

Country-Specific Age/Health Patterns: Options for Achieving Sustainable Prosperity

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Everything Changes, Everyone is Affected

- The long life expectancy in modern societies is a result of an extraordinary successful economic development paired with public health achievements.
- It is perhaps the most significant revolution produced in the last century
- However, in this century, we face the challenge of comprehensive reforms to address the fiscal, financial and labour market implications of ageing, as well as its implications for pensions, social benefits and systems of health and long term care.

What the leaders are saying

“People think that aging is the end of the world, that for example *Switzerland’s* richness will go out of the door. That is simply wrong. A fall in gross domestic product is possible – but is only one scenario.”

Axel Borsch-Supan, Director,
Manheim Research Institute for the Economics of Aging, Germany

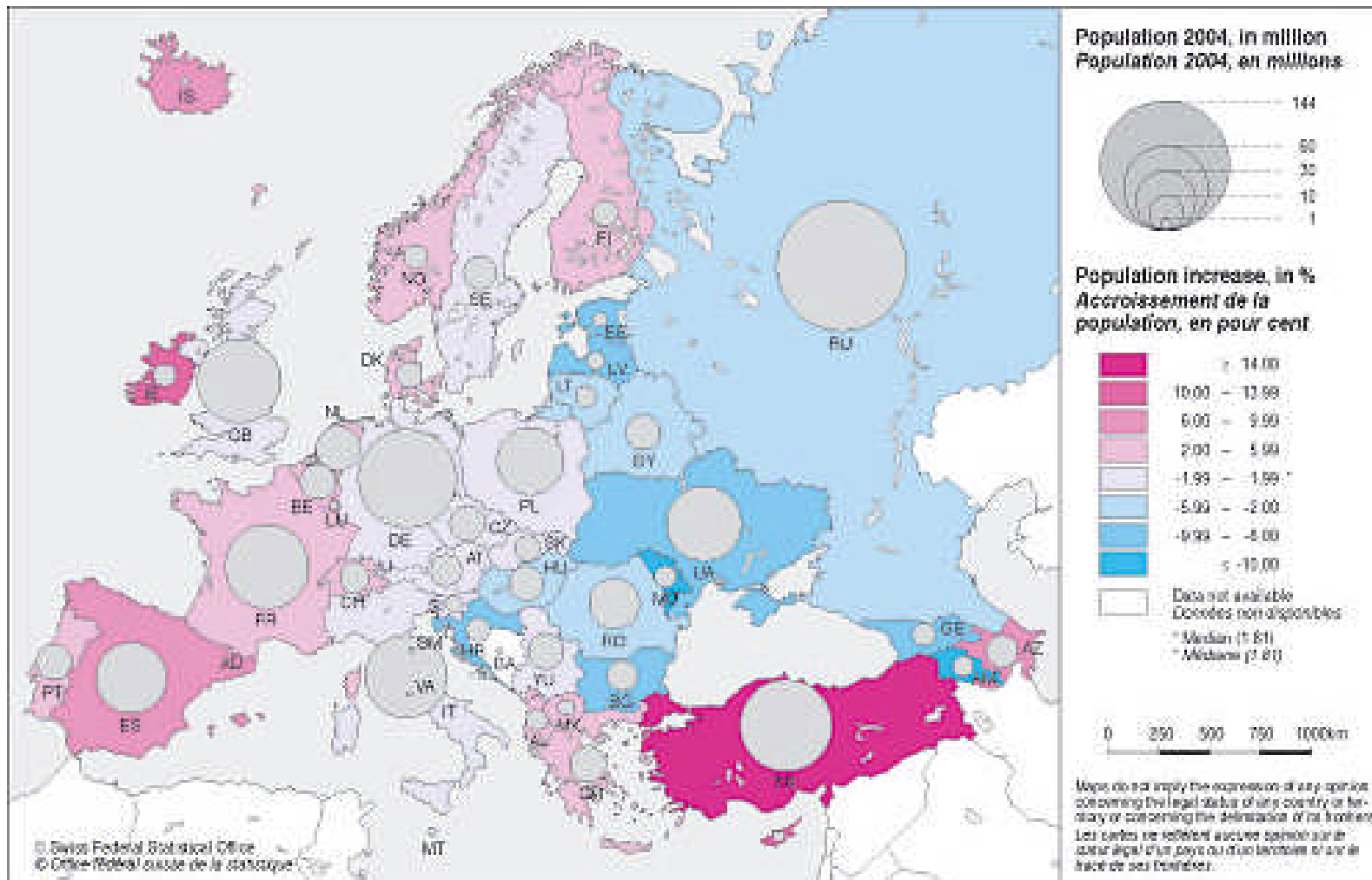
“Demographic change is one of the three major forces now remodeling Europe, alongside globalization and technological change.”

