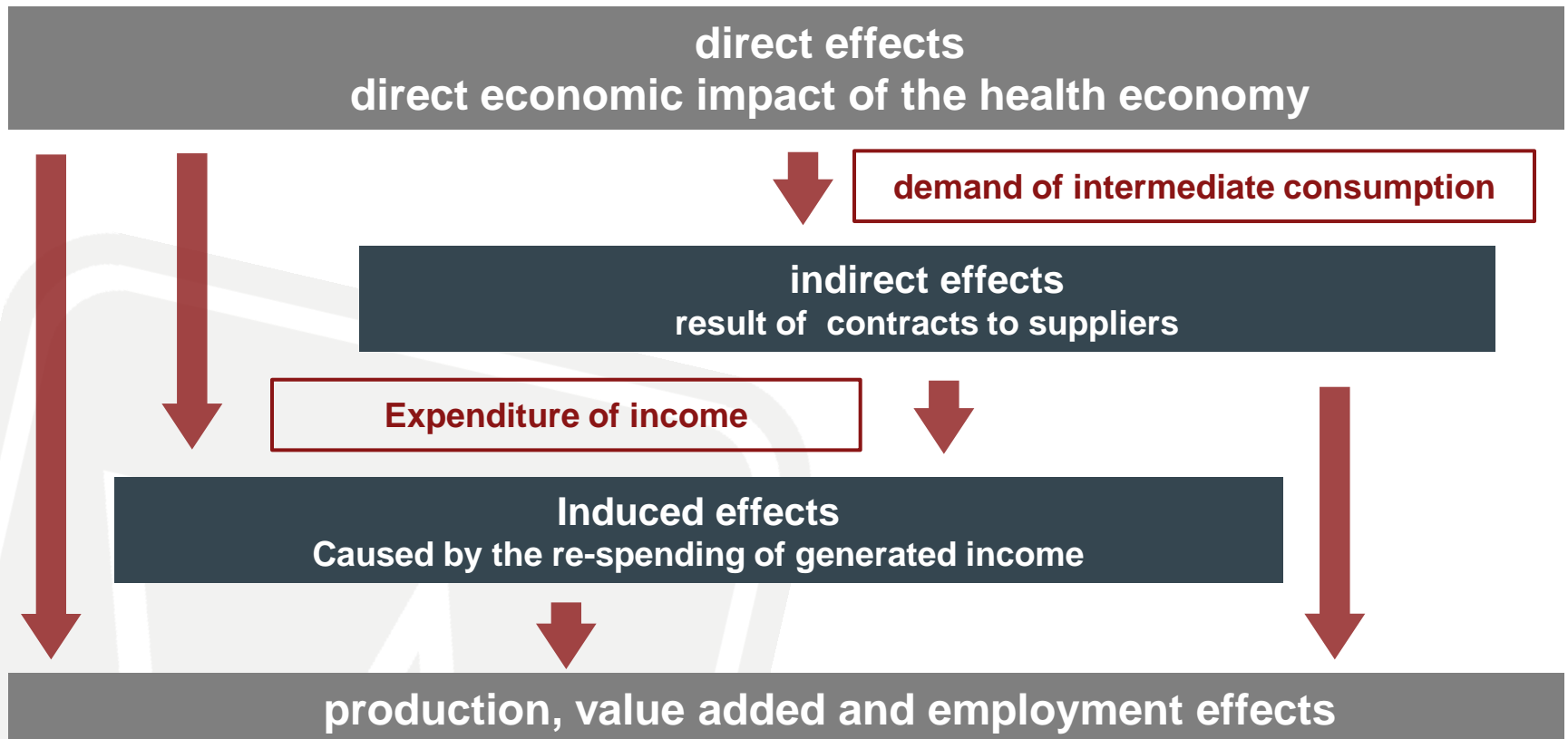
1) extrapolation

Source: health economy total account, at current prices.



# Perspective 3: The economic benefit of the health economy

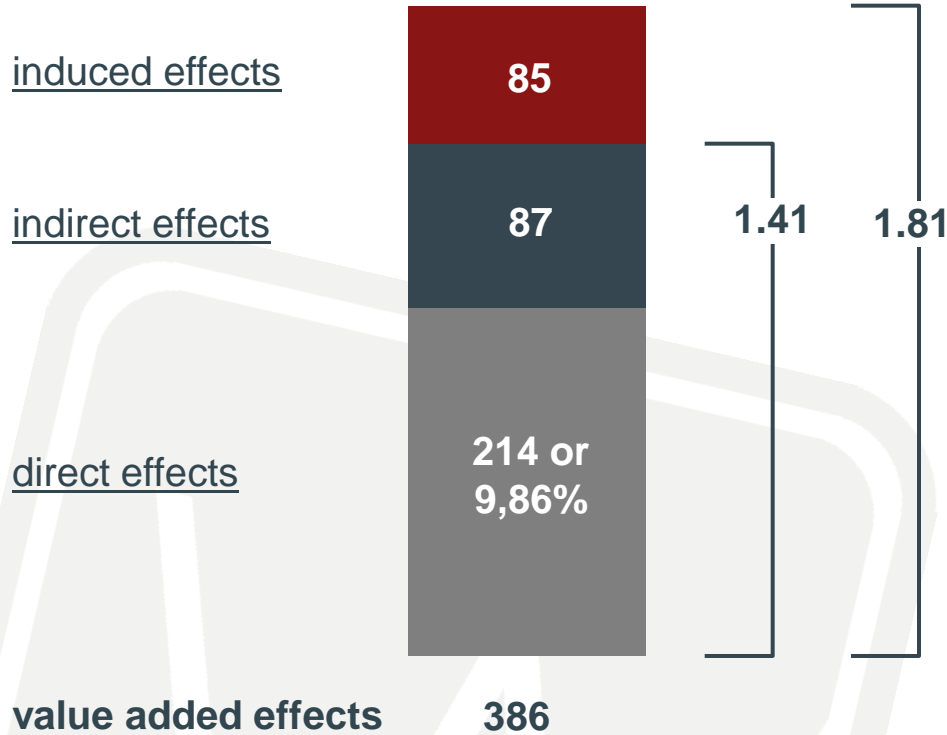
## Simplified illustration of the formation of spillover effects



