

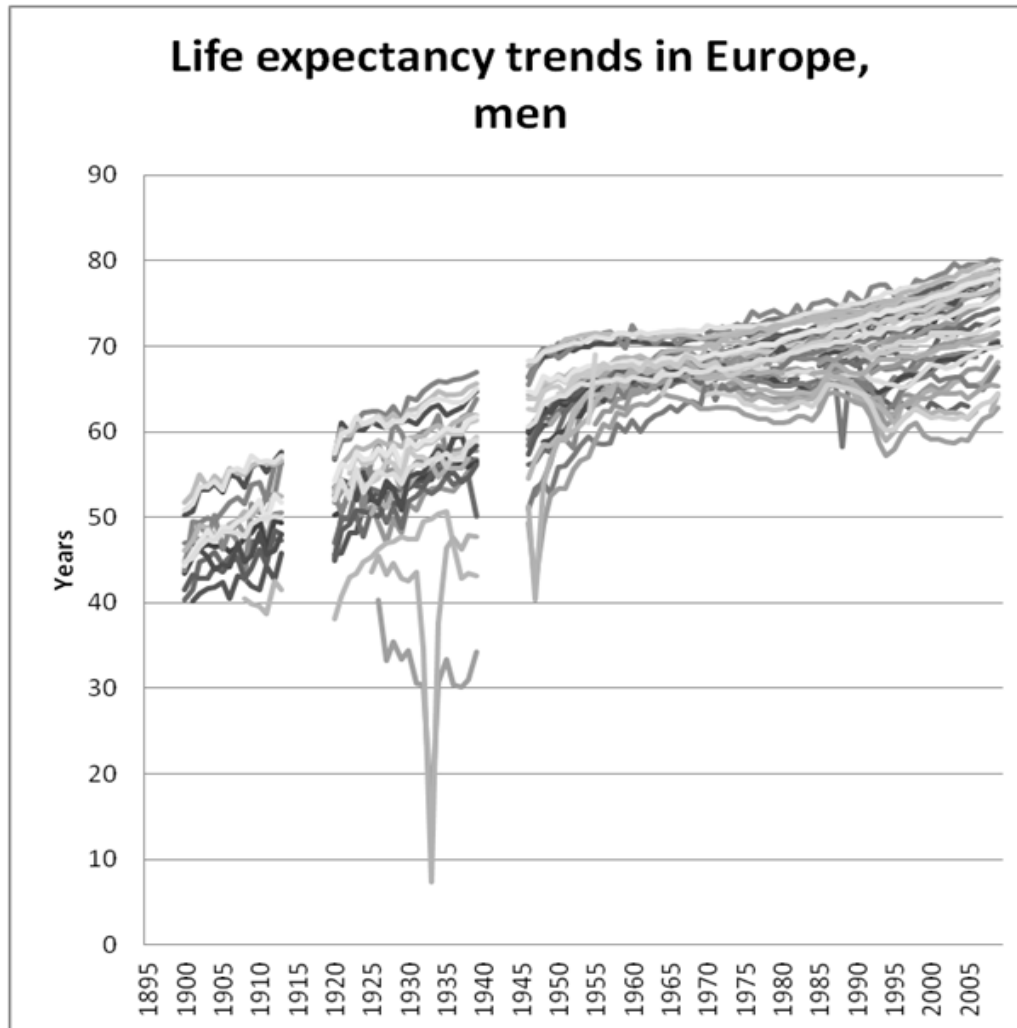
Johan Mackenbach & Martin McKee

**IMPACT OF POLICY
INTERVENTIONS ON POPULATION
HEALTH IN EUROPE**

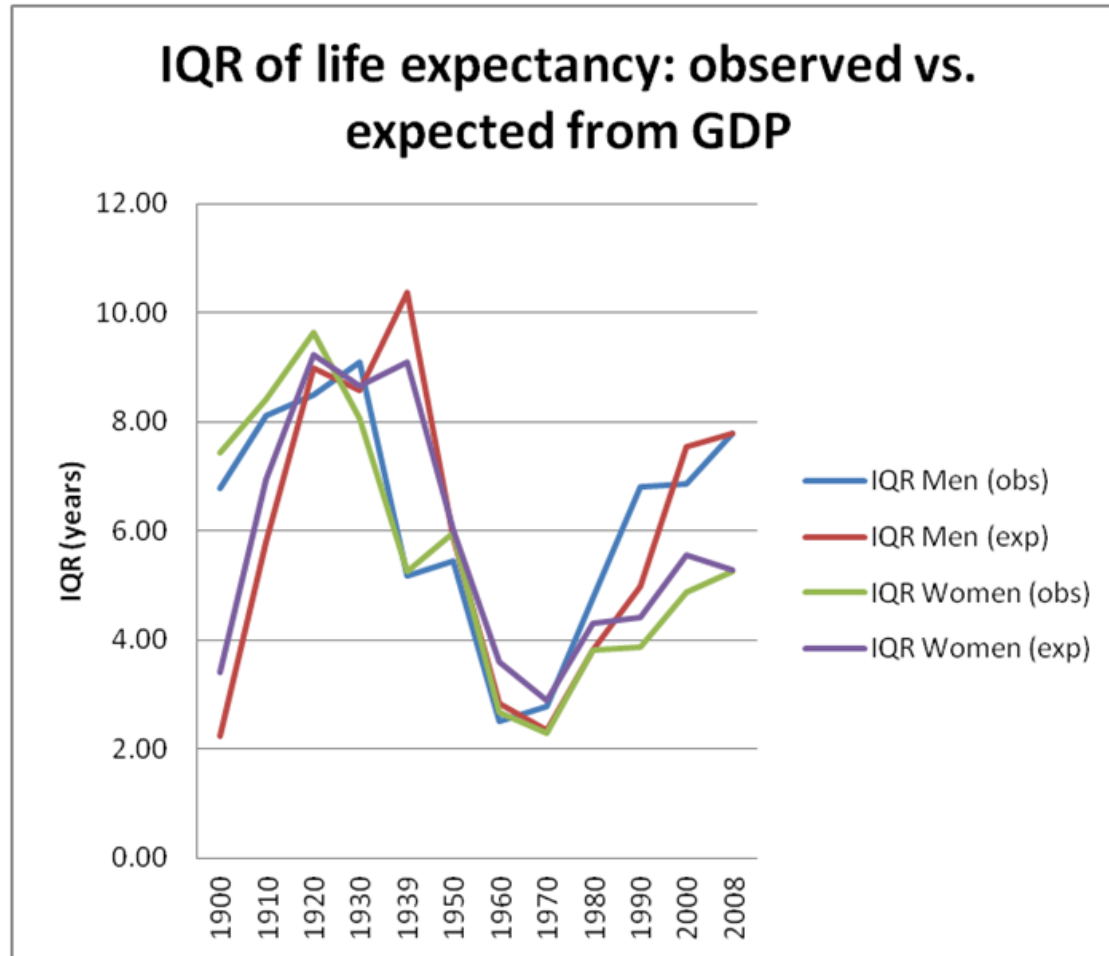
OUTLINE

- Context: recent divergence of life expectancy in Europe
- Successes and failures of health policy in Europe: performance indicators
- Determinants of health policy performance: economic, social, political

WIDENING, NARROWING, WIDENING OF GAP IN L.E.