José Manuel Barroso, President of the European Commission

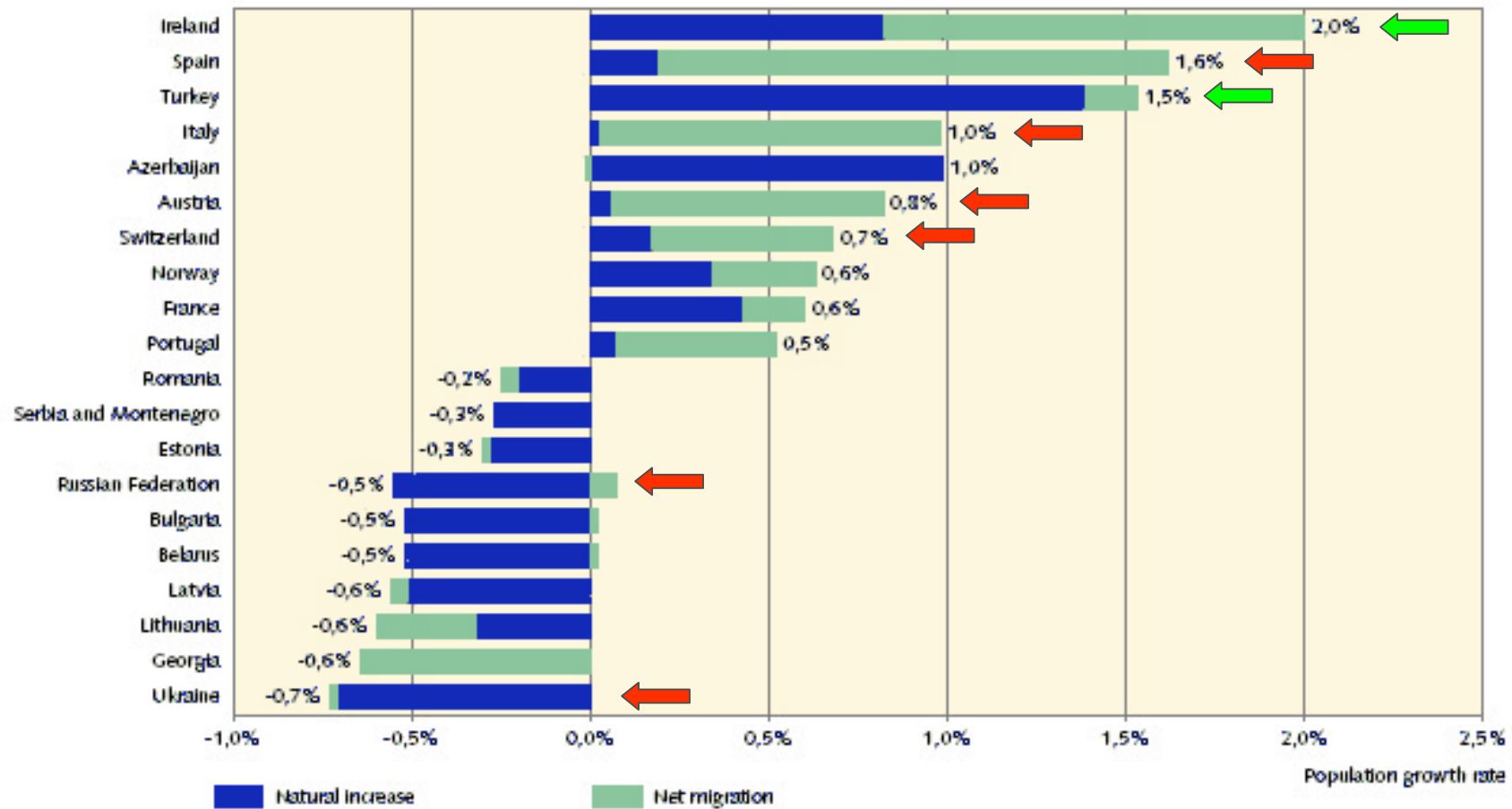
“We will make full use of the next 15 years and take effective measures to avoid the side effects of an aging population.”

