Health: a vital investment for economic development in eastern Europe and central Asia

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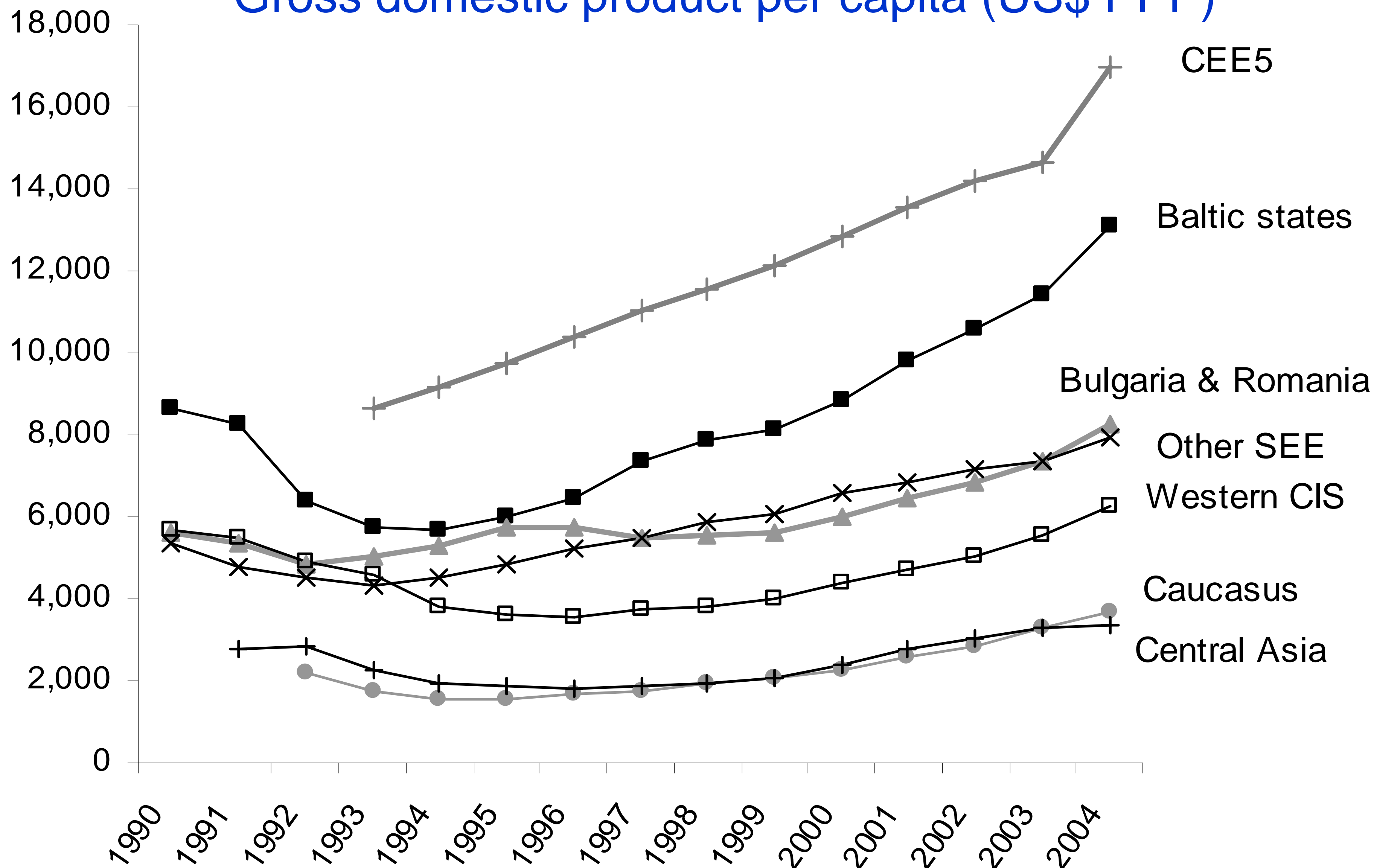
Achieving sustained economic growth and poverty reduction: the road ahead is long

There is substantial scope for improvement in both health and health policy

Current levels of poor health exact a large economic toll and there are substantial economic benefits to be reaped from improving health