GAP IN L.E. FOLLOWS GAP IN NATIONAL INCOME



IQR = interquartile range

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EUROPE'S DIVISIVE POLITICAL HISTORY



Yalta 1945

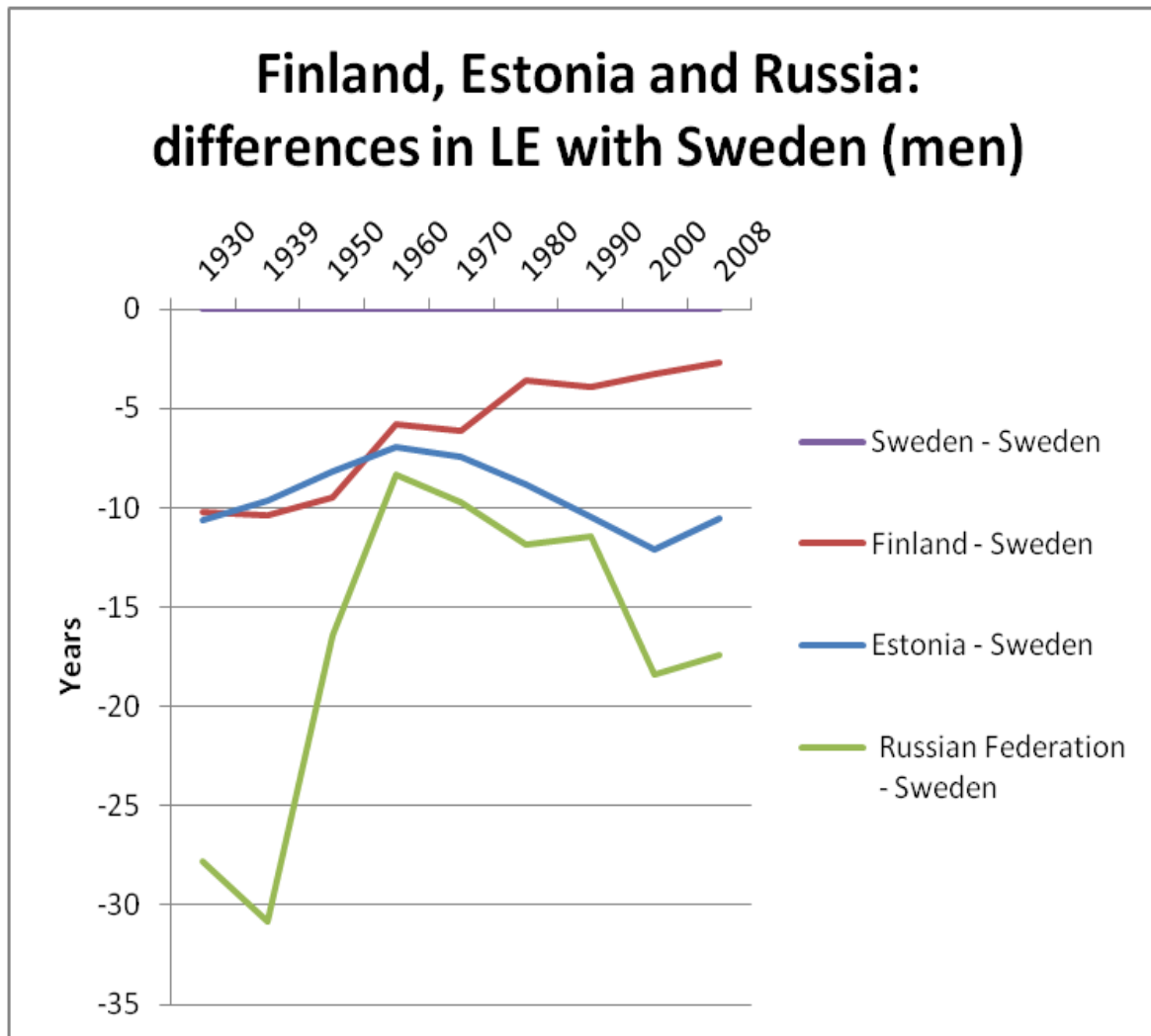


Budapest 1956

Moscow 1992



TRENDS IN E_0 ULTIMATELY DETERMINED BY POLITICAL CONDITIONS?