Zhang Weiqing, Director of the National Population and
Family Planning Commission, China

Population around 2004 and Population Change between 1995 - 2004



Ten highest and ten lowest rates of population growth in Europe (2004)



NB Countries with fewer than one million inhabitants have been ignored.

The Consequence

- Upsurge of public and political interest in demography
- But still lack of solid science-based information about likely future demographic trends
- More information: www.populationeurope.com

Can we learn from history?

“Aus der Geschichte kann man nicht lernen, aber sich für die Zukunft bilden. Mit anderen Worten , die Geschichte ist keine Beispielsammlung, aus der man nach Belieben fertige Lösungen für unsere Probleme herausgreifen könnte.





Der Historiker mag zwar wissenschaftlich arbeiten, aber er ist, gewollt oder ungewollt, von seiner Zeit und seiner Umgebung geprägt. Nicht simple Neugier drängt ihn, mehr über die Vergangenheit zu erfahren, sondern die Ungewissheit, in der er lebt.”

Jean-Francois Bergier, 1998

Agenda

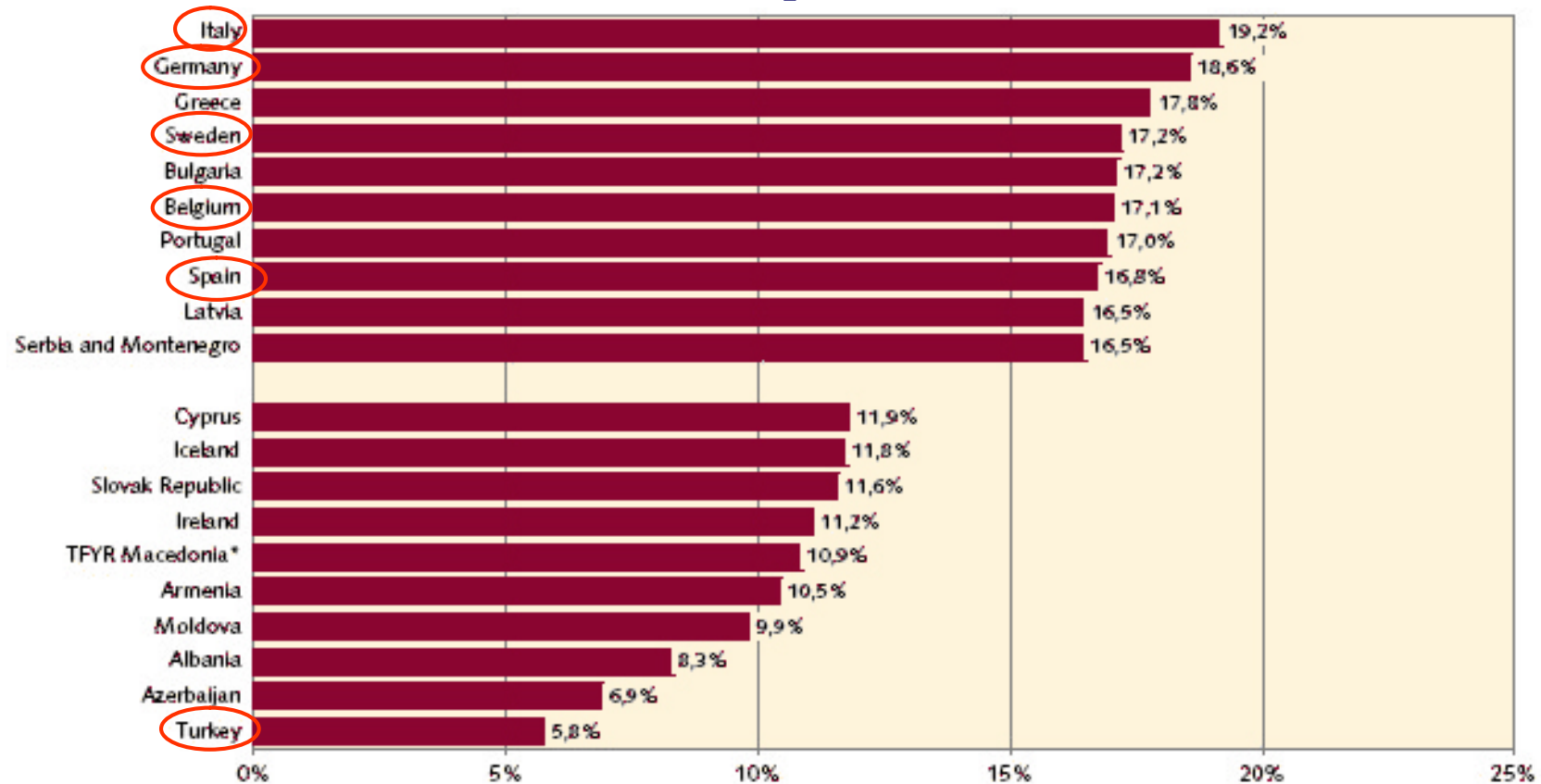
- Age-Health Pattern across Europe
 - past and present
 - future and forecast
- Options for Change
 - the value of modern health care & prevention
 - the economic impact: The case of Switzerland