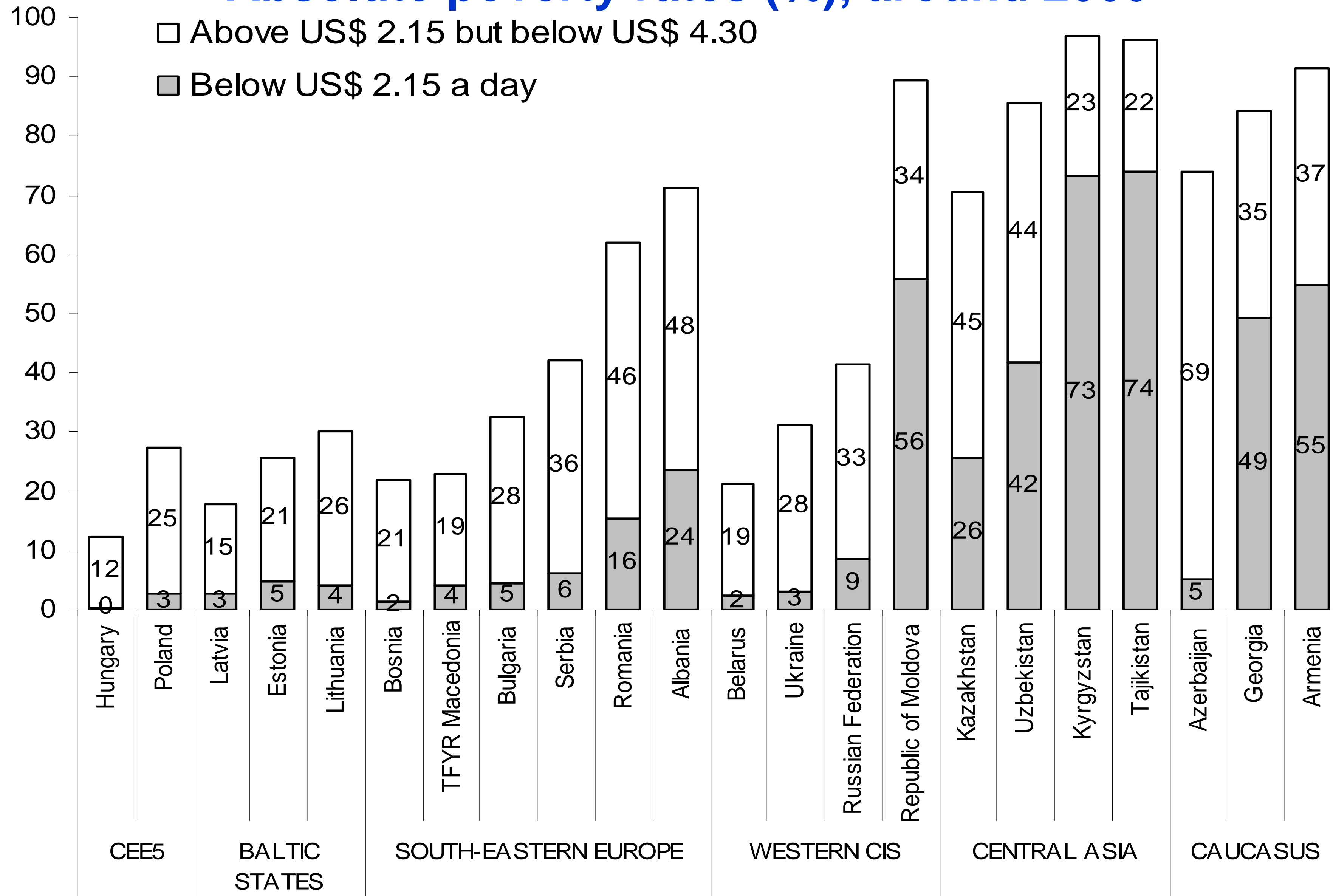
There are evidence-based ways of improving health but action is needed in- and outside the health care system

Growing, from very low levels – sustained growth?



Source: UNICEF Transmonee database 2006

Poverty still widespread in large parts



Source: Alam et al. (2005)