11 AREAS OF HEALTH POLICY

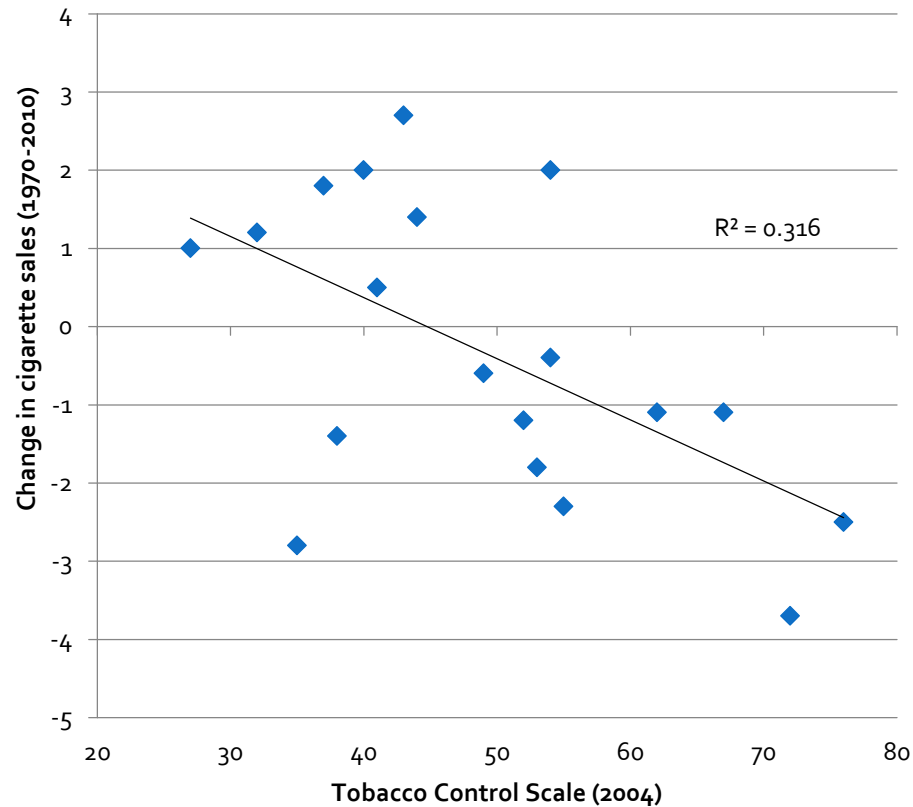
- Tobacco control
- Alcohol control
- Food and nutrition
- Fertility, pregnancy, childbirth
- Child health
- Infectious disease
- Hypertension
- Cancer screening
- Mental health
- Road traffic injury
- Air pollution

APPROACH

- Literature reviews to identify effective interventions
- Relate implementation to intermediate and final health outcomes
- Select performance indicators and create summary score
- Rank countries, identify determinants of health policy performance

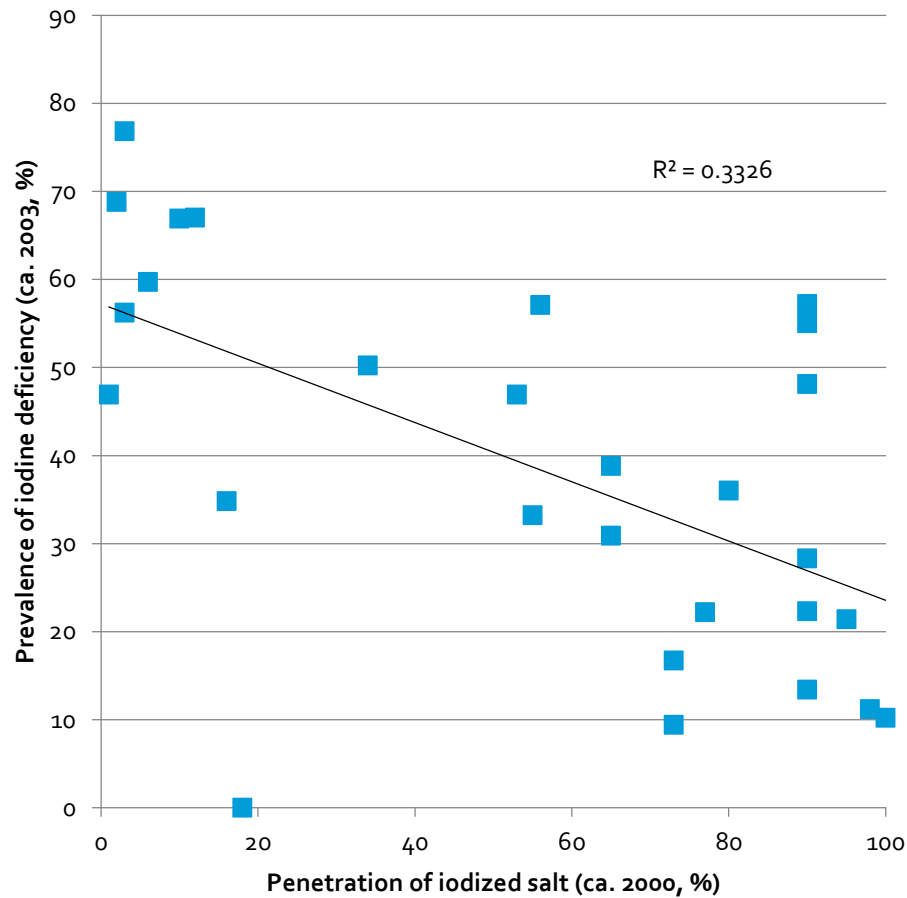
LESS SMOKING WITH MORE TOBACCO CONTROL

Tobacco control
vs. change in cigarette sales



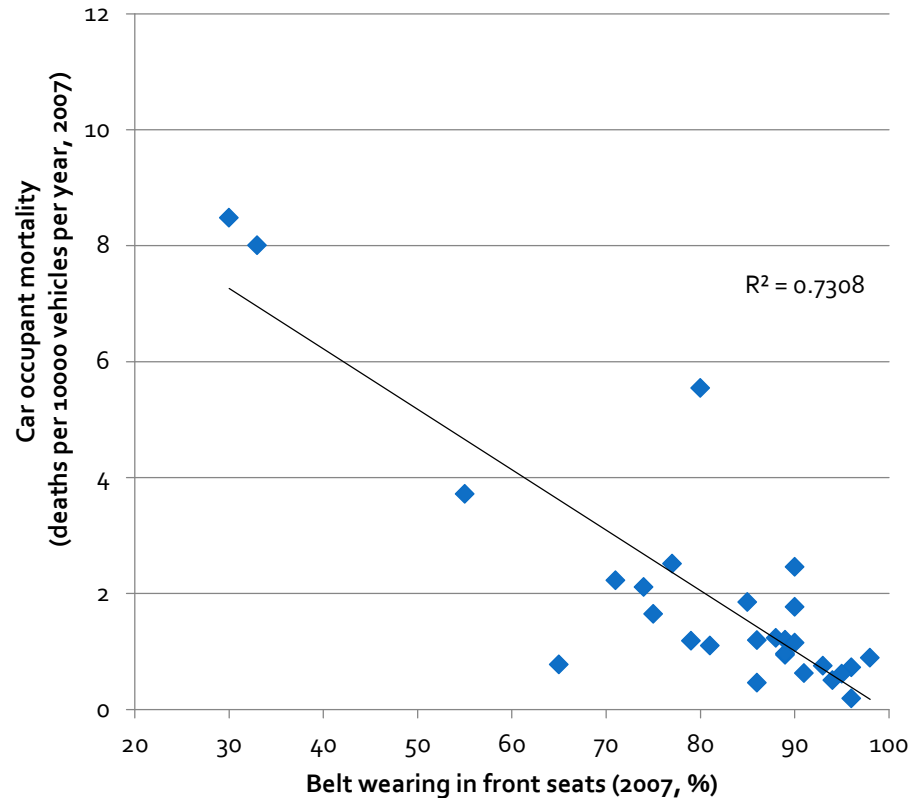
LESS IODINE DEFICIENCY WITH MORE SALT IODIZATION

