



# **Understanding the impact of developing socio-economic trends and how this will impact on consumption in the healthcare sector**

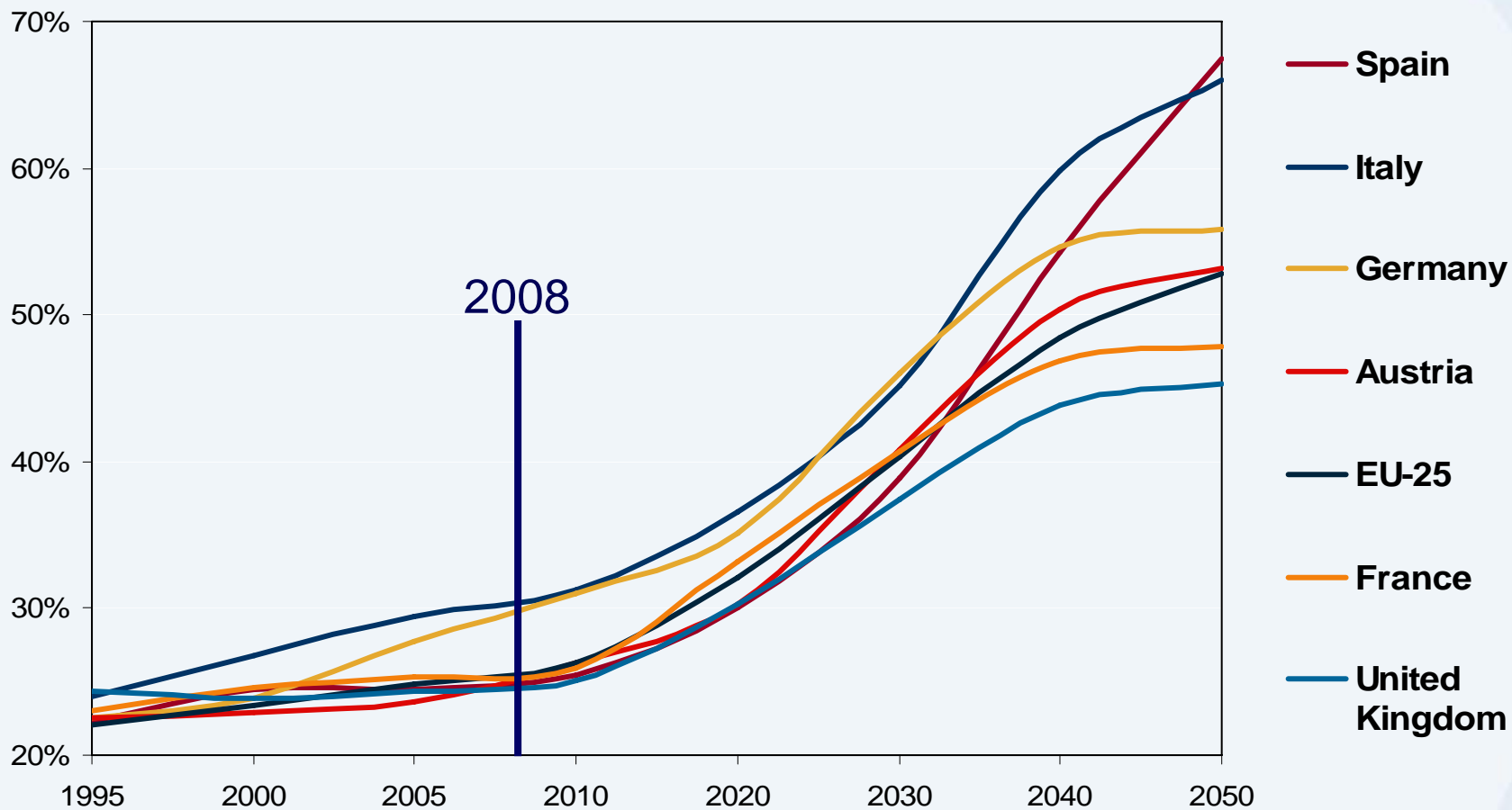
**E.N.G.'s 2nd senior executive pan European summit:  
Converting Consumer Insights into Actionable Results**

Amsterdam, 6 March 2008

**Dr. Andreas Heigl, Senior Manager Government Affairs**

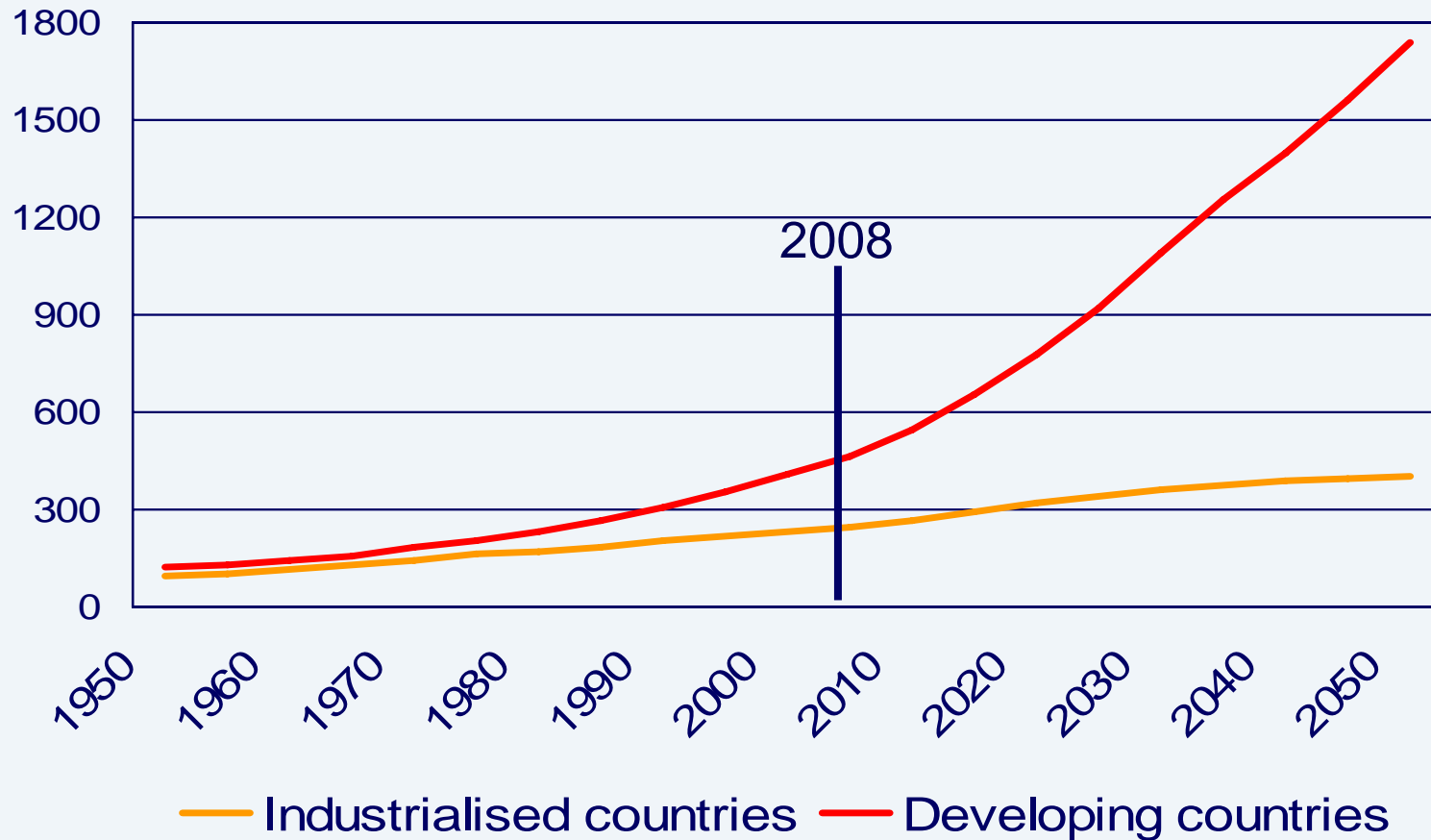
# The demographic change in Europe

Ratio 65+ year-olds vs. 15 to 65 year-olds (percent)



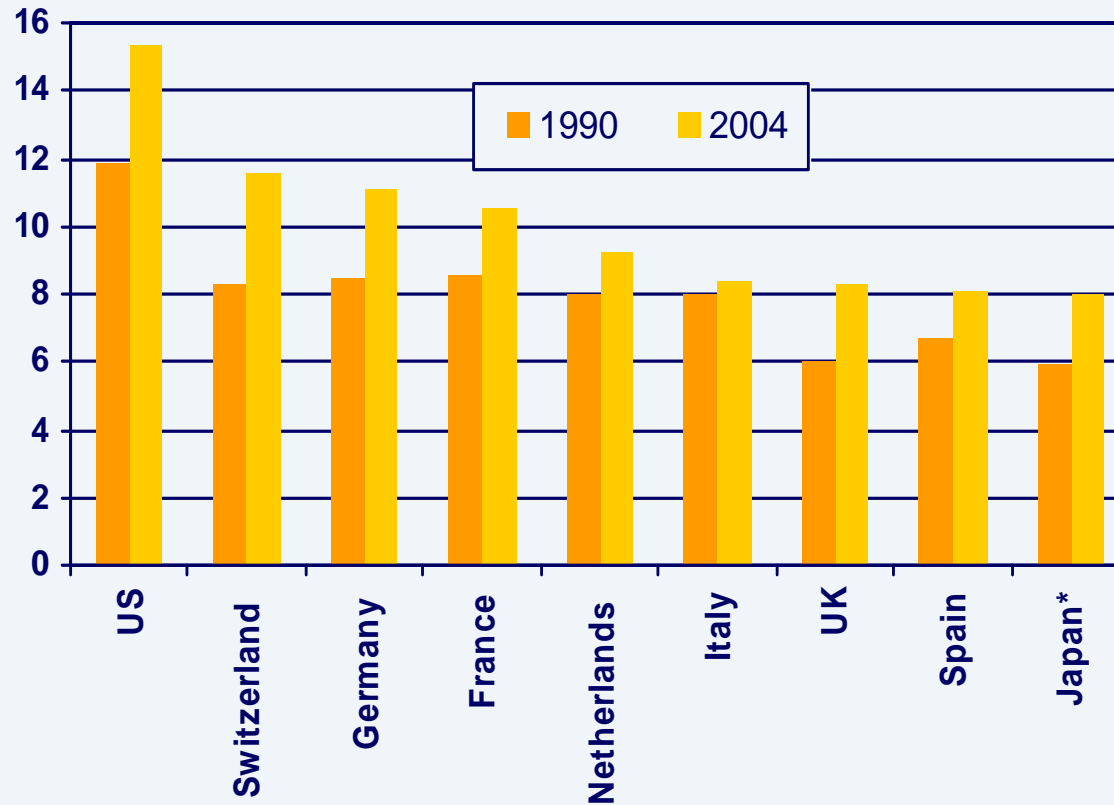
# Ageing is a global phenomenon

Number of 60+ year-olds in Mio.