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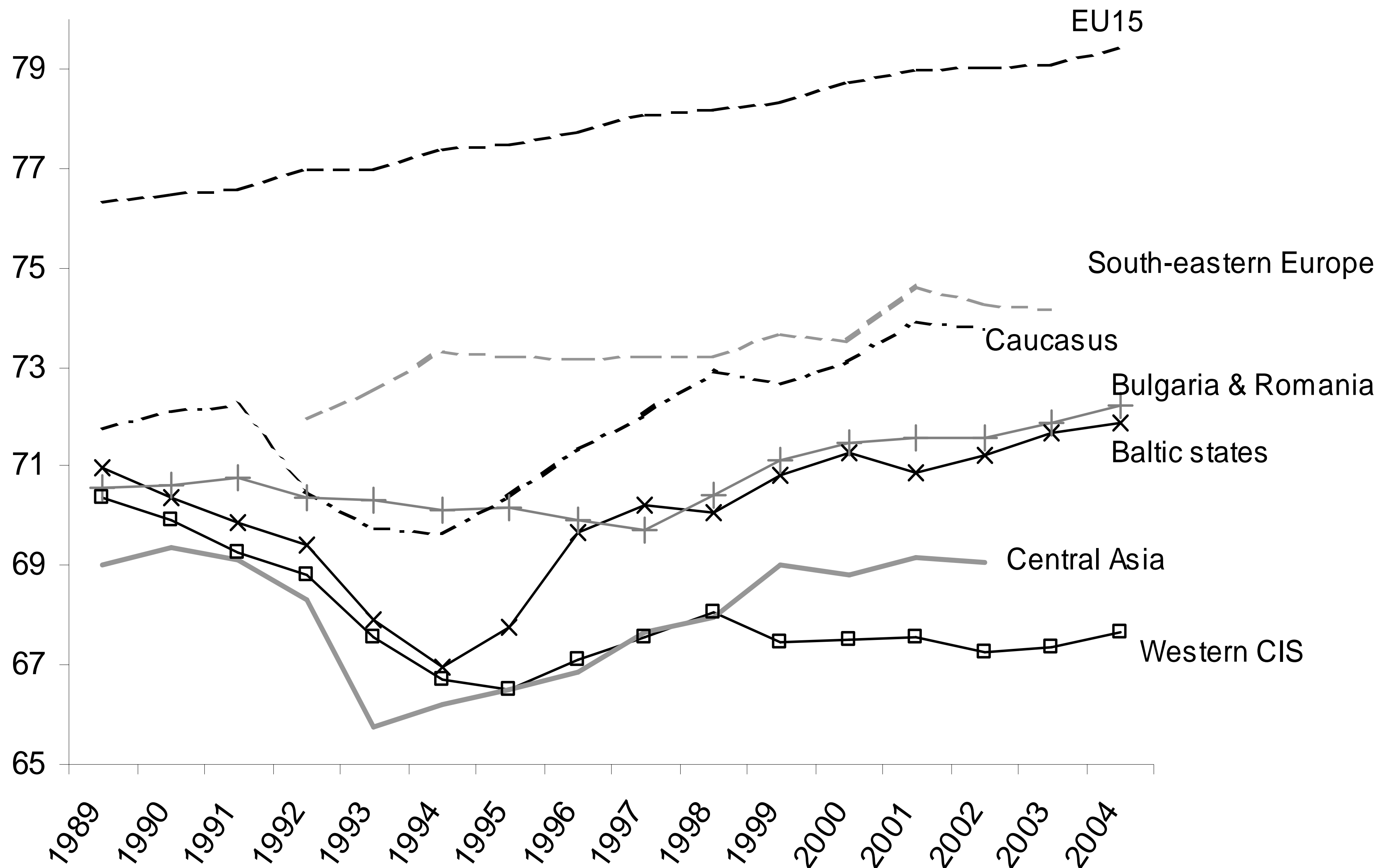
Life expectancy at birth, 1989-2004



Scope for health improvement:

- Too many people are dying too young
- The situation may be even worse than we think
- Men are dying but women are suffering
- The big killers are non-communicable diseases and injuries
- Yet the spectre of infections is never far away

Scope for health policy improvement:

- Some obvious spending gaps in some but not all countries
- Significant and probably rising inequalities in health care access and health outcomes
- Public expenditures exacerbate inequities
- Very limited international efforts for health
- Health not firmly integrated into the national poverty reduction strategies

Is there a health "expen-diture gap"?

(*in $ per capita*)

	Female adult mortality	Male adult mortality	Under-5 mortality	*Public health expenditure per capita (2002)*
Estonia	91	28	25	*461*
Latvia	53	33	50	*306*
Lithuania				*399*
Albania	17	28	55	*117*
Bosnia & Herzegovina				*161*
Bulgaria				*267*
Croatia				*513*
FYR Macedonia				*289*
Romania				*309*
Serbia and Montenegro				*191*
Belarus				*430*
Republic of Moldova				*88*
Russian Federation	17	5	26	*298*
Ukraine			6	*150*
Armenia	48	60	85	*53*
Azerbaijan	50	62	84	*27*
Kazakhstan	106	105	131	139
Kyrgyzstan	1	12	32	60
Tajikistan	17	25	39	13
Turkmenistan			15	129
Uzbekistan		4	24	65
Average (population weighted)	15.7	11.6	26.6	229

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New empirical evidence on:

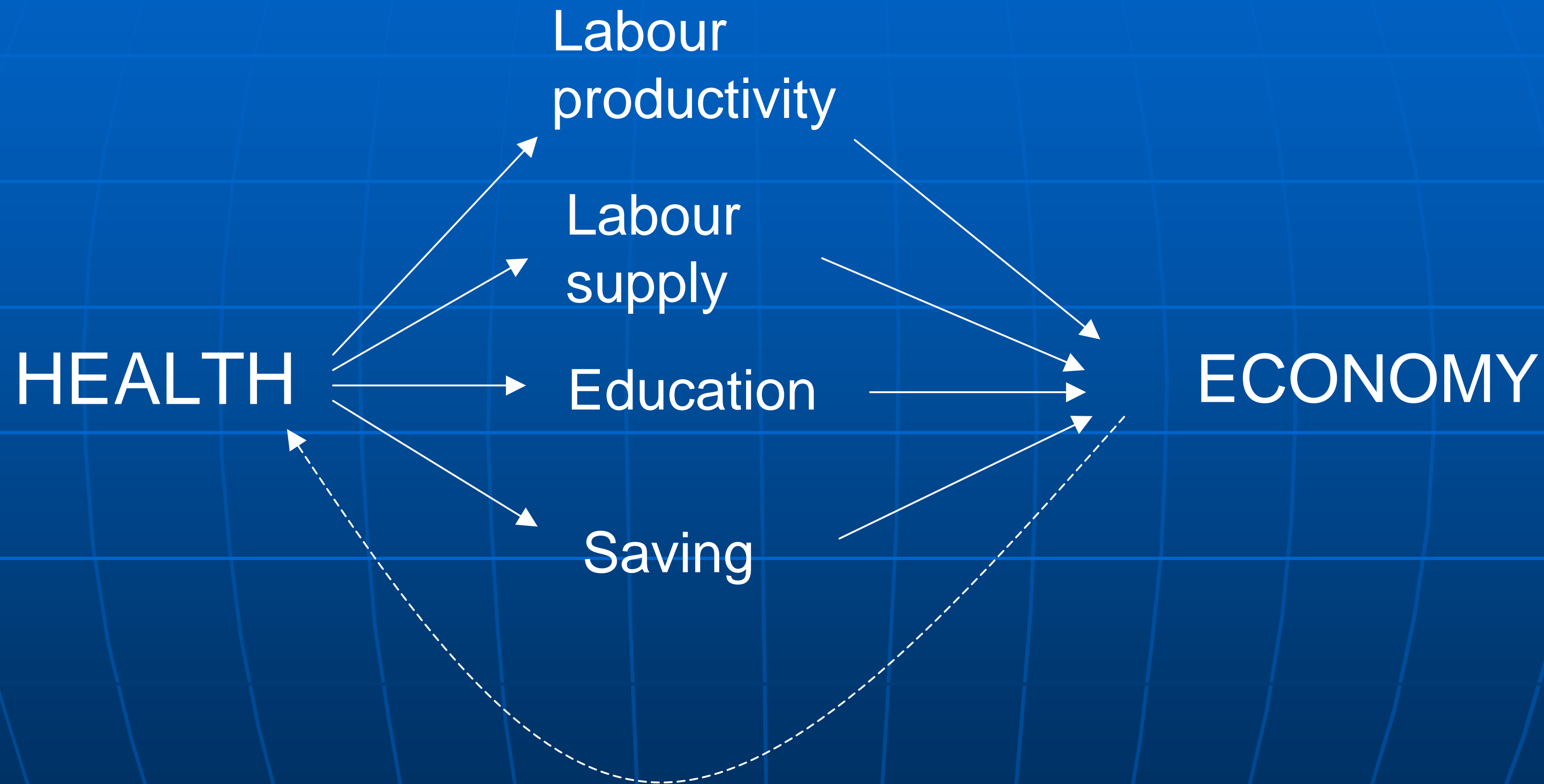
1) Economic impact at the individual level

- Russia
- Estonia
- Albania, Bosnia & Herz., Bulgaria, Serbia & Mont.
- Tajikistan
- 8 CIS countries (Armenia, Belarus, Georgia, Moldova, Kazakhstan, Kyrgyzstan, Russia, Ukraine)

2) Macroeconomic impact of improving health

3) “Full income” impact of improving health

Relevant channels from health to the economy: a simple framework



Microeconomic costs/consequences

What impact does having a limiting illness have on your chances of working? 8 CIS countries (2001)

	Marginal effects (%)
Armenia	-16.3
Belarus	-25.1
Georgia	-6.9
Kazakhstan	-30.4
Kyrgyzstan	-18.8
Moldova	-22.3
Russia	-23.0
Ukraine	-16.7

Note: coefficients significant at 5%-level; coefficients from 2nd stage regression

Source: Suhrcke/Rocco/McKee (2007)

Russia: The impact of ill health on labour productivity and supply

Self-reported good health increases the wage rates by 22% for women and by 18% for men, compared to those who were not in good health.