Salt iodization vs. iodine deficiency



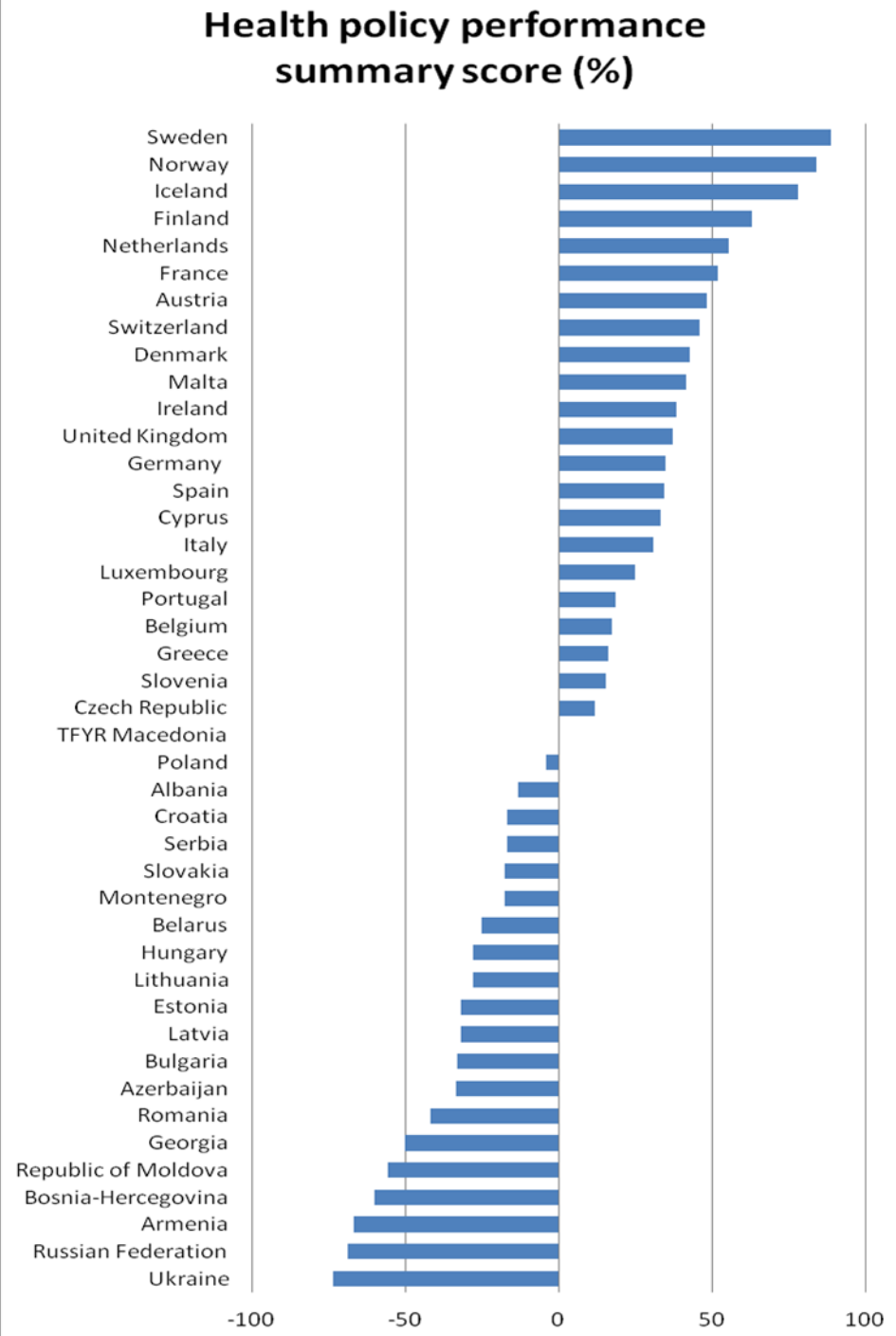
LESS CAR OCCUPANT DEATHS WITH MORE SEAT BELT WEARING

Seat belt wearing vs.
car occupant mortality



HEALTH POLICY PERFORMANCE SUMMARY SCORE

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EXAMPLE: LITHUANIA

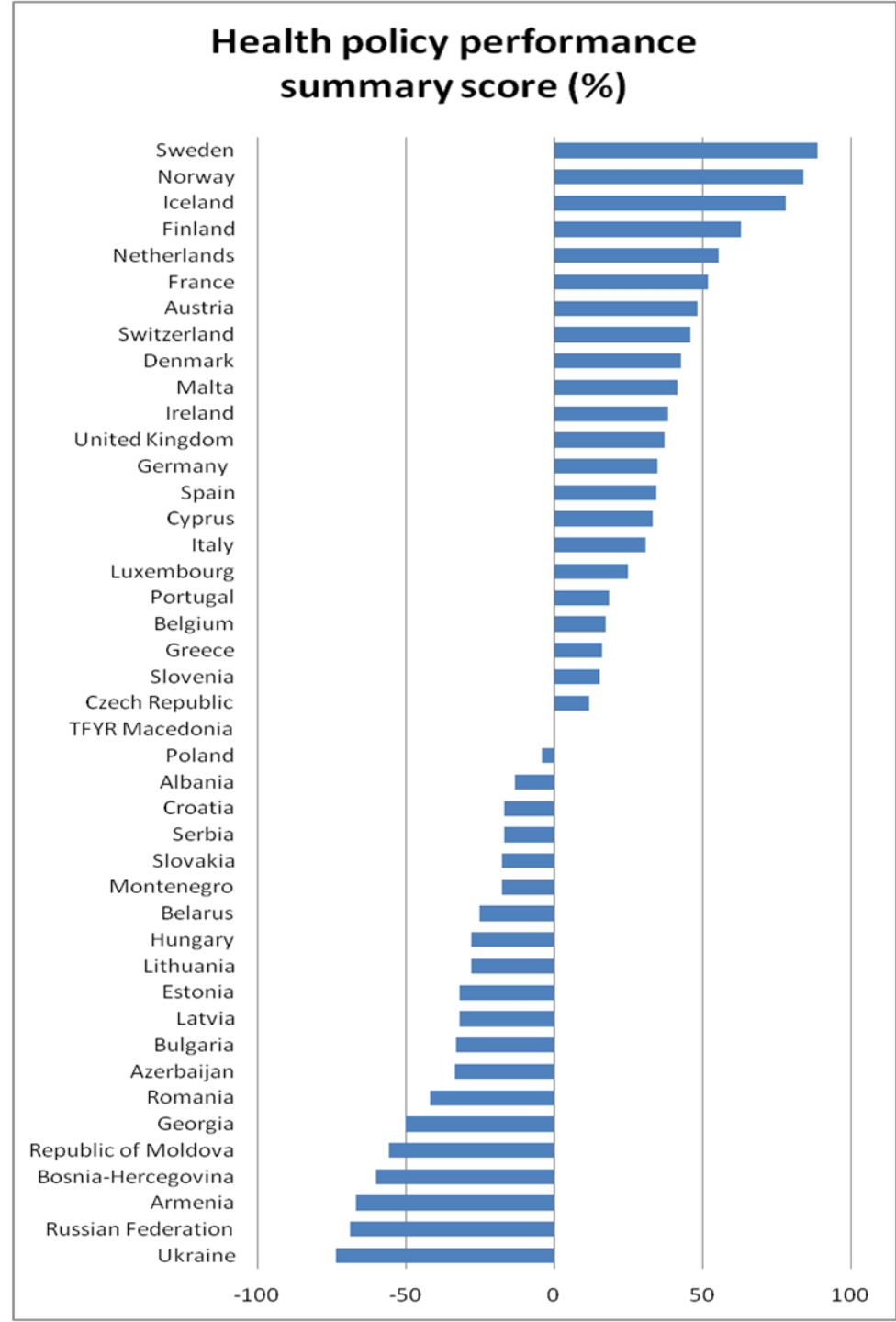
Policy area	Indicator	Lithuania	Europe
Tobacco	Tobacco Control Scale	41	46
	Daily smokers	39	32
	Lung cancer mortality	79	62
Alcohol	Alcohol Control index	13	14
	Alcohol consumption	13	12
	Liver cirrhosis mortality	56	26
Nutrition	Iodine deficiency	60	35
	Fat consumption	27	33
	Fruit and vegetables	187	217
Pregnancy	Teenage pregnancy	5.6	5.4
	Neonatal mortality	2.8	3.9
	Maternal mortality	4.9	11.0
Child	Measles immunization	96	95