Unprecedented Ageing

Country	Population size on January 1st, 2005 (millions)	Projected population size, 2030 (millions)	Male life expectancy at birth, 2004 (years)	Male life expectancy increase 1994-2004 (years)	Male life expectancy at age 65, 2004 (years)	Female life expectancy at age 65, 2004 (years)	Proportion of the population above age 65, 2005 (%)	Projected proportion of the population above age 65, 2030 (%)
Switzerland 	7.4	7.4	78.5	3.3	18.0	21.4	15.8	23.1
EU-25 	459.5	469.4	75.1	2.8	16.1	19.7	16.6	24.7
USA 	295.1	363.6	75.2	2.8	16.8	19.8	12.4	19.6
Japan 	127.6	117.6	78.6	2.5	18.0	23.0	19.9	29.6

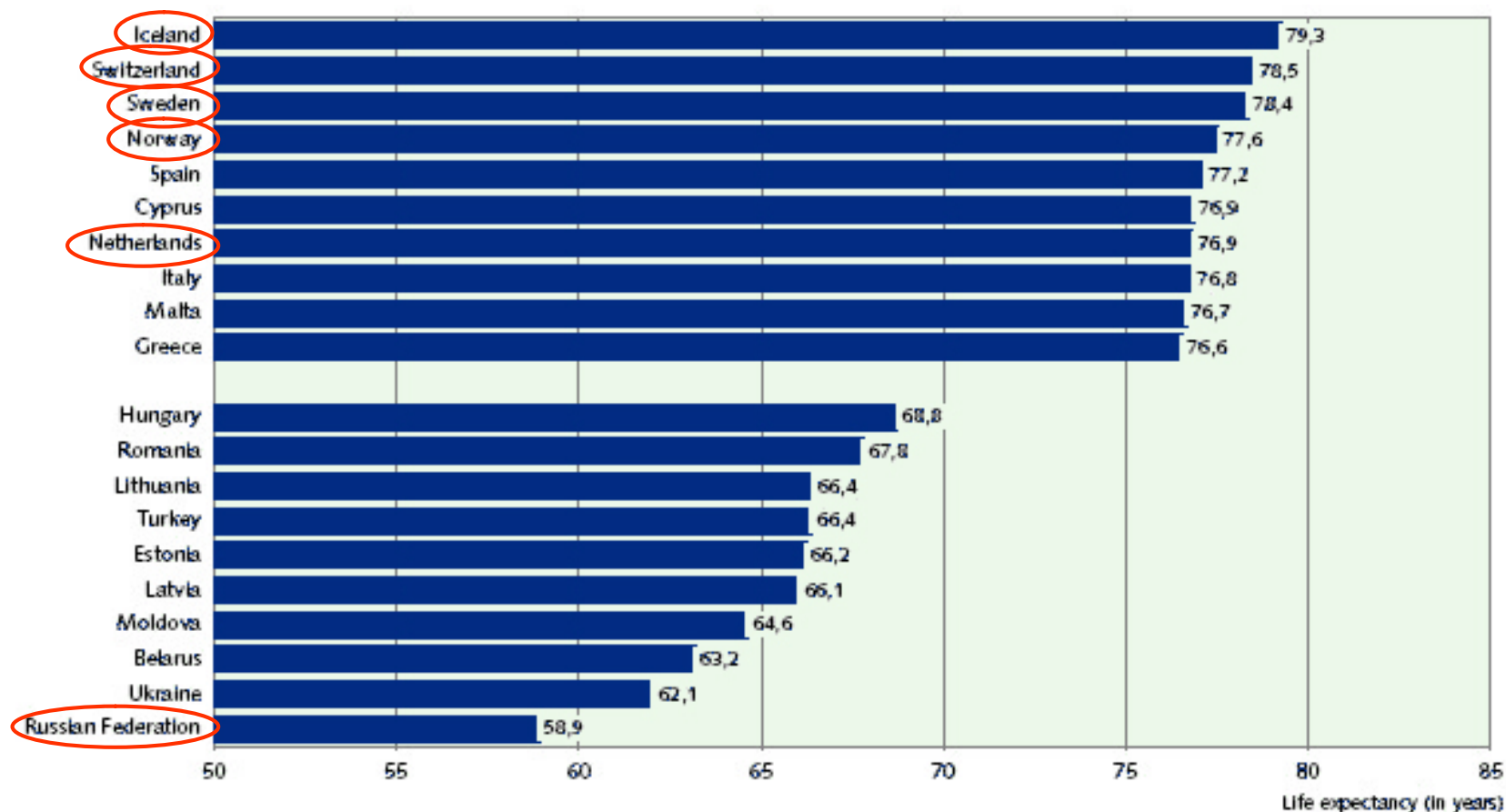


Ten highest and ten lowest percentage 65 years of age or over in Europe (2004)



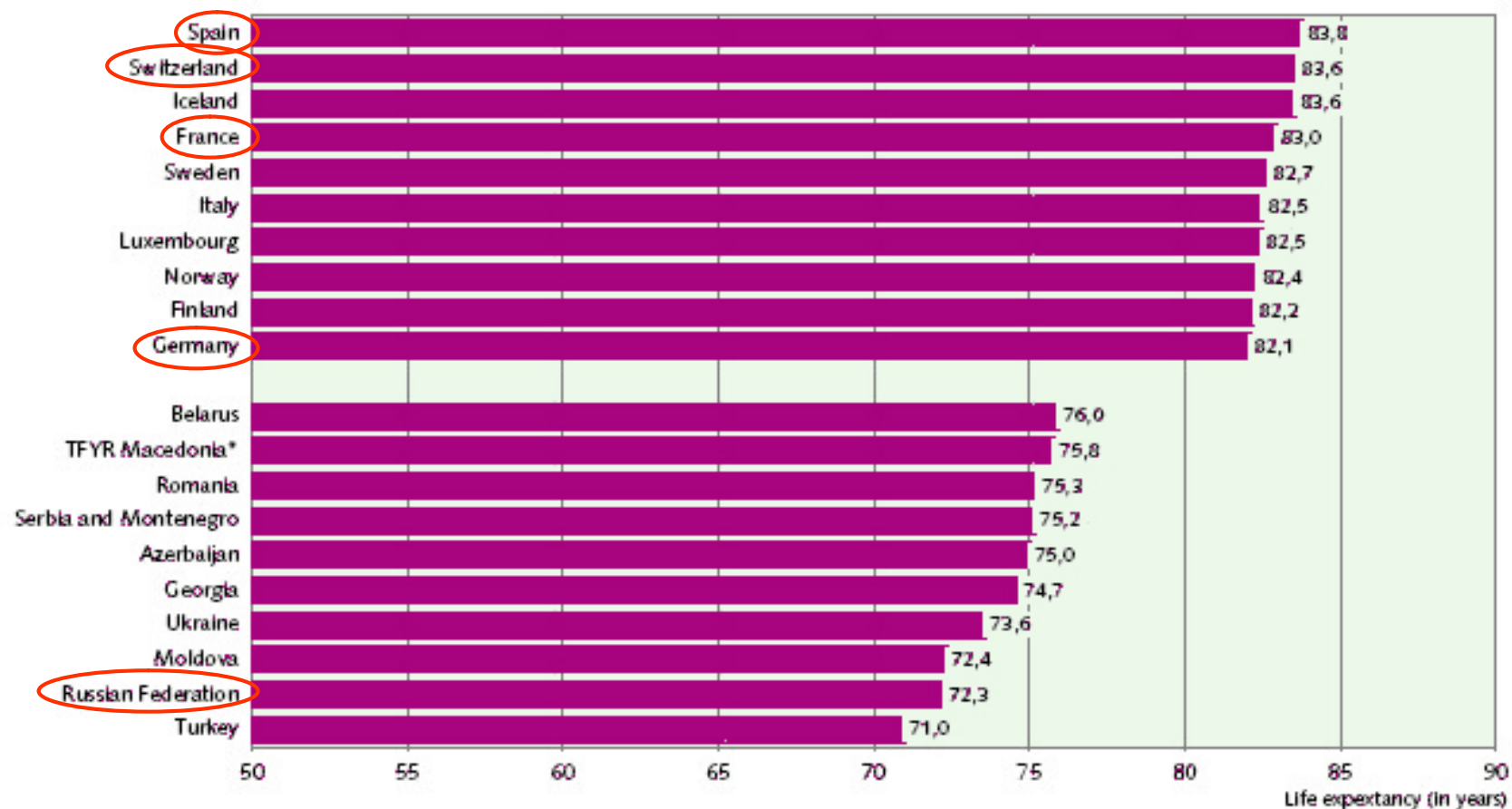
* The use in the figure of the term "TFYR Macedonia" is for descriptive purposes and the convenience of the reader.
NB Countries with fewer than 100 000 inhabitants have been ignored.