A workday missed due to illness reduces the wage rate by 5.5% for females and 3.7% for males.

An 'average' Russian male aged 55 would be expected to retire at 59. With chronic illness he retires at 57.

Improving health from "very poor health" increases your chances to work by…

	Albania	Kosovo
Poor health	+23%*	+21%**
Average health	+29%*	+27%**
Good health	+29%**	+29%**
Very good health	+30%**	+36%**

Note: LSMS data. Estimates using self-reported health. (* = 5%, ** = 1%); marginal effects, based on 2nd stage regression

Estonia:

Ill-health increases the probability of retiring by 6%, compared to those in good health

Men (women) in “poor health” are almost 40% (30%) more likely not to participate in the labour force, compared to those in good health

Being in “poor health” reduces weekly working hours by 12 hours for men and 8 hours for women

Macroeconomic costs/consequences

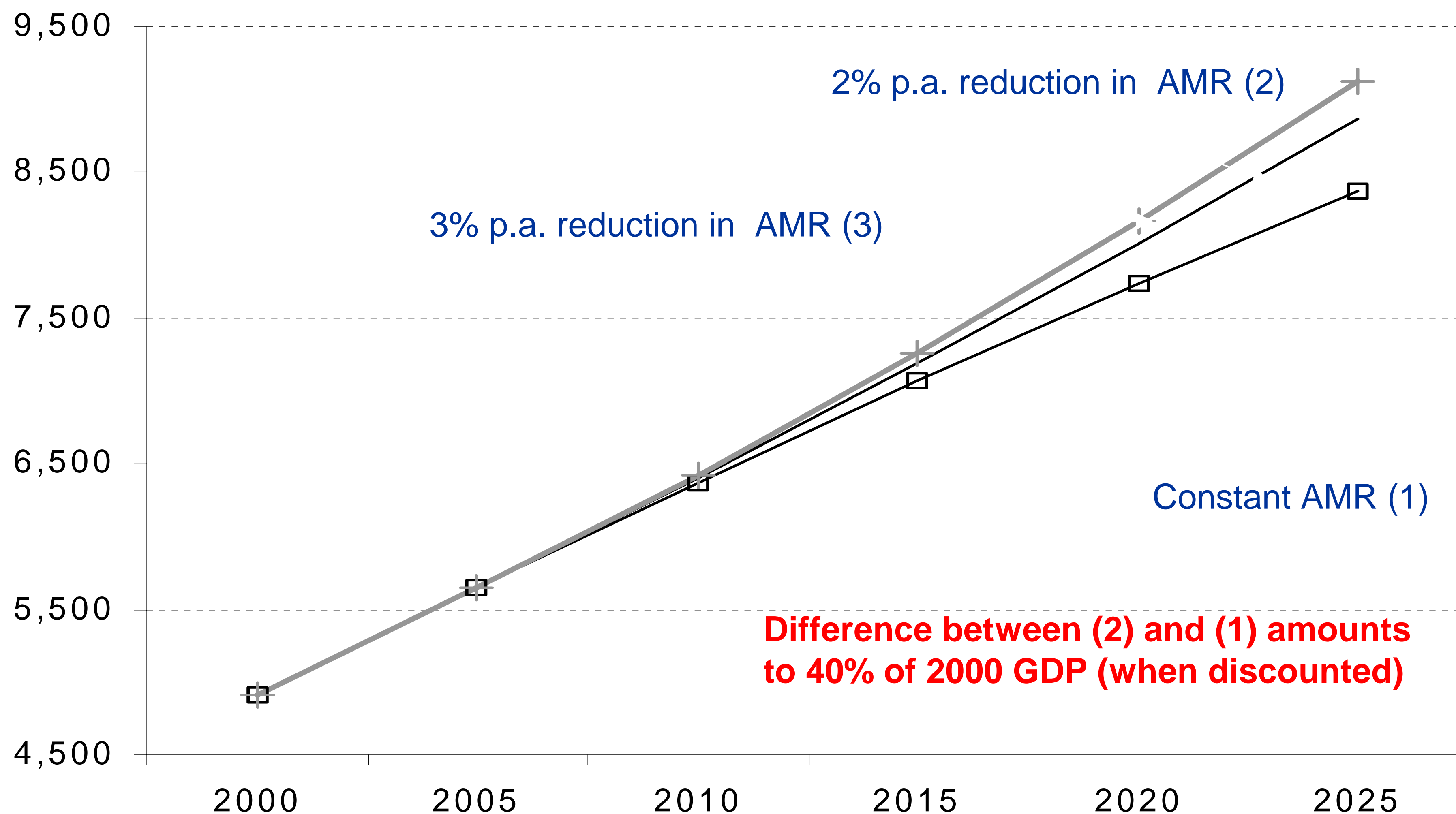
The empirical relationship between adult mortality and economic growth worldwide (1960-2000):