# Healthcare expenditures are rising in all countries

GDP share on health expenditure

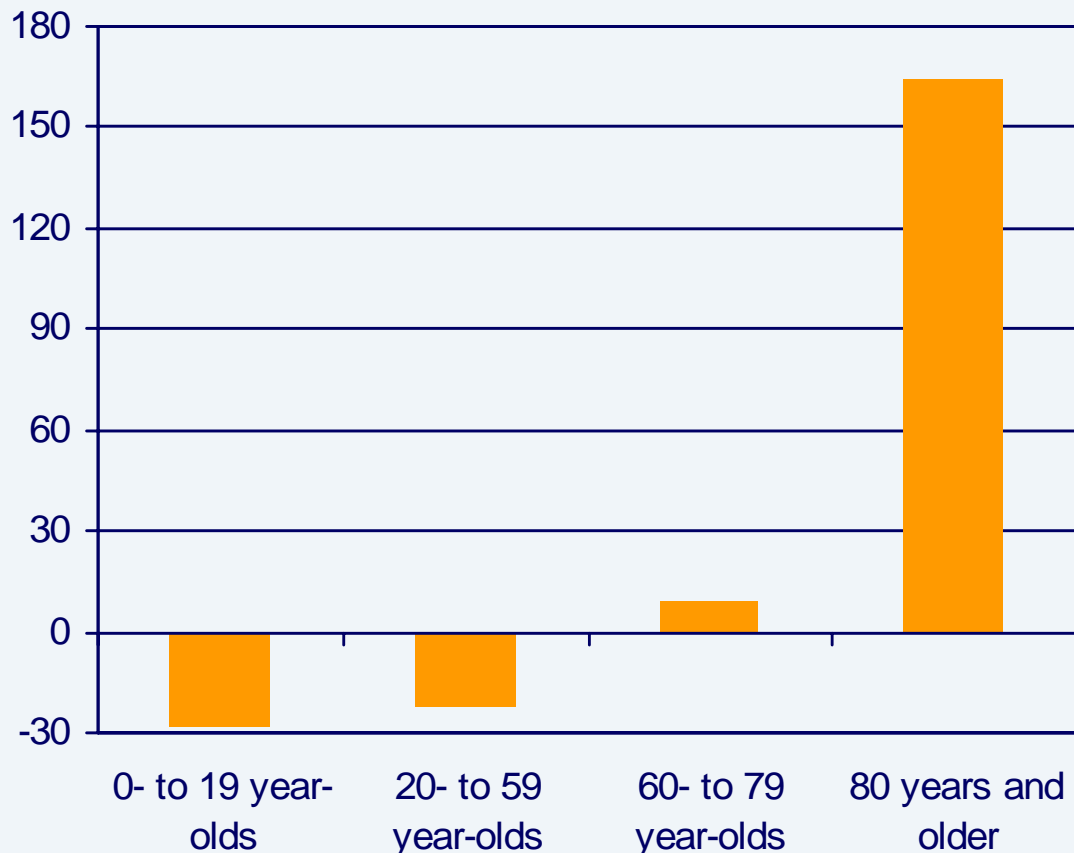


- Healthcare expenditures are rising since 1990 and so has the market for health care goods.
- In the US and Switzerland health expenditures have been rising higher than average.

Source: OECD Health Data 2006, \*2003

# Demographic shift of specific age-groups: geriatricisation of the health care system?

shift of age-groups 2050 shown in percentage of 2003 (Germany)

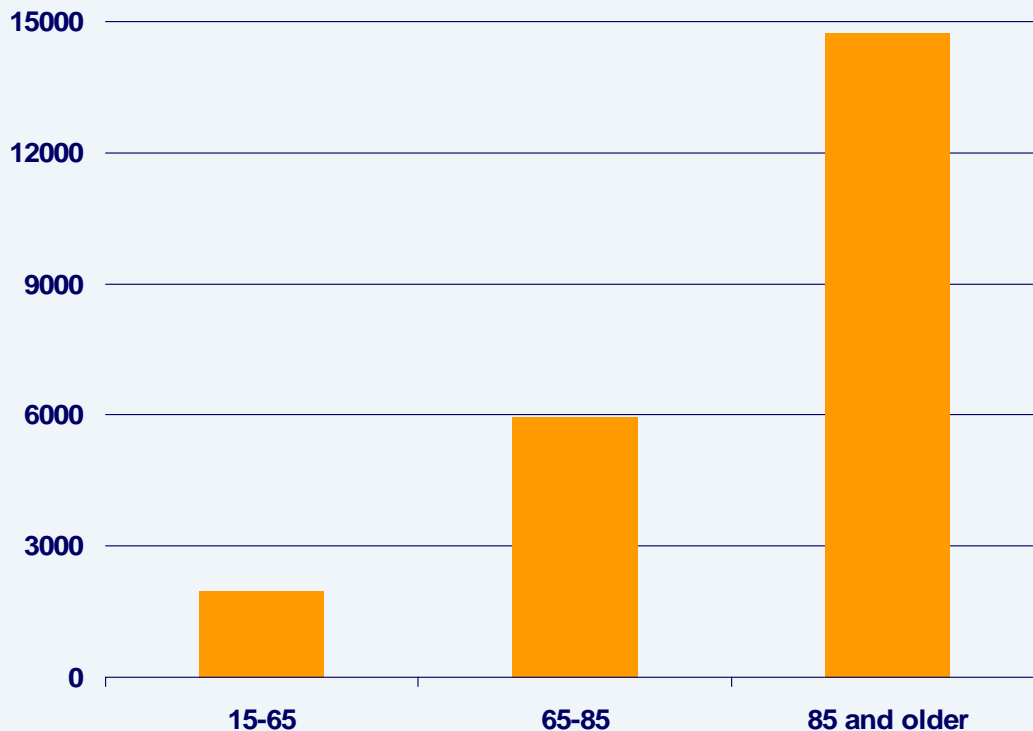


- The age-group over 80 is growing very fast and at the same time is mainly affected by health expenditures and multi-morbidity.
- Regarding the demographic trend we have to hope that people will stay healthy longer during their lifetime.
- The advance in diagnostics and medical therapy should be able to weaken the demographic effects.

Source: Federal statistical office, population forecast

# Age pattern and health expenditures

Expenditure for healthcare services in specific age-groups  
(Euros per head, Germany)

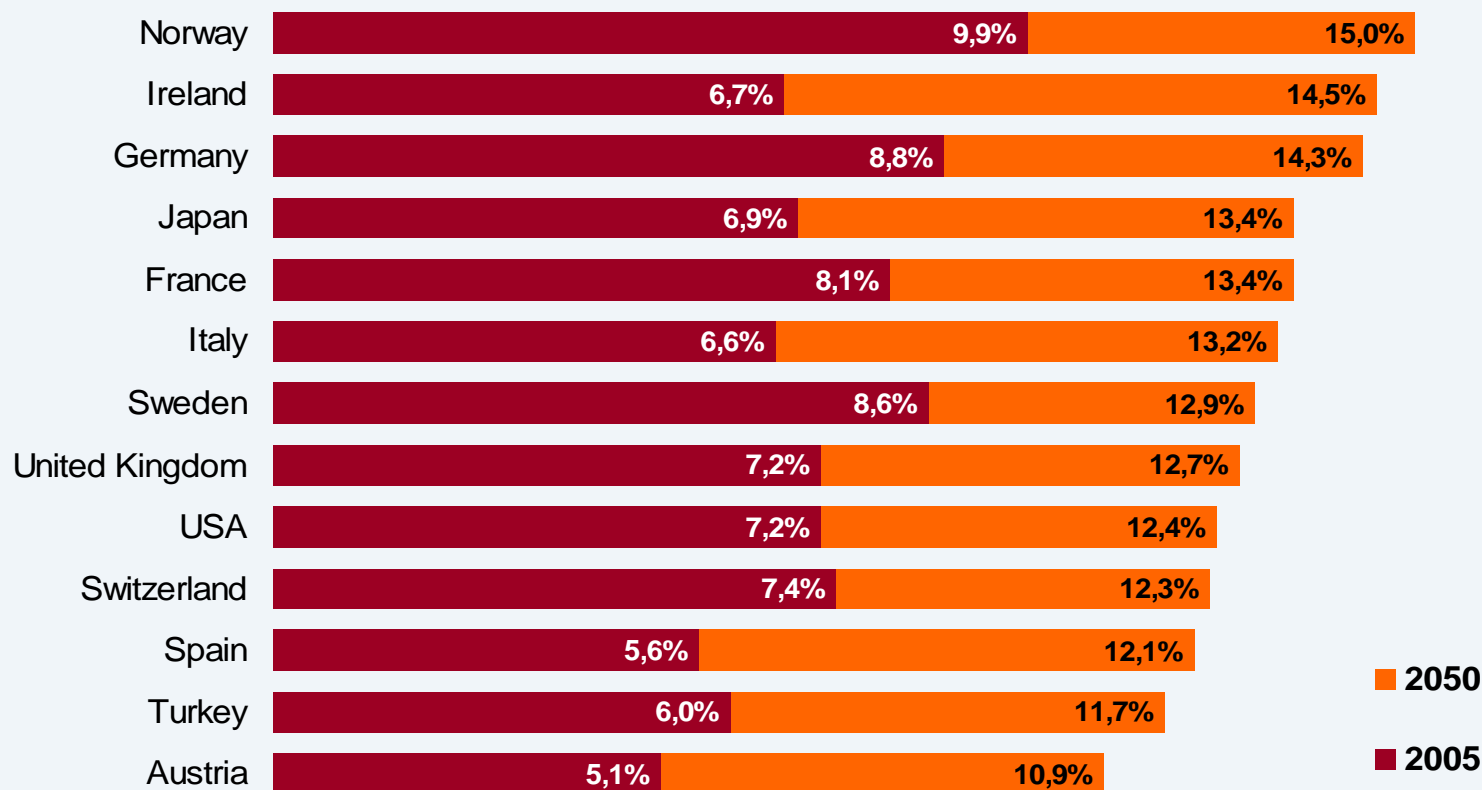


- Healthcare expenditures for the over 85 year-old population exceeds the expenditure figures of younger cohorts by far.
- This is mainly a result of the increasing life-expectancy. (Most of health expenditures during lifetime is spent within the last year before death.)