	Child Safety Score	33	36
	Postneonatal mortality	2.1	2.1

EXAMPLE: LITHUANIA

Policy area	Indicator	Lithuania	Europe
Infections	AIDS incidence	1.6	1.5
	MRSA infections	12.5	4.4
	Influenza vaccination	n.a.	53
Hypertension	Blood pressure	137	133
	Cerebrovascular mort.	110	77
Cancer screening	Breast cancer screening	1	n.a.
	Cervical ca. mortality	11.5	5.8
Road safety	Safety belt use	n.a.	81
	Car occupant mortality	2.6	2.8
	Pedestrian mortality	1.5	1.5
Air pollution	SO ² emissions	10.8	13.4
	Urban ozone	2304	3584
Summary score	% high minus % low	-28	5

HEALTH POLICY PERFORMANCE SUMMARY SCORE

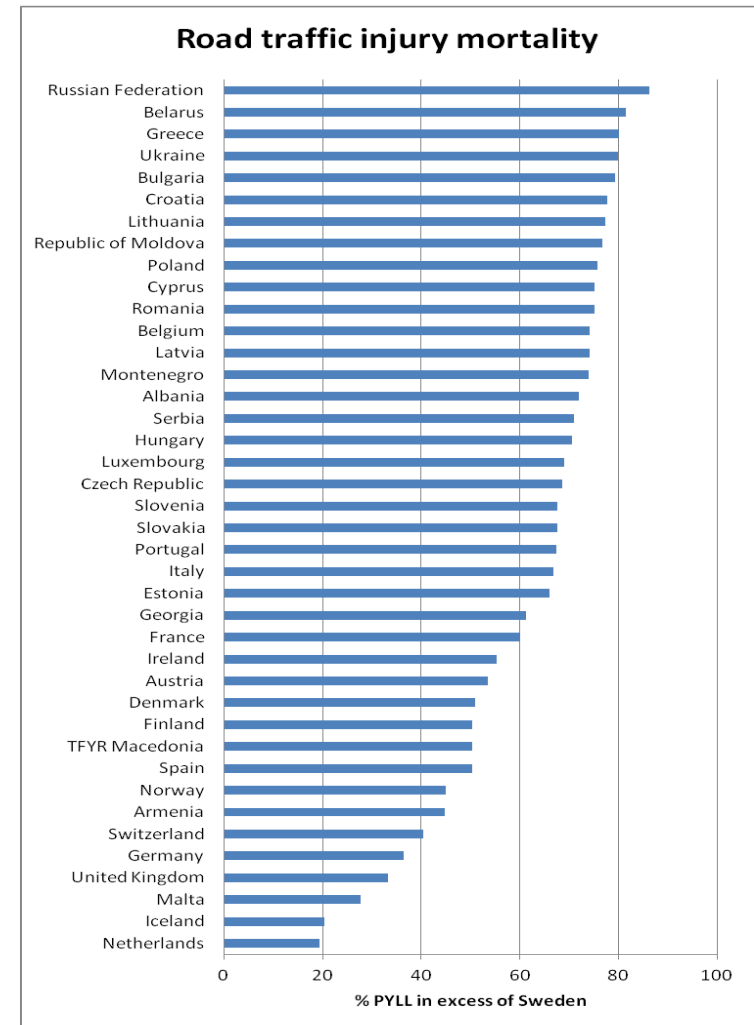
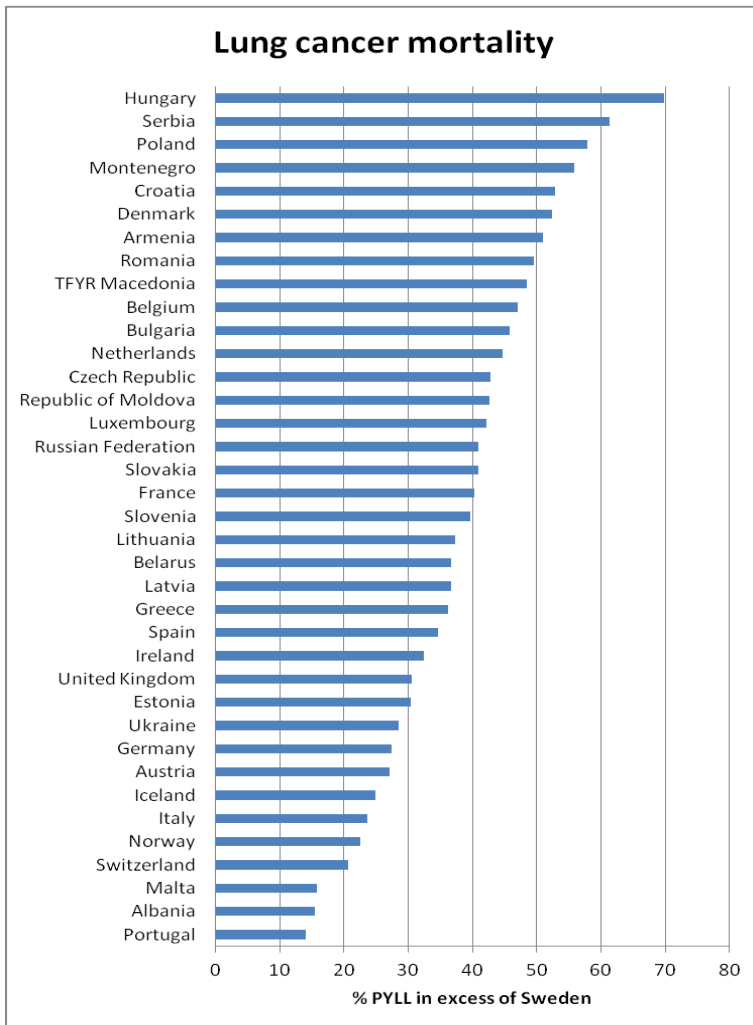
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UNFINISHED BUSINESS