Dependent variable: GDP per capita	Estimate 1 (OLS)	Estimate 2 (FE)
Lagged-GDP p.c.	.86***	.65***
Lagged Fertility rate	-.05	-.17***
Openness	.16***	-
Lagged adult mortality rate	-.08**	-.18***
No. of observations	*302*	*332*

Note: OLS is 'ordinary least squares', FE is 'Fixed Effects'

Source: Suhrcke/Rocco/McKee (2007)

Predicted GDP per capita (US$) in three future adult mortality rate (AMR) scenarios: *e.g. Georgia*



Source: Suhrcke/Rocco/McKee (2007)

Note: based on OLS regression

Summary of discounted benefits as a share of (2000) GDP per capita

	2% p.a. reduction in adult mortality rate	3% p.a. reduction in adult mortality rate
Georgia	40	62
Kazakhstan	26	48
Lithuania	30	46
Romania	40	61
Russia	26	39

Note: Based on OLS estimates, ie. lower bounds estimates

Source: Suhrcke/Rocco/McKee (2007)

Economic impact – summary:

- It is clear that, in CEE-CIS countries as in many developing countries:
  - Ill-health negatively impacts on individual's economic status
  - Improving health could bring substantial economic (and welfare) benefits to the overall economy

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Main points

- Government has a role – from a strict economic perspective!
- The health system reform agenda
- Increasing expenditures may be necessary but not sufficient, see e.g.:
  - Quality of governance
  - Social capital

Is there a role for government to act?

Particularly challenging in the case of non-communicable (or 'chronic') diseases…

"If people want to be fat, smell like ashtrays and die early, let them."

The Economist, 9/11/2006

"*The state has no business with your plate*"

Financial Times, 3/09/2006

"*Intercontinental health nannying*"

The Economist, 6/03/2003
on WHO's Framework Convention
on Tobacco

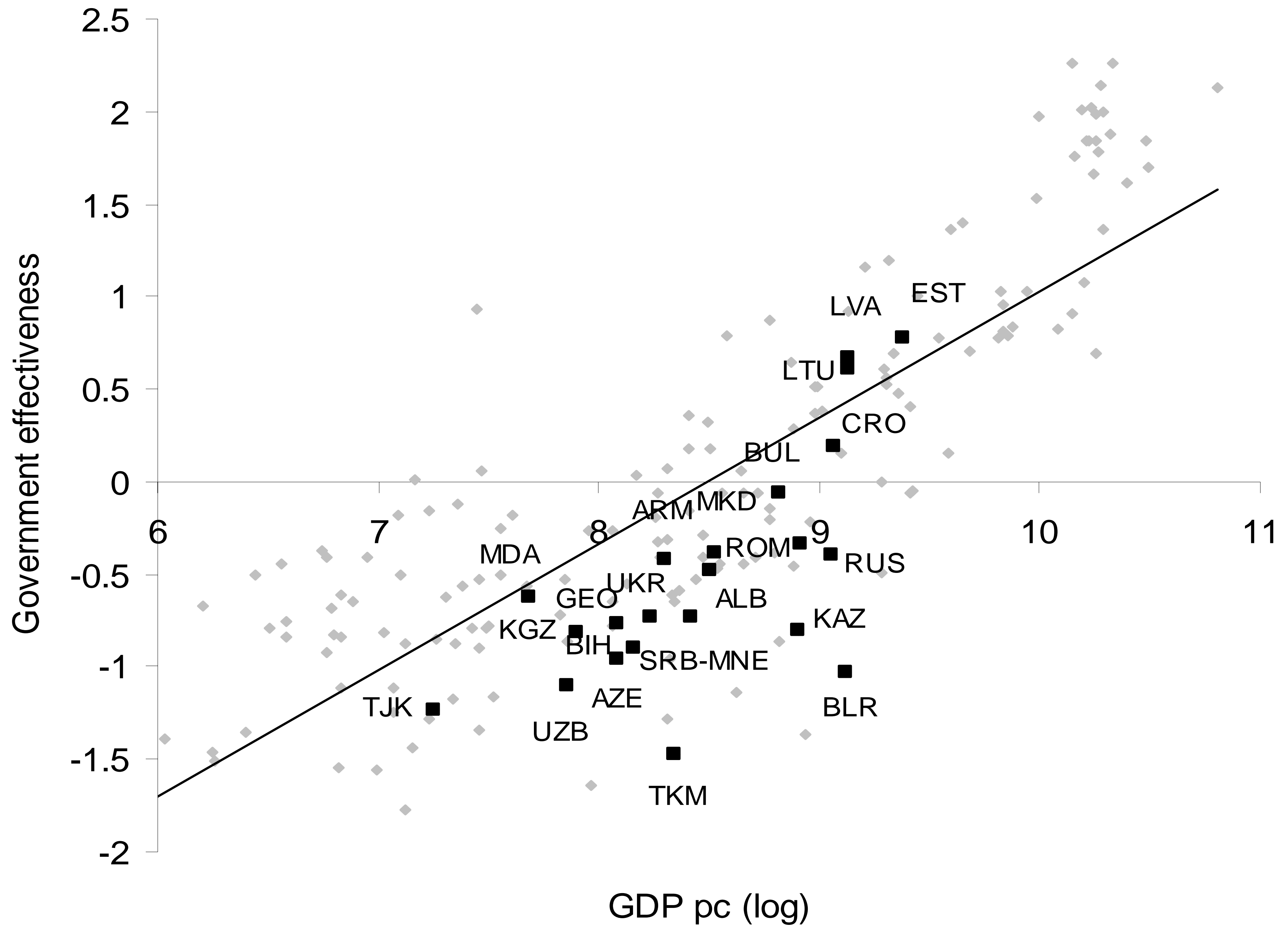
Market failures in chronic disease?