Source: Federal Office of Statistics

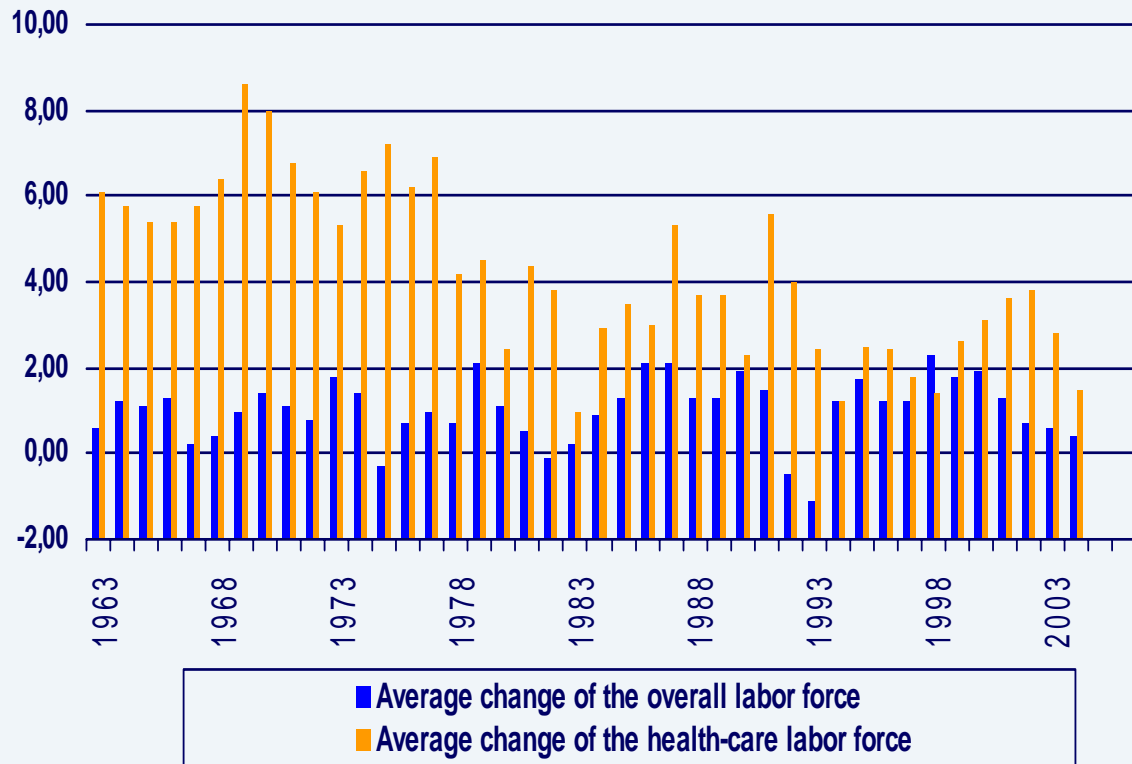
# Healthcare expenditures for older people are rising

Expenditure for health and care of the elderly (percent of GDP)



# The health care market - one of the biggest employers worldwide

Change in percent compared to the previous year (OECD countries)

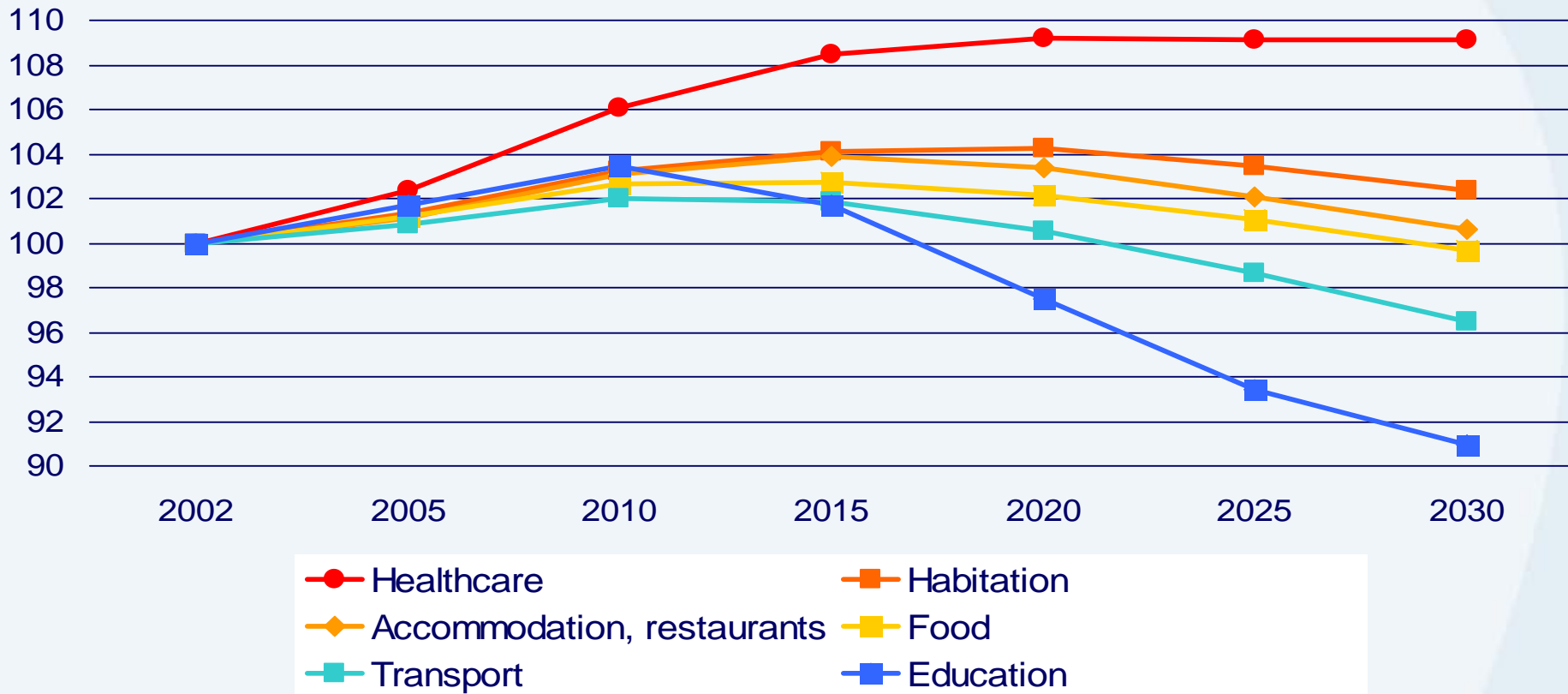


- In industrialized countries the rise in jobs in the healthcare market exceeds the rise in overall labor force.
- The rise of jobs within the health care sector is a main indicator for its growth potential.
- But: the dynamic is lower than in the past

Source: OECD Health Data

# Demographic effects on the spending behavior

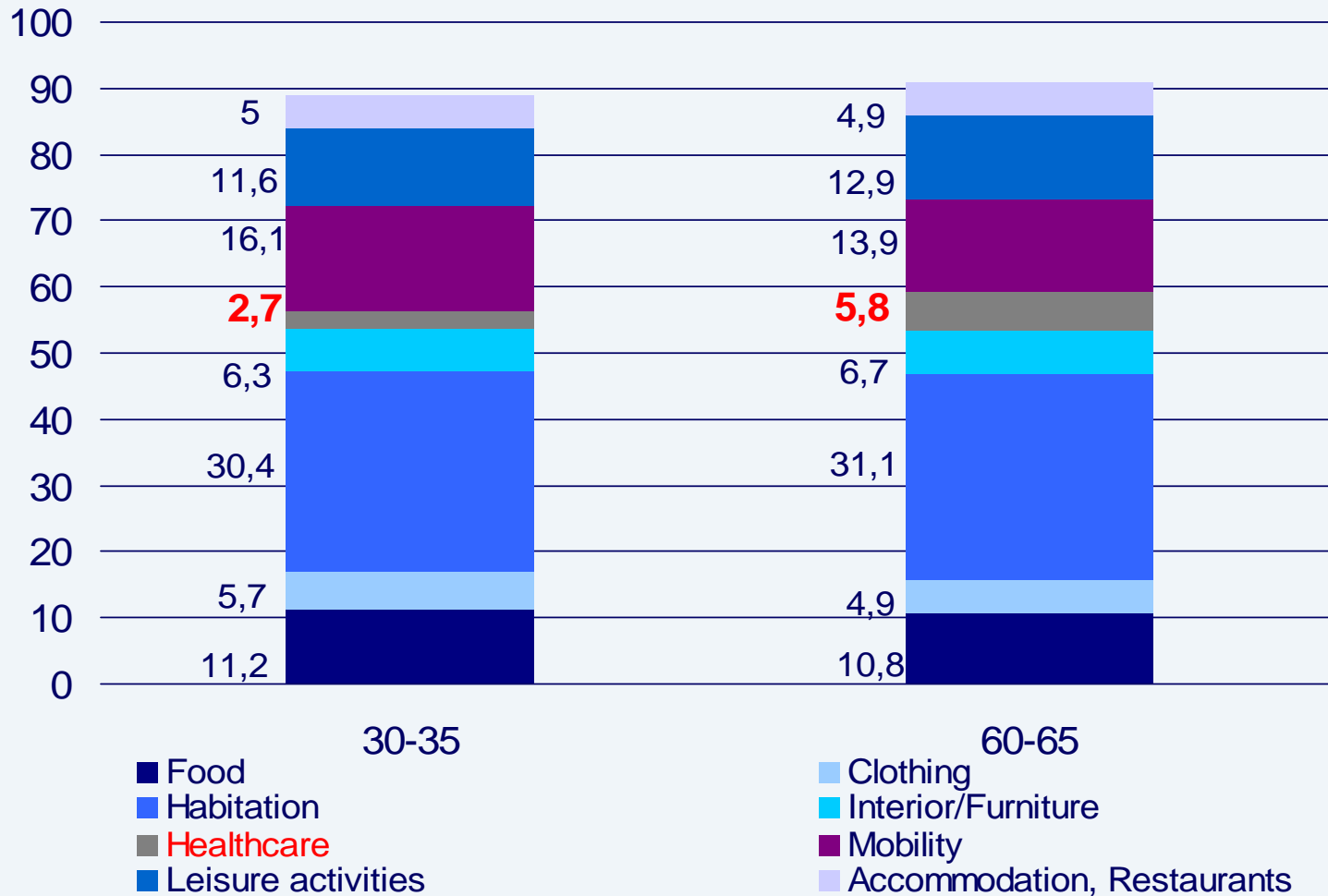
2002 = 100 (Germany)