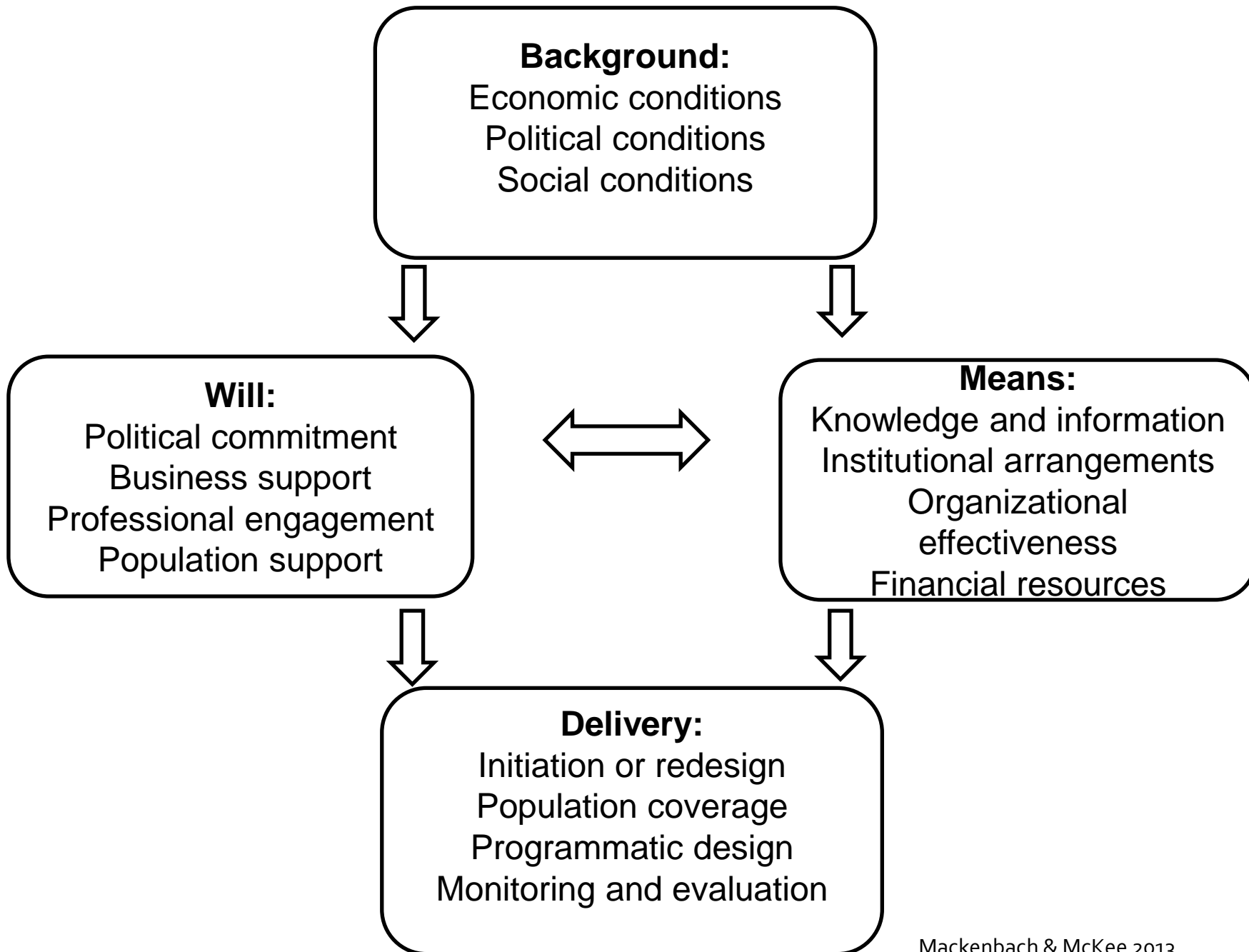
- Enormous gaps in implementation of effective health policies in Europe, particularly in Central and Eastern Europe
- Even in Western Europe, countries could typically reduce years of life lost by 30-50% by adopting policies in countries with best practices
- Remaining gaps in all areas: tobacco and alcohol control, iodine deficiency, immunisation, child safety, cancer screening, road safety, air pollution, ...