- External costs
- Insufficient information
- Myopia, irrationality
- Time-inconsistent preferences / ‘internalities’

The need to look beyond the obvious

- Governance

- Social capital



Government effectiveness
GDP pc (log)
2.5
2
1.5
1
0.5
0
-0.5
-1
-1.5
-2
6
7
8
9
10
11
EST
LVA
LTU
CRO
BUL
MKD
ARM
ROM
RUS
MDA
UKR
ALB
GEO
KAZ
KGZ
BIH
SRB-MNE
AZE
BLR
TJK
UZB
TKM

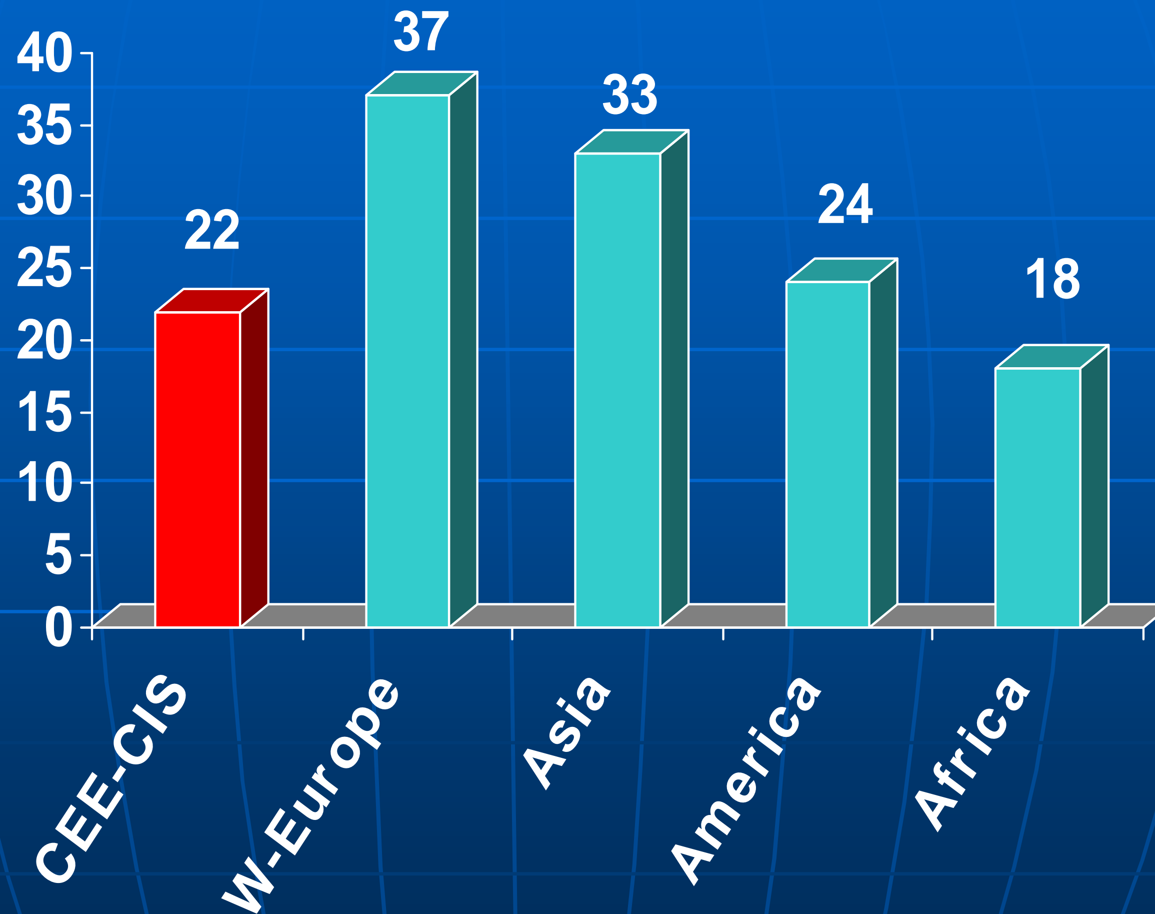
The quality of governance influences the effectiveness of health expenditures in improving health outcomes