Source: 10th coordinated population forecast (variant 5), Income and consumption sample 2003; my own calculations

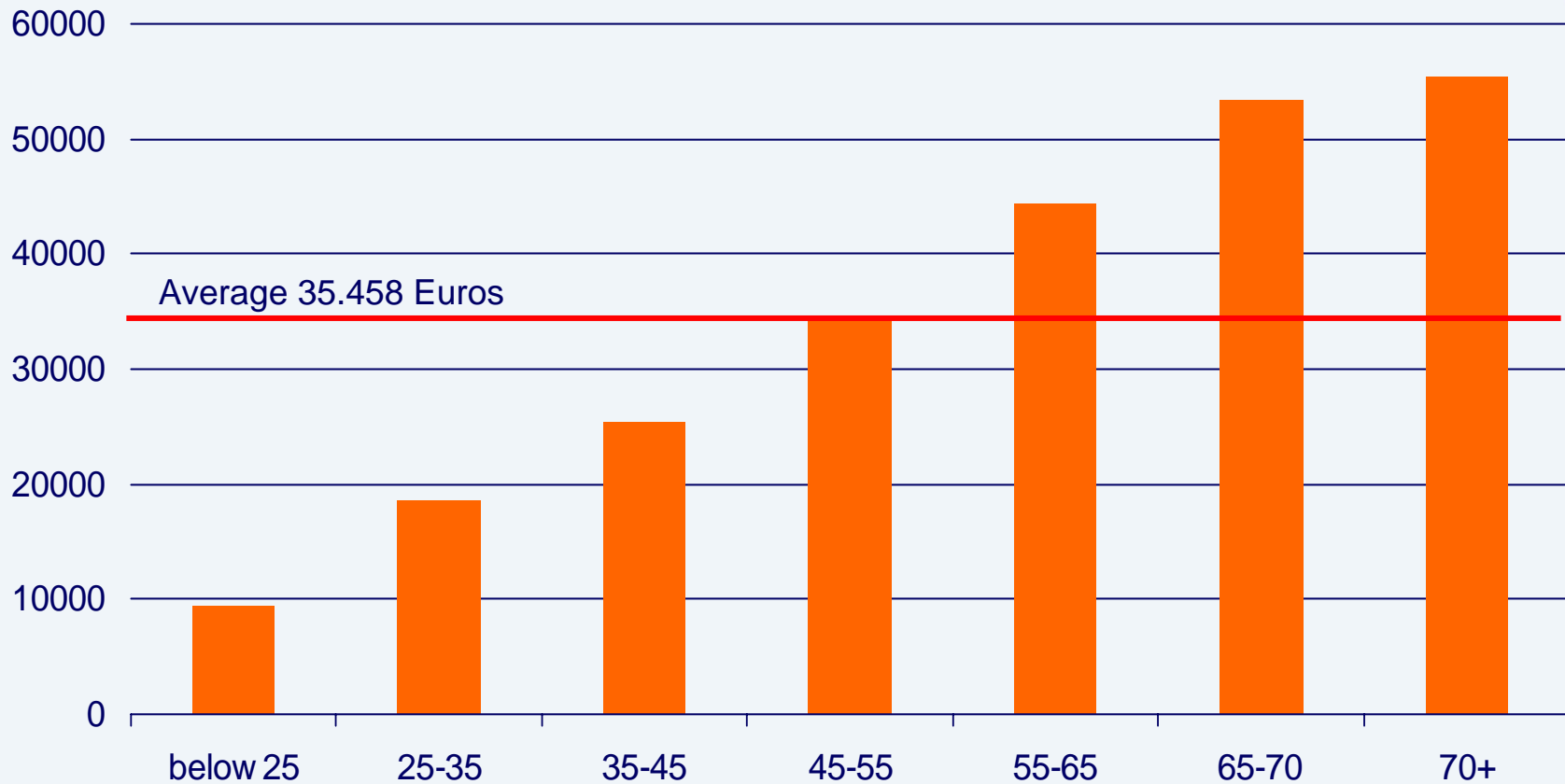
# Spending behavior – only slight differences between generations

In percentage of the overall spending figures for specific age-groups



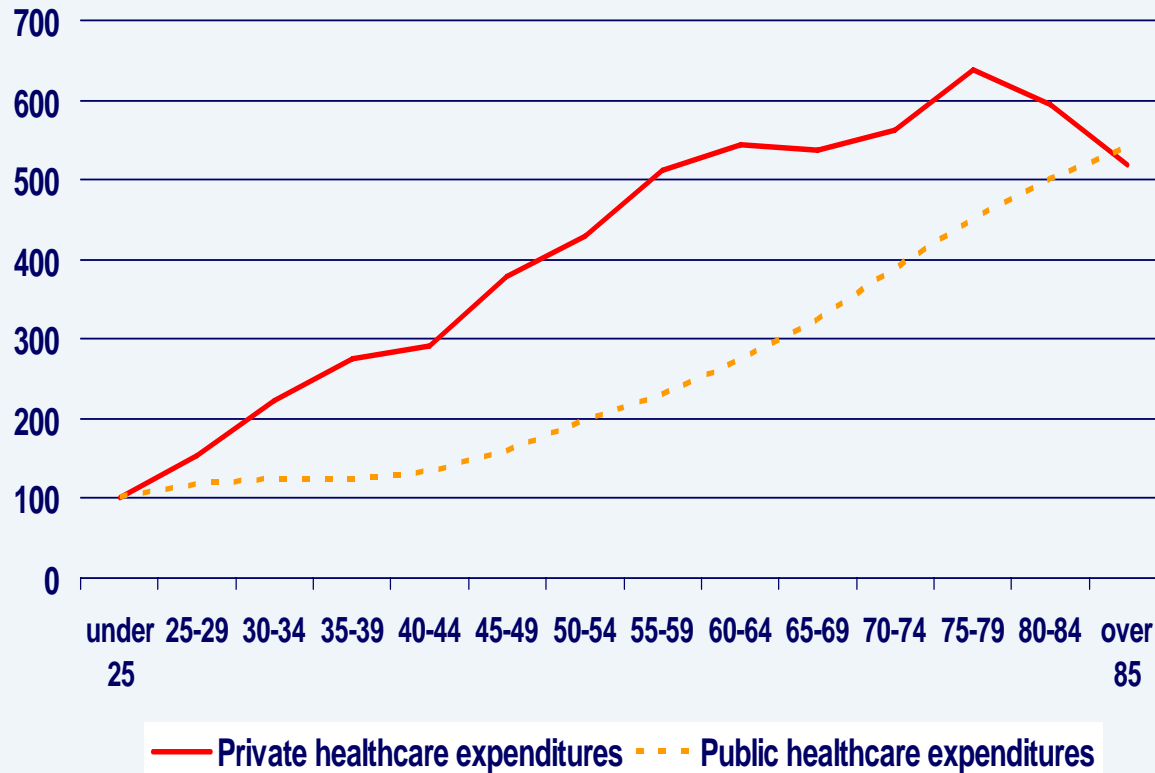
# The older, the richer

Gross-capital-assets according to age groups in Euros  
(Germany)



# Gap in demand structure for healthcare

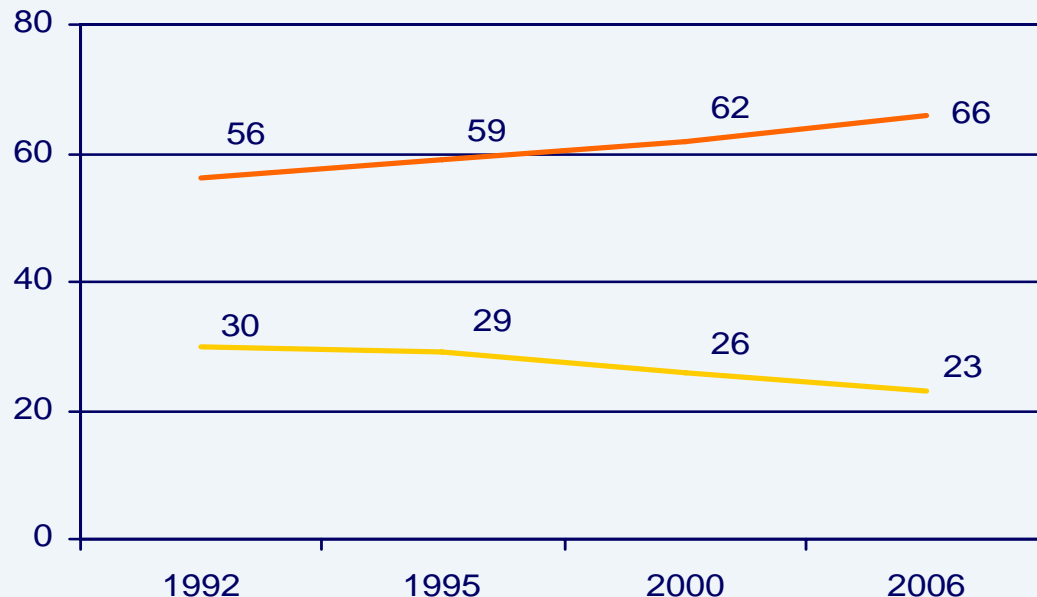
Expenditures of below 25 year-olds are standardized to 100



- Private healthcare services are already claimed with younger age.
- Healthcare insurance services increase by age.
- Healthcare service suppliers should take the age-gap of their clients into consideration!

# Self-medication – a new trend?

in percentage of the interviewed population over 14



— If I feel ill, I go to see a GP. I hardly get drugs without seeing a doctor before.  
— If I feel a little ill, I go to pharmacy to obtain medication

- The trend to a higher level of self-medication can be seen as a sign of empowered patients.
- The main self-medication consumption are drugs like pain-killers without prescription.