Ten highest and ten lowest life expectancies in Europe (2004), males

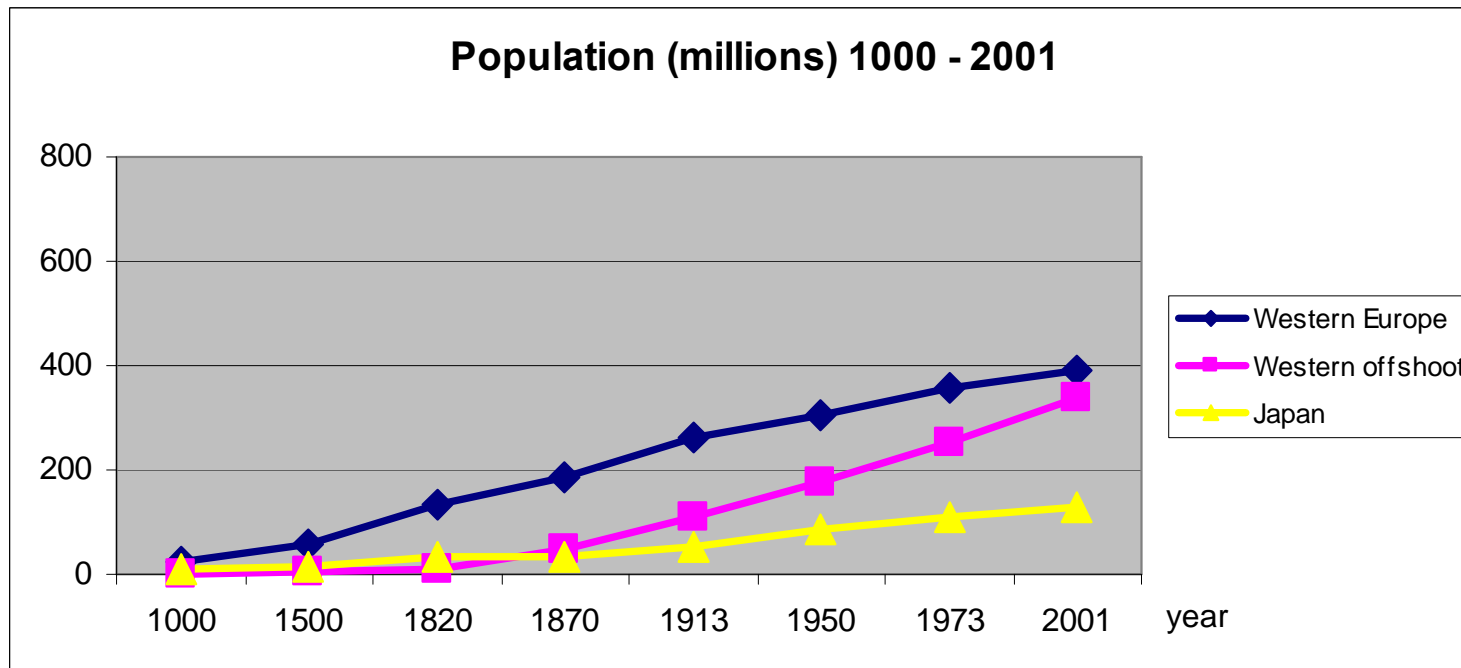
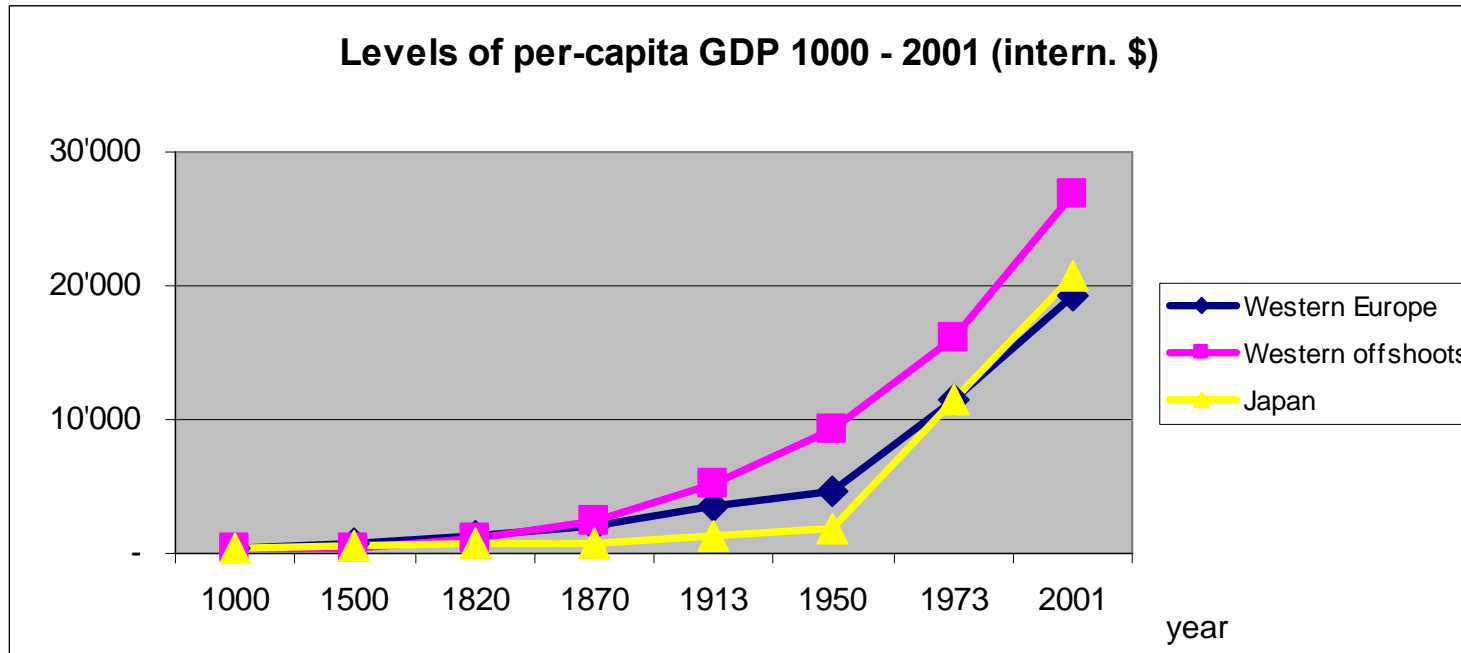