- Health expenditures matter for health, BUT only beyond a threshold level of governance quality
- How to measure “governance”?
  → the World Bank Governance Database
- We pick one out of 6 indicators:
  “government effectiveness”

Social capital and health

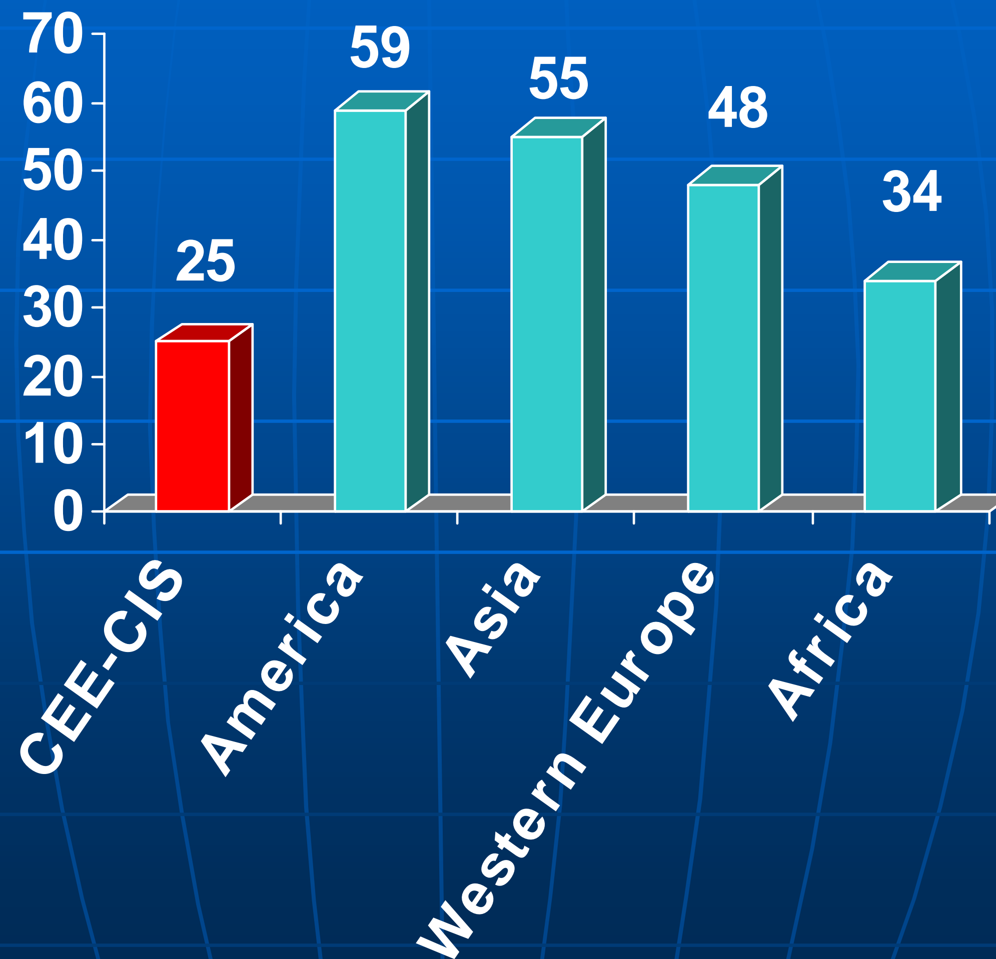
- Social capital has a positive effect on individual health through informal networks, in which an individual can:
  - obtain support, aid, care
  - obtain information
  - sharing past experiences
  - access risk sharing/pooling agreements based on reciprocity

% trusting 'most people'



Source: WVS/EVS 2000

% membership in an organisation



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Summary

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