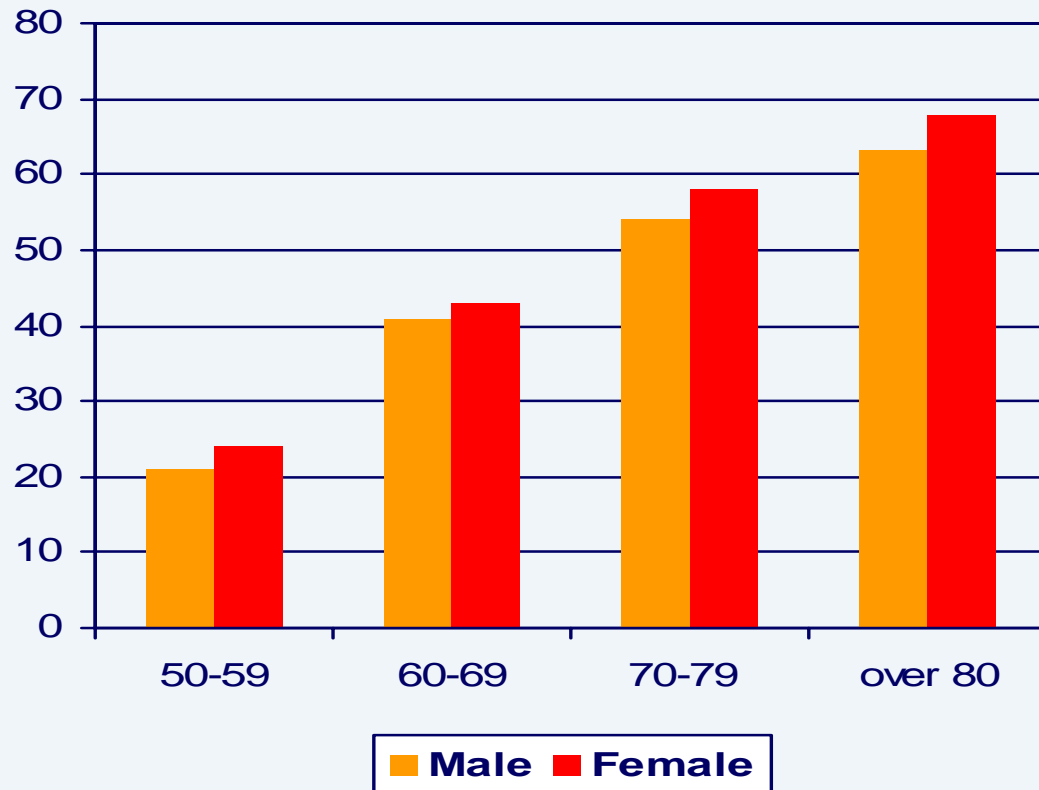
Source: Institute for Demoskopie Allensbach; each year with around 21.000 respondents

# Growth factors in the health-care market

- ◆ **Socio-demographic evolution**
  - ◆ demographic ageing, changing family structures
  - ◆ „Anti-Aging“-movement
- ◆ **Medical and technological innovations**
  - ◆ Biotechnology, stem-cell-technology, genetic engineering
  - ◆ e-Health (e-card, online-consultation, online-screening etc)
- ◆ **Positive income elasticity**
  - ◆ health as a superior good for the people
  - ◆ development of a health consumer market

# Multi-morbidity grows with increasing age

Share of respondents (n = 2.953) in percent with two or more chronic diseases related to age-groups and gender

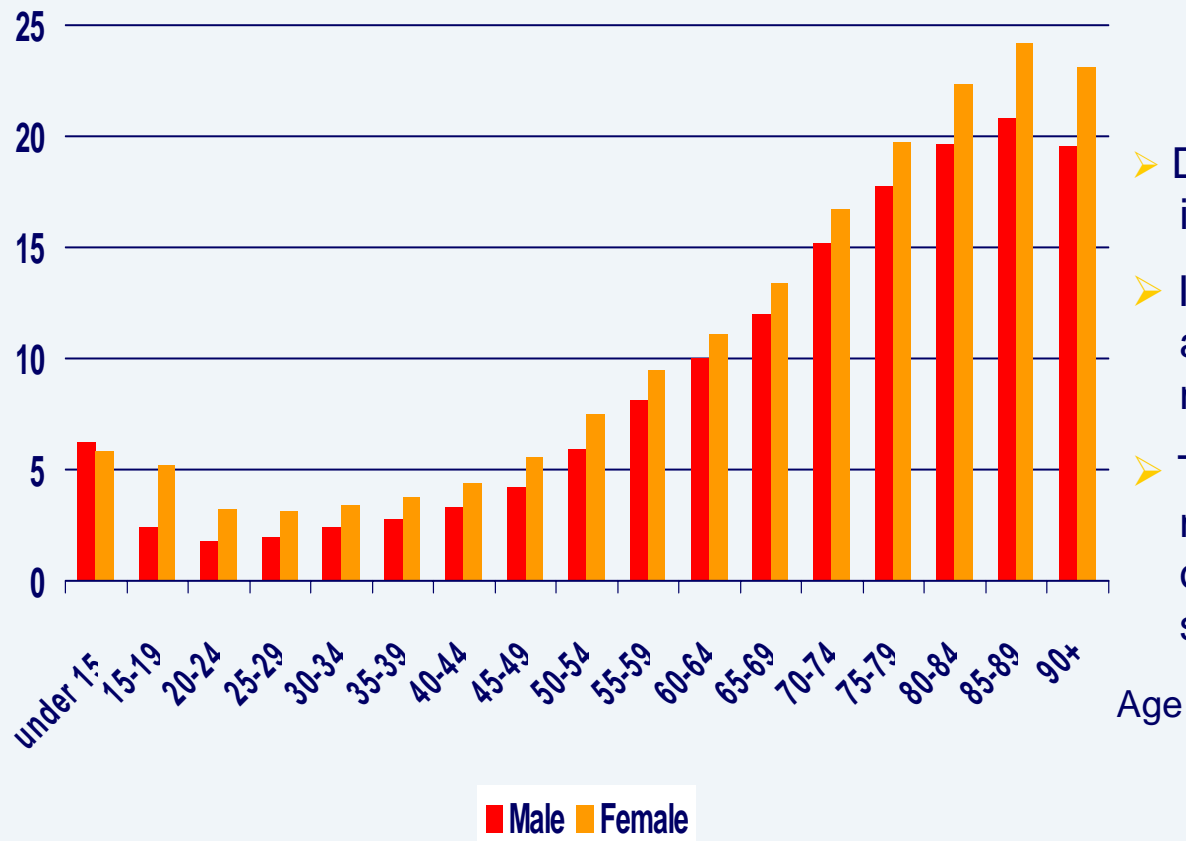


- With advancing age, chronic diseases go along simultaneously.
- Two thirds of the age-group 80+ suffer from several chronic diseases at the same time.
- Men are less affected than women. The difference however is subtle.

Source: German Centre of Age Concern: Report age data 02/2006

# The elderly consume most drugs

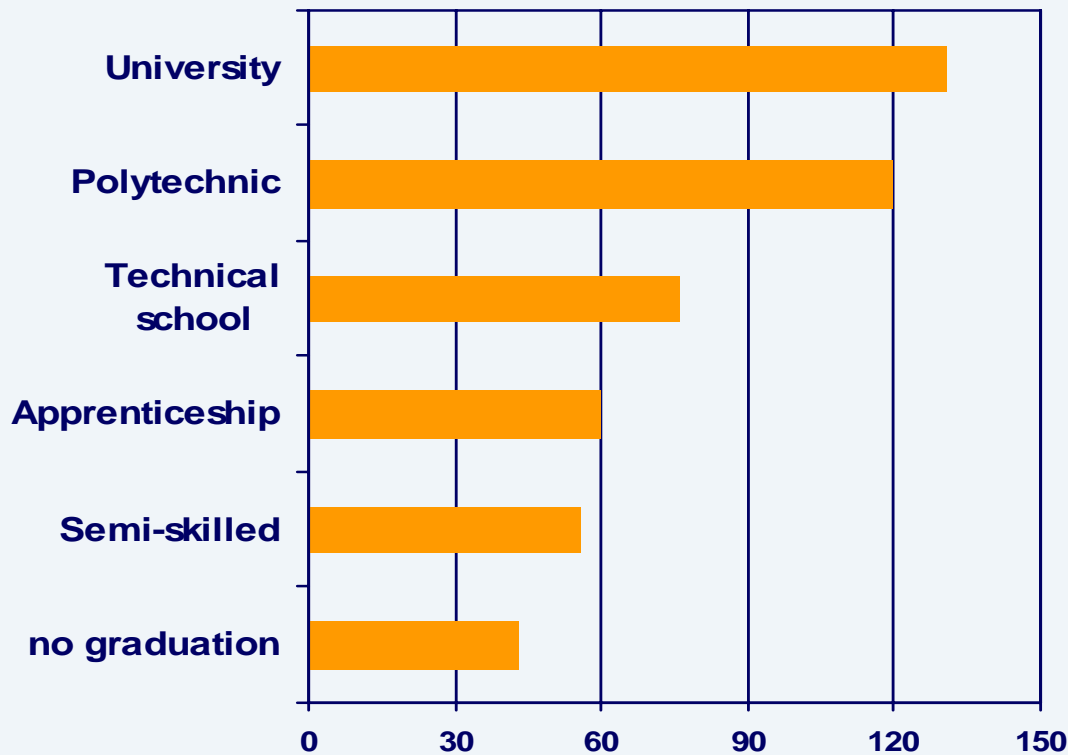
Number of prescribed drug-units per insured patient by age-group



- Drug consumption rises with increasing age.
- In the course of life more drugs are prescribed for women than men.
- The consequence of multi-morbidity: On average, 80 years-olds receive prescription of 8 substances at the same time!