# Perspective 3: The economic benefit of the health economy

## Generation of considerable indirect and induced value added effects

### value added effects<sup>1)</sup> [EUR bn.]



- » Through the value added of the health economy, additional indirect and induced effects with a value of EUR 386 billion are generated
- » The multiplier for the indirect value added effects (including the direct ones) is 1.41, i.e. **one Euro produced in the health economy generates an additional production of 0.40 EUR in the upstream industries**
- » By taking the consumption of generated incomes into account the multiplier rises to 1.81

1) Model calculations based on the 2007 HIOT domestic production (excluding imports and processing of production)

Source: HETA



# Perspective 3: The economic benefit of the health economy

## Next steps in the current research project

### **What is the health economy after all?**

Within the National Accounting Systems it is an economic sector similar to many others.

**OPEN QUESTION:** What is the connection between the economic dividend and the health dividend of the health economy?

### **Perspective 4:**

Measurement of the macro, meso and micro performance in regard to structure, process and outcome of the health sector





# Perspective 4: Measuring performance in the health care sector

## What is the health care sector ?

- » Health system, Health care system, Health market, Health economy, the Health institutions, Health care industry, the Public health system, the Beveridge or the Bismarckian-System? A healthy society or
- » **just a bundle of health indicators collected with the**
- » National Statistical Office,
- » Eurostat,
- » OECD,
- » WHO and the
- » World Bank.



# Perspective 4: Measuring performance in the health care sector

## What do international comparisons tell us?

**International comparisons are indispensable and always subject to improvement.**

- The “open method of coordination” and “best practice at low cost” may hopefully come out of international comparisons. Learning by comparing is the message.

Pros

Cons

- Ranking is always arbitrary, its contents depends on the persons, the commissions etc. and the interests behind them; there is no overall truth or rationality.

### What is meant by „value“ ?

„Value should be measured for defined groups with similar needs“

„The only way to accurately measure value, is to track patient outcomes and costs longitudinally“ Michael E. Porter

In addition there is  
the social and economic benefit of better health  
and the welfare benefit for the society.  
Avoiding wasteful activities improves „value for money“.

# Perspective 4: Measuring performance in the health care sector

## Improving value for money

There are inefficiencies in all systems at all times, i.e. there are always possibilities to improve value for money from a health economics perspective (1):

### More value

- » through improving care coordination and better navigation of patients
- » by avoiding overuse and inappropriate use of resources and through better financial incentives
- » through more disease management programmes and centers of competence
- » through maintenance and promotion of an independent lifestyle and autonomy by the elderly



### More value

- » by paying for performance; more selective contracting
- » by involving patients more in their own care
- » through a more entrepreneurial and innovative behaviour
- » through evidence-based health policy
- » through a consistent basic legal framework and binding guidelines

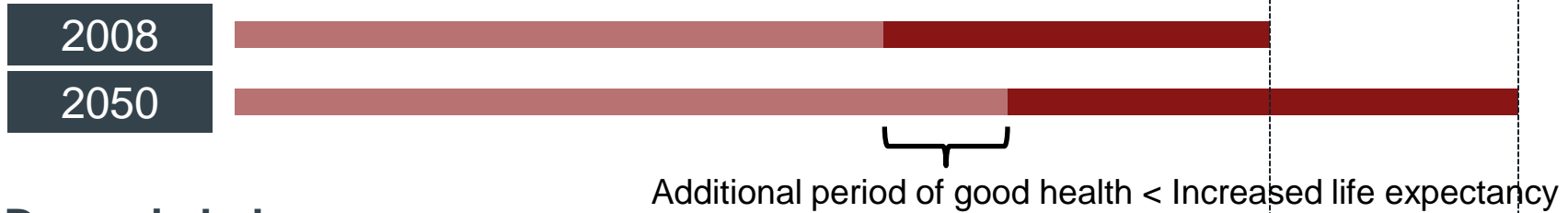
And last but not least:

**Health assessment (HA) as the major scientific challenge**

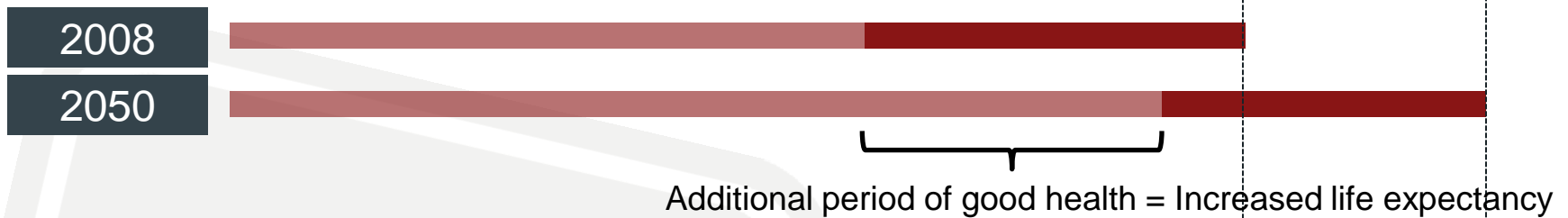
# Perspective 4: Measuring performance in the health care sector

## Health assessment as a major scientific challenge

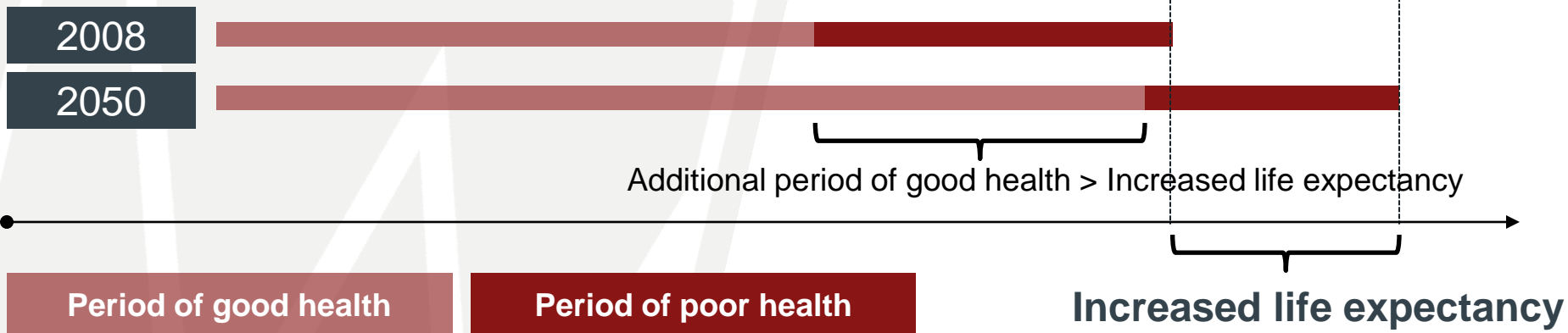
### Expansion of morbidity



### Dynamic balance



### Compression of morbidity



# Improving value for money from a health economics perspective

## Summary

» **Perspective 1:**

There is no optimal health expenditure Quota and no optimal structure for health expenditures

» **Perspective 2:**

How many fiscal agents are necessary? Germany has too many

» **Perspective 3:**

The economic benefit of the Health economy (export, value added, consumption, employment etc.) should be measured regularly on the basis of the National Accounting system.

» **Perspective 4:**

Additional healthy life years as a major policy objective

There is no gold standard or panacea for balancing the competing demands for resources, quality and access,

**but the OECD approach comes close to it.**



# Selected literature

- » Henke, K.-D., Ostwald, D., Health Satellite Account – A First Step, Berlin 2011, in print.
- » Henke, K.-D. The Funding and Purchasing of Health Care – A Book with Seven Seals, in : Journal of Public Health , Bd. 14, Nr. 6, 385-390, 2006
- » Joumard, I., André, C., and Nicq, Ch., HEALTH CARE SYSTEMS: EFFICIENCY AND INSTITUTIONS, ECONOMICS DEPARTMENT WORKING PAPERS No. 769, OECD JT03283813
- » Kickbusch, I., ed., Policy Innovation for Health, Berlin 2009
- » OECD Health Policy Studies, Value for Money in Health Spending, 2010
- » Orosz, E. and D. Morgan (2004), “SHA-Based National Health Accounts in Thirteen OECD Countries: A Comparative Analysis”, *OECD Health Working Papers*, No. 16, OECD Publishing. <http://dx.doi.org/10.1787/131855120122>
- » Paris, V., M. Devaux and L. Wei (2010), “Health Systems Institutional Characteristics: A Survey of 29 OECD Countries”, *OECD Health Working Papers*, No. 50, OECD Publishing. <http://dx.doi.org/10.1787/5kmfxfq9qbnr-en>
- » Porter, M.E., What is the Value in Health Care, *N Engl. J. Med* 363;26; p 2477-2481
- » Schick, A., Budgeting for Fiscal Space, *OECD Journal on Budgeting*, Vol. 2009/2
- » Tandon, A., and Cashin, C., Assessing Public Expenditure on Health From a Fiscal Space Perspective