EXCESS MORTALITY AS COMPARED TO SWEDEN, 2008



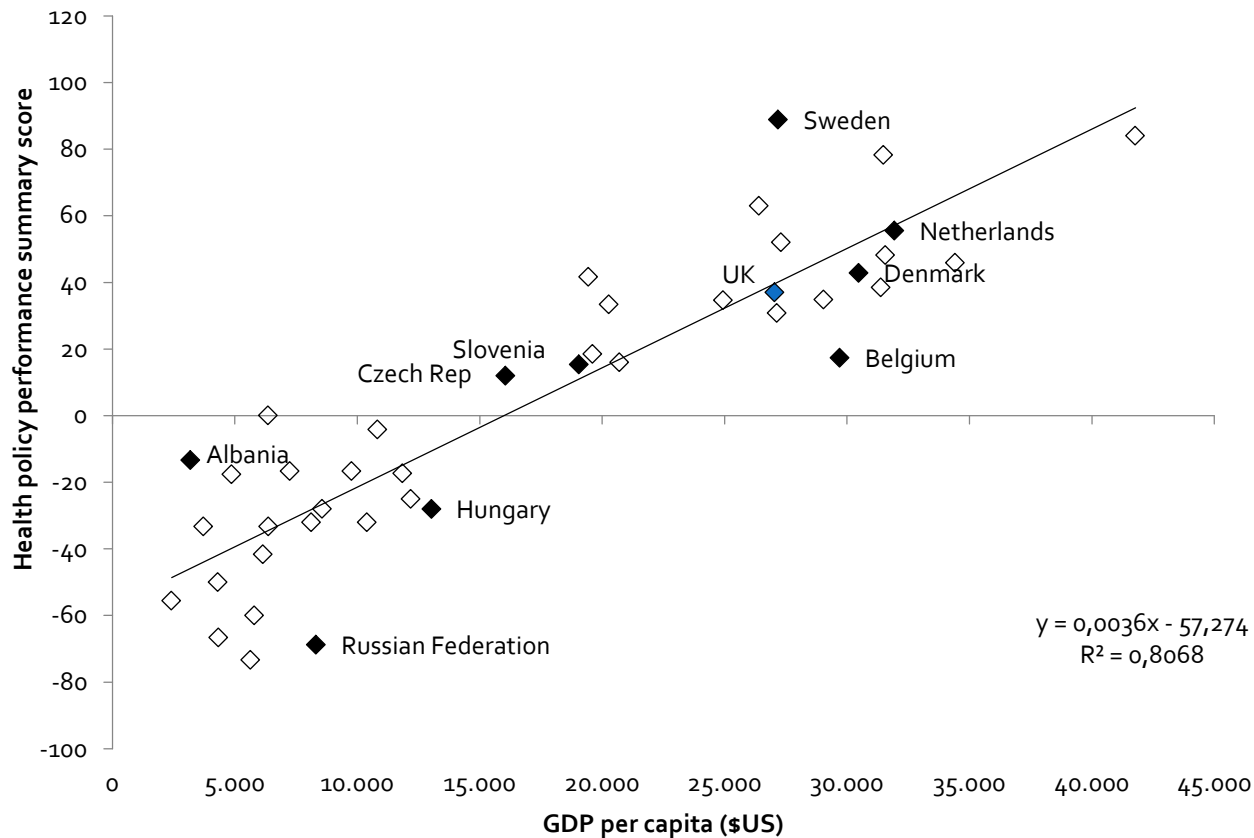
EXCESS DEATHS IN EUROPE AS COMPARED TO BEST PERFORMER (SWEDEN)

Condition	Excess deaths	Condition	Excess deaths
Lung cancer	151,000	Injuries (1-19)	7,000
Liver cirrhosis	119,000	Infectious dis.	51,000
Other alcohol	14,000	Stroke	584,000
Ischemic heart	937,000	Cervical ca.	11,000
Infant mort.	26,000	Breast ca.	24,000
Maternal mort.	<1,000	Road transport	57,000



WHAT DETERMINES HEALTH POLICY? MEANS?

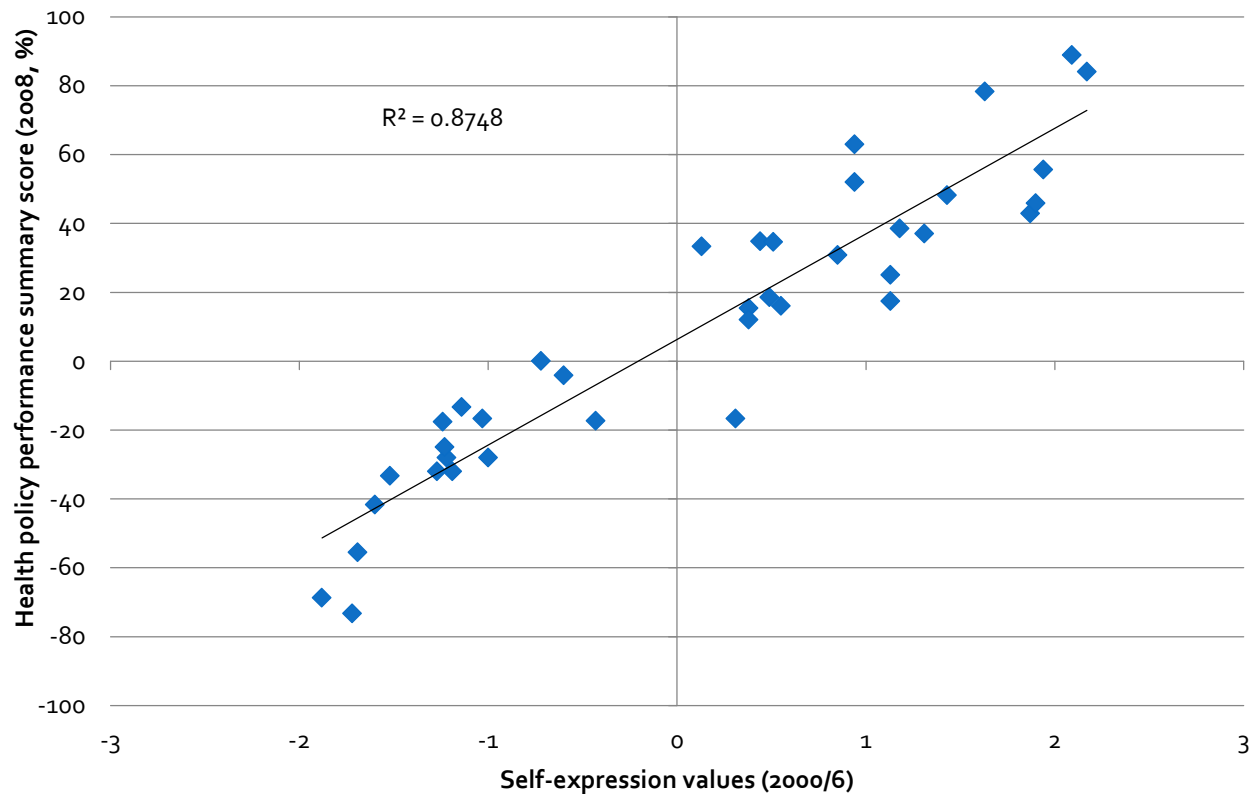
National income vs.
health policy performance