# Higher education = higher healthcare spending

Expenditures for private healthcare per household and month in Euros regarding the highest required educational level of the main earner



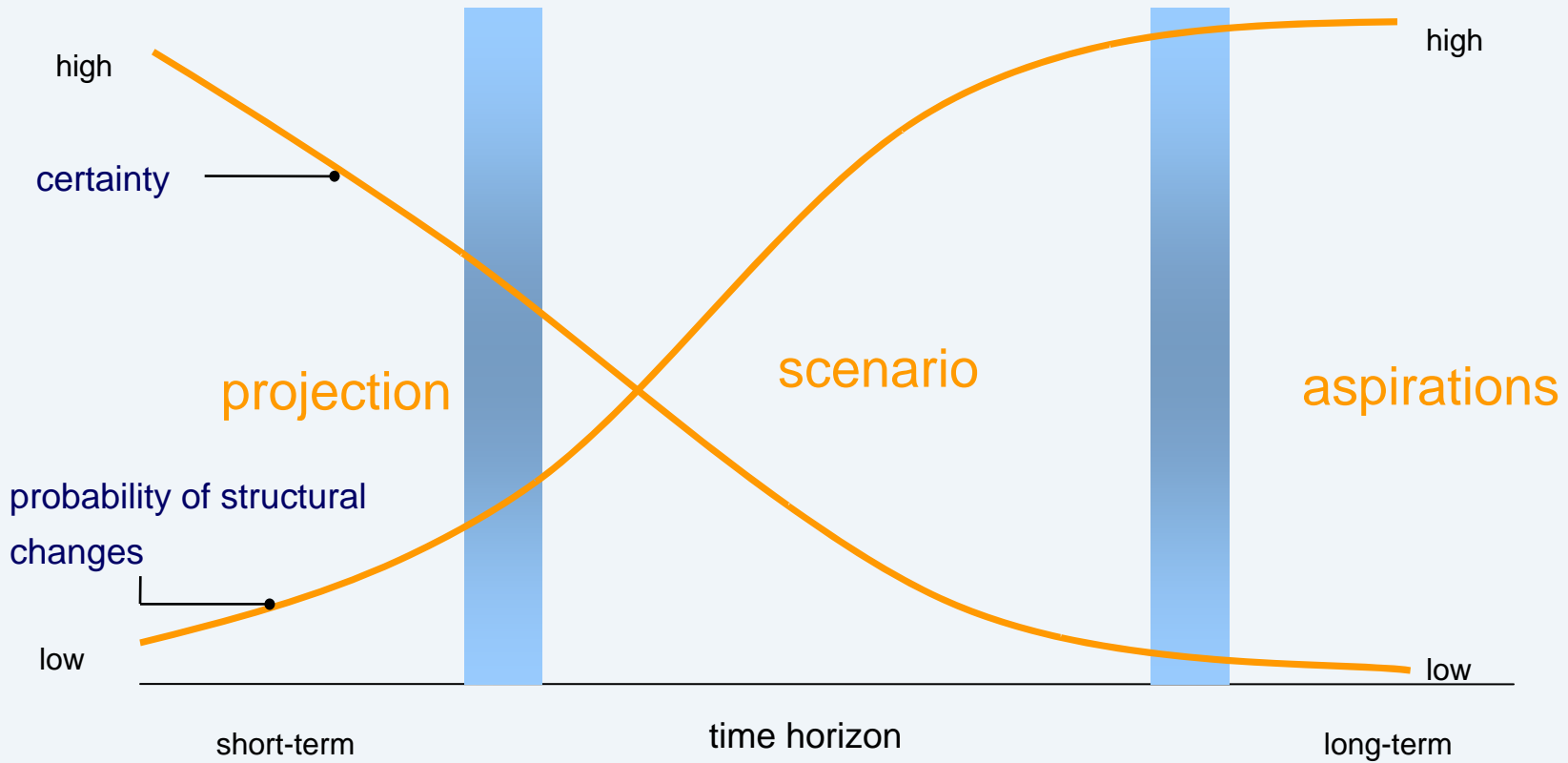
- Education, income and status of income status are strongly linked with private spending on healthcare.
- Most of it is spent on prevention, and results in social inequities regarding different health statuses within society.

Source: Income and consumption sample; my own calculations

# Healthcare is a growth market, but...

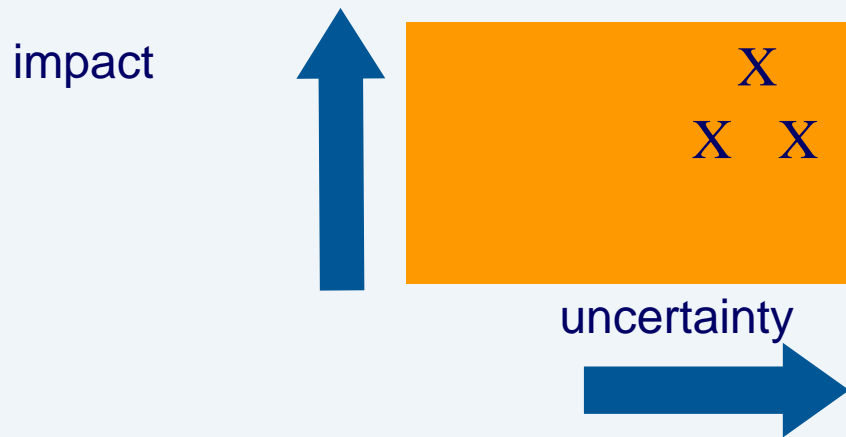
- **Do we fully tap the entire growth potential?**
- **Which constraints do we face?**
- **How likely and severe is their impact on market growth?**
- **Which healthcare actors will benefit most/least?**
- **Are there any potential losers? Can those be identified?**

# Scenarios related to uncertainty



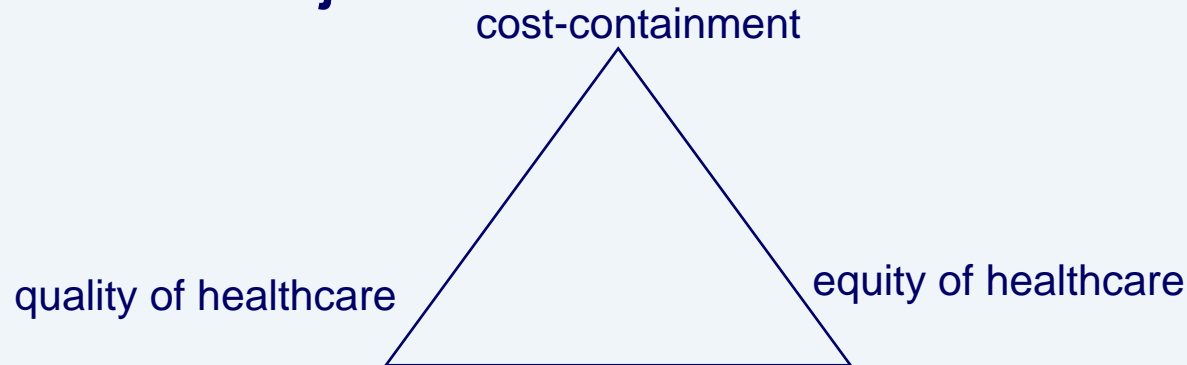
# Identification of critical uncertainties

- Deducted from the clustered key-factors and environmental impacts
- We want to know which aspects accomplish the following claims:



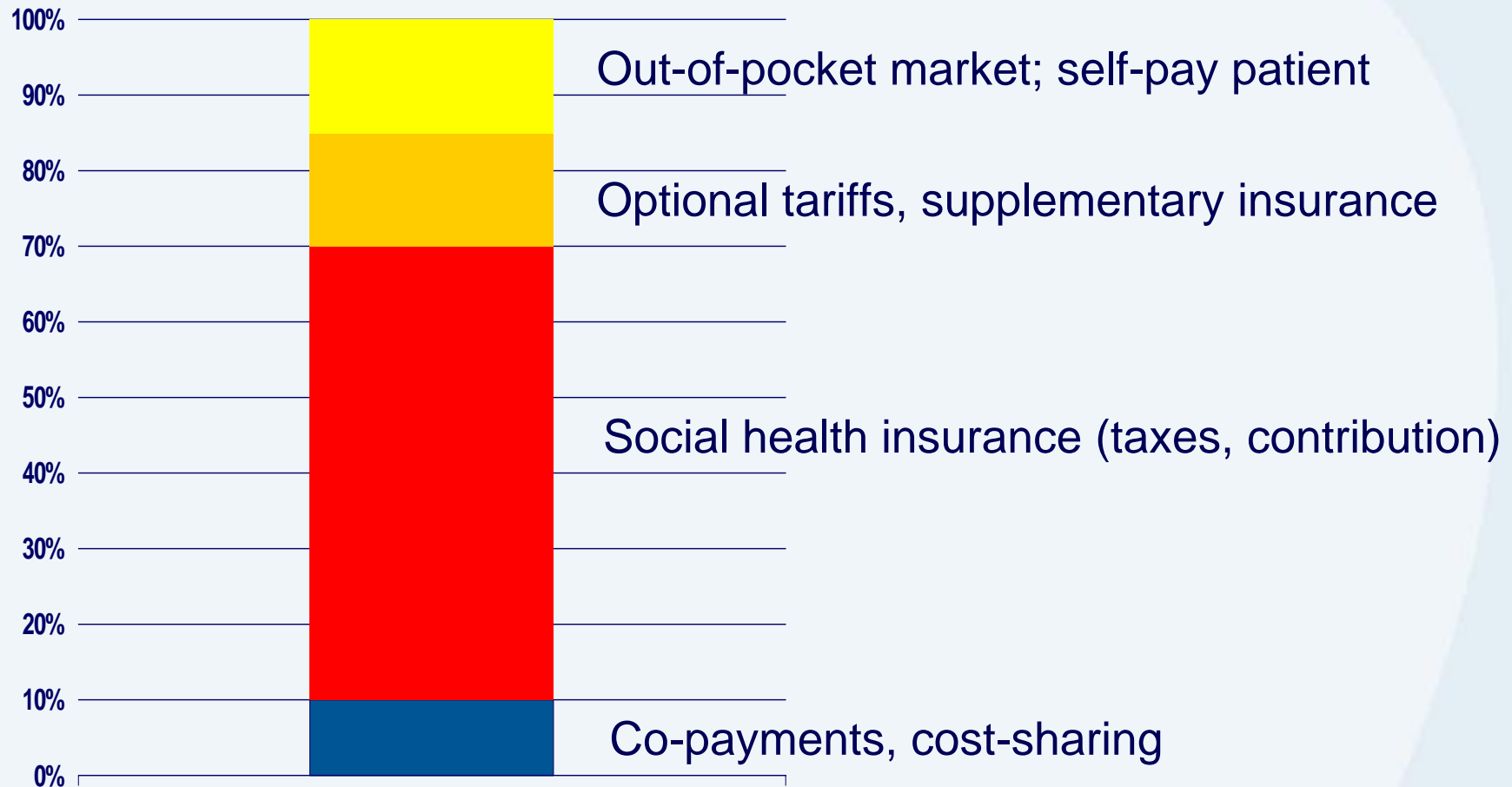
# Critical uncertainty 1: state-controlled regulations

- **conflict of objectives:**

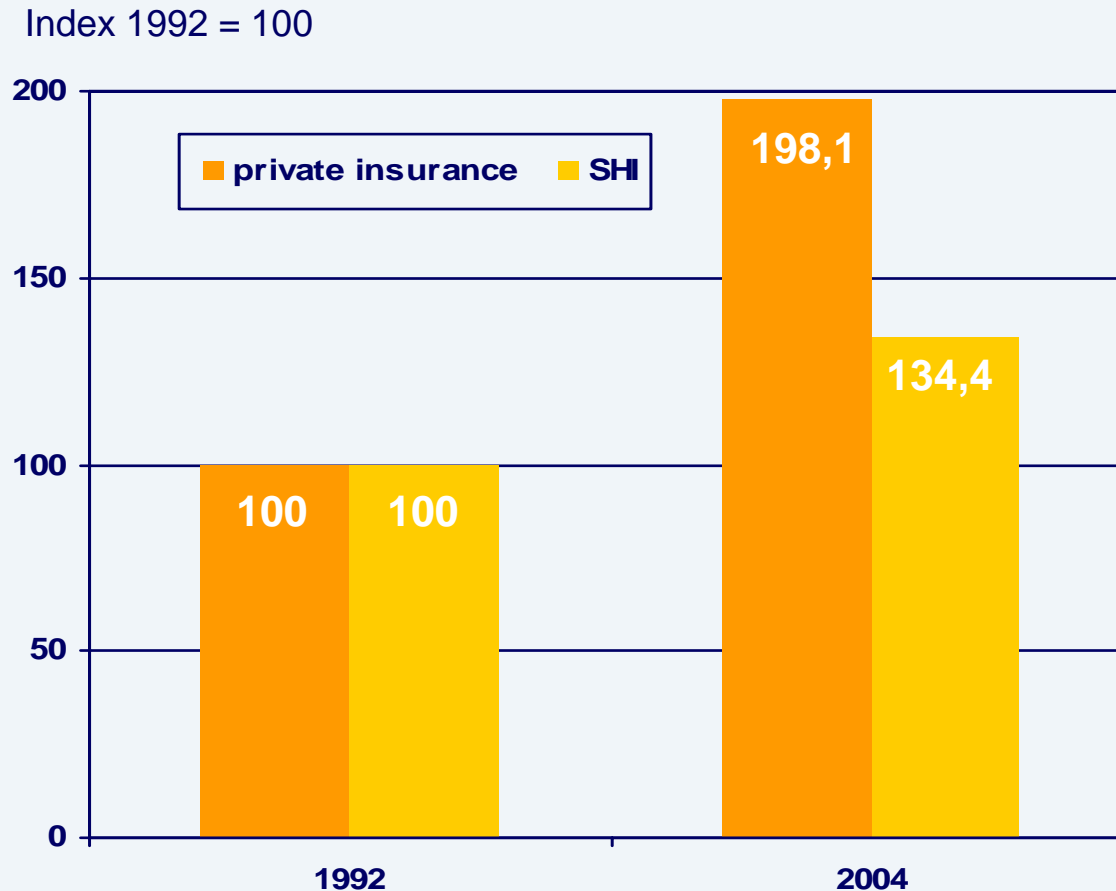


- The principles of solidarity and public welfare vs. the principles of funding and insurance
- Which level of individual responsibility is tolerated by the people?
- One single European-Market for health-care goods?
- How much competition within, as well as between systems will be accepted?

# The resources of the health market



# Expenditure gap: social health insurance vs. private insurance

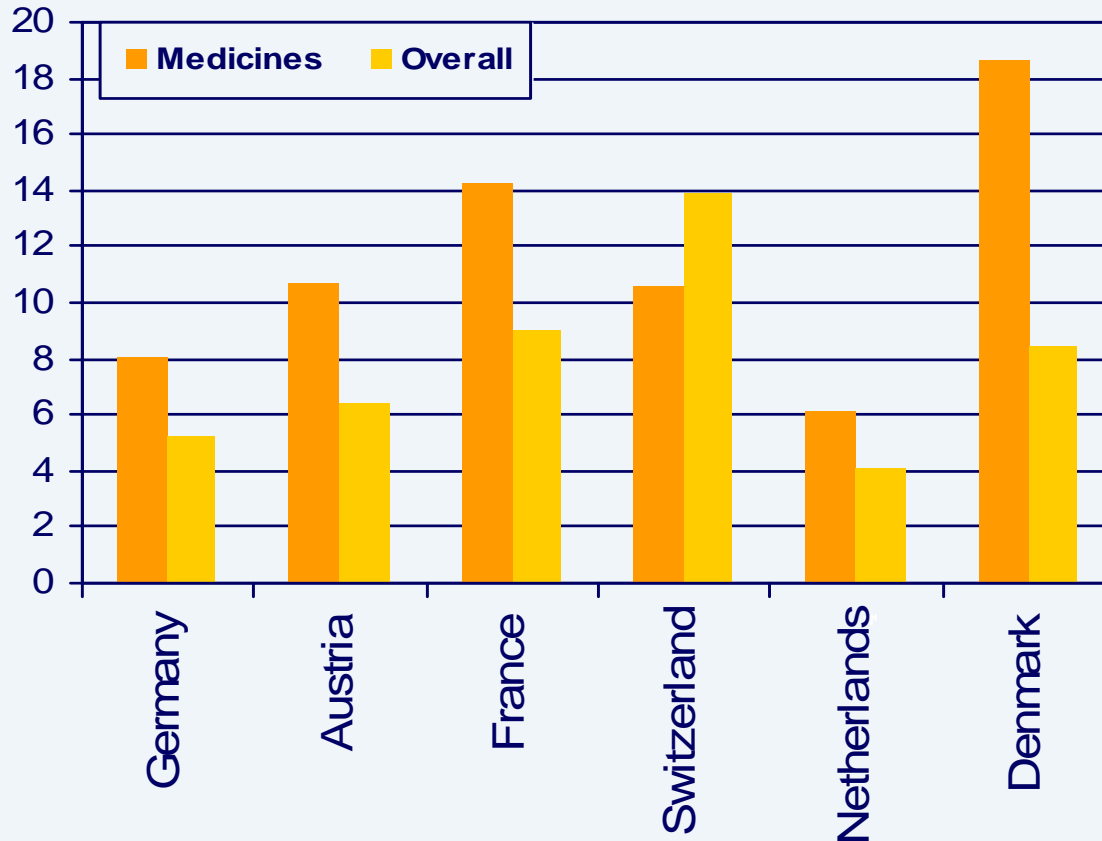


Source: Private Health Insurance

- The acceleration of private health insurance spending significantly exceeds public insurance expenditures.
- Is this development a result of the rigorous rationing scheme within social health insurance or...
- ... do private health insurances spend too much on expensive medicines?

# Huge differences in co-payments

Co-payments as a share of health expenditure in %

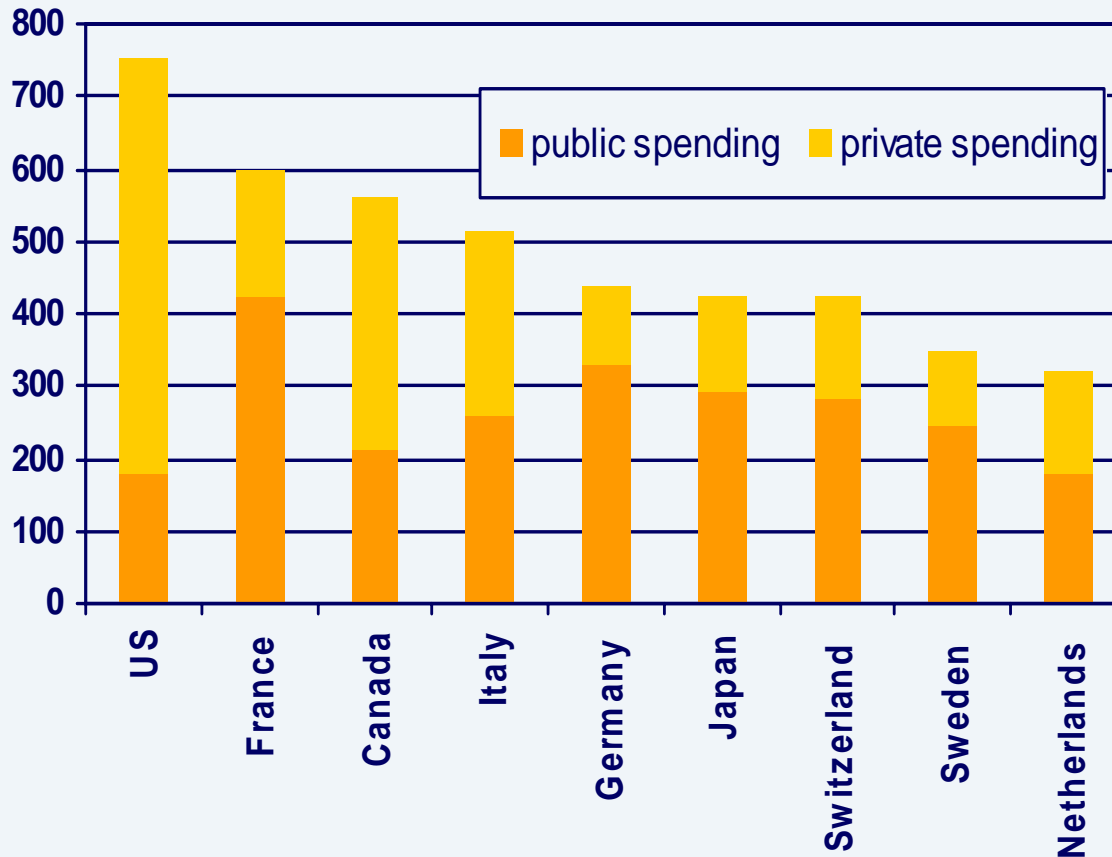


- Co-payments are a popular tool for cost containment and are widely applied in European healthcare systems.
- Experience shows that they have a short-term impact but are not very efficient in the long run .
- Co-payments imposed on drugs are usually higher than those imposed on healthcare services and goods .

Source: BASYS 2004

# Drug- spending: huge differences with respect to funding

in US-\$ purchasing power parities per habitant 2004 including OTC' s



- The German share of public drug-spending is significantly high. This justifies the huge interest in pharmaceutical regulations.
- Each healthcare system faces the challenge of balancing economic (cost containment) and social (solidarity) goals.