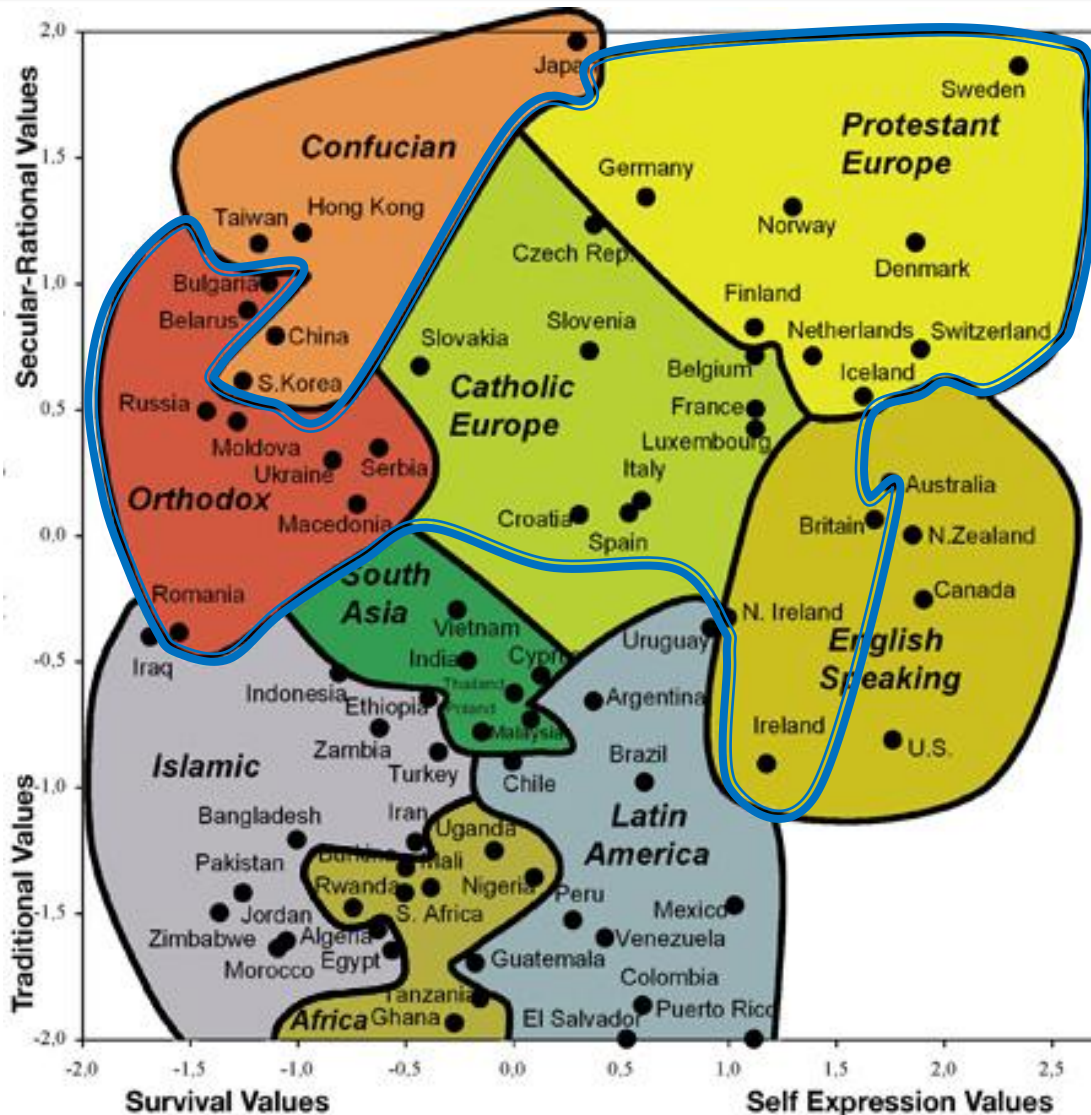
WHAT DETERMINES HEALTH POLICY?

POLICY? WILL?

Value orientation vs.
health policy performance



WORLD VALUES SURVEY



Traditional values emphasize:

- God is very important
- Obedience and religious faith more important than independence
- Abortion never justified
- Strong sense of national pride
- Respect for authority

Survival values emphasize:

- Economic & physical security more important than self-expression and quality of life
- Would not sign a petition
- Have to be careful about trusting people

SPECIFIC POLICY INDICATORS VS. POLICY DETERMINANTS

Policy area	National income	Survival values	Democracy	Left parties	Govt. effectiveness	Ethnic fractional.
Tobacco control score		■				
Male smoking		■		■		
Male lung cancer		■				
Alcohol policy score					■	
Alcohol consumption		■				
Male liver cirrhosis		■		■		
Iodine deficiency						
Fat as % of energy	■					
Fruit & veg. cons.	■				■	
Teenage pregnancy	■		■			
Neonatal mortality			■			
Maternal mortality			■			
Measles immunisation						
Child safety score					■	
Postneonatal mortality	■		■			
AIDS incidence						
MRSA rate						
Influenza vaccination	■					
Male blood pressure		■				
Female stroke mort.	■					
Cervical cancer mort.	■					
Seat belt wearing					■	
Occupant mortality	■					
Pedestrian mortality	■					
SO2 emissions					■	
Ozone concentrations						
Summary score		■				■

IN CONCLUSION

- The diverging health trends in Europe are a testimony to both the successes and failures of health policy in Europe in the past decades
- Economic, social and political conditions have been the main drivers of this divergence, but they were partly mediated by specific health policies
- Europe's diversity offers great opportunities for mutual learning, in which public health and health policy research have an important role to play

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THANK
YOU!