## Critical uncertainty 2: preferences of people

- Consumer orientation or supply orientation?
- Does individual responsibility also lead to more individual contribution?
- Does the level of regulations have an impact on the satisfaction of consumers and patients?
- Is there acceptance for two-class medicine?
- Do mandatory insurance systems lead to a lower extent of solidarity in the end?

# Health enjoys top priority

The ranked impact of specific factors of life with regard to well-being and satisfaction („very important“) as a percentage of total respondents (German household sample).



# A profound social change in the patient's status: From patient to consumer

1960 The <b>patronised</b> patient	medical patriarchy no information about diagnoses
1970 The <b>informed</b> patient	legal protection of physician „Informed consent“
1980 The <b>mature</b> patient	Information and Co-determination Patients rights
1990 The <b>autonomous</b> patient	Partnership models „Shared decision“
2000 The <b>competent</b> patient	Co-responsibility Co-producer of health

# Understanding the needs

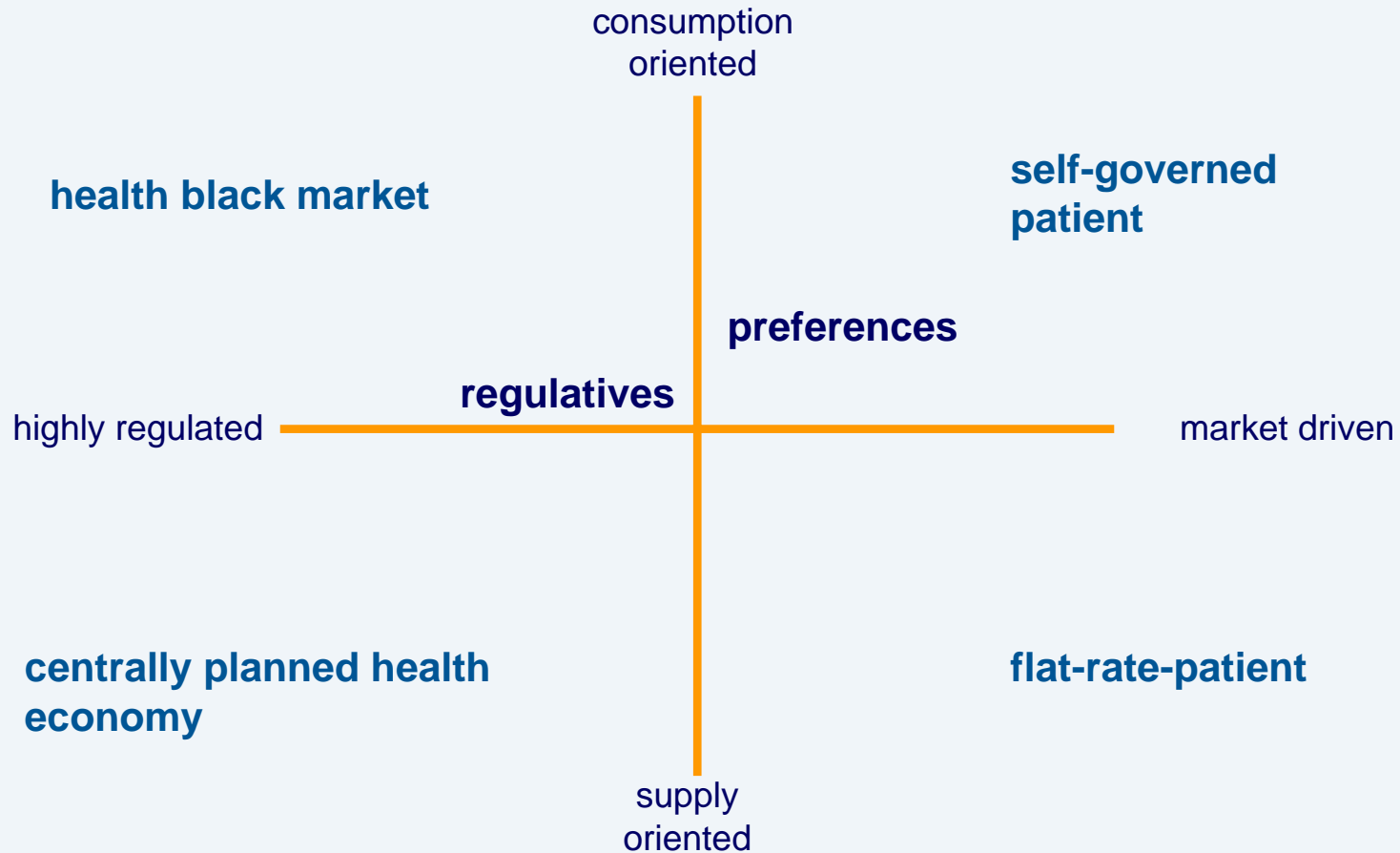
## Patients:

- Information
- Participation
- Consumer-choice

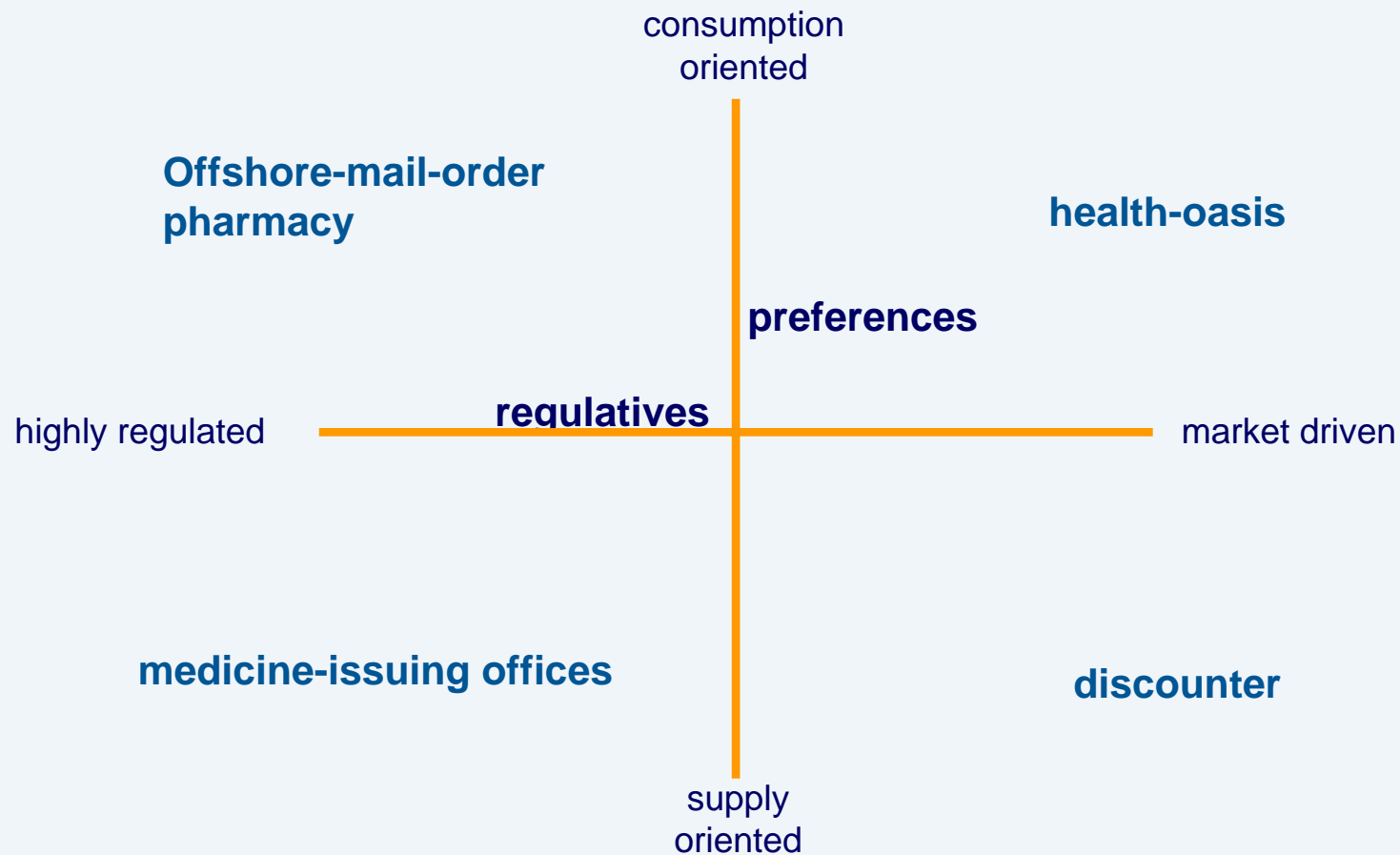
## Consumers:

- Simplicity
- Convenience
- Speed
- Price
- Experience

# Scenarios of the future healthcare market



# Scenarios for the pharmacies



# Leading indicators and signposts to predict the future (examples)

- Share of private healthcare expenditure
- Market share of private healthcare suppliers
- Development of healthcare tourism
- Degree of specialisation in the healthcare sector
- Degree of regulative interventions
- Acceptance of rising social inequality

# Strategic implications

- There will be no such thing like a 'Sunshine-Scenario', but the self-governed patient promises high growth potential, especially for providers that are specialized in ageing related services and products and innovative medical technology and biotech.
- The introduction of capital coverage makes sense: it strengthens the justice between generations and - as a macro-economic effect - the capital market.
- Healthcare providers as well as insurance companies could be faced with smaller financial margins (very competitive environment).
- Patients would be engaged with more individual responsibility; their cost of information grows; the social inequity in healthcare is rising.

# The need for innovation: Unmet medical needs



- Acute medical care

## Unmet medical needs

- Chronic diseases
- Mental diseases
- Nursing / Care
- Prevention
- Early treatments
- Palliative care



# Unmet medical and social needs: Early and personalized therapy

- Preventive diagnostics
- Personalized medicine
- Lifestyle-drugs
- Pharmacogenomics
- Vaccines
- Information-platform
- Disease management
- Synergy potentials

# Three elementary key criteria for a successful context oriented innovation-strategy

- There is need for a long term, process oriented goal- and strategy-development
- Enlargement of the innovation-process by context-thinking
- Inclusion of networks and strategic alliances

## But:

- Also social acceptance?
- Consistent with an increasingly critical society?
- Normative basis?
- ethics?

# Pharma's next top model?

**Lifestylers**

**Integrators**

**Incrementalists**

**Life savers**



**Thank  
you!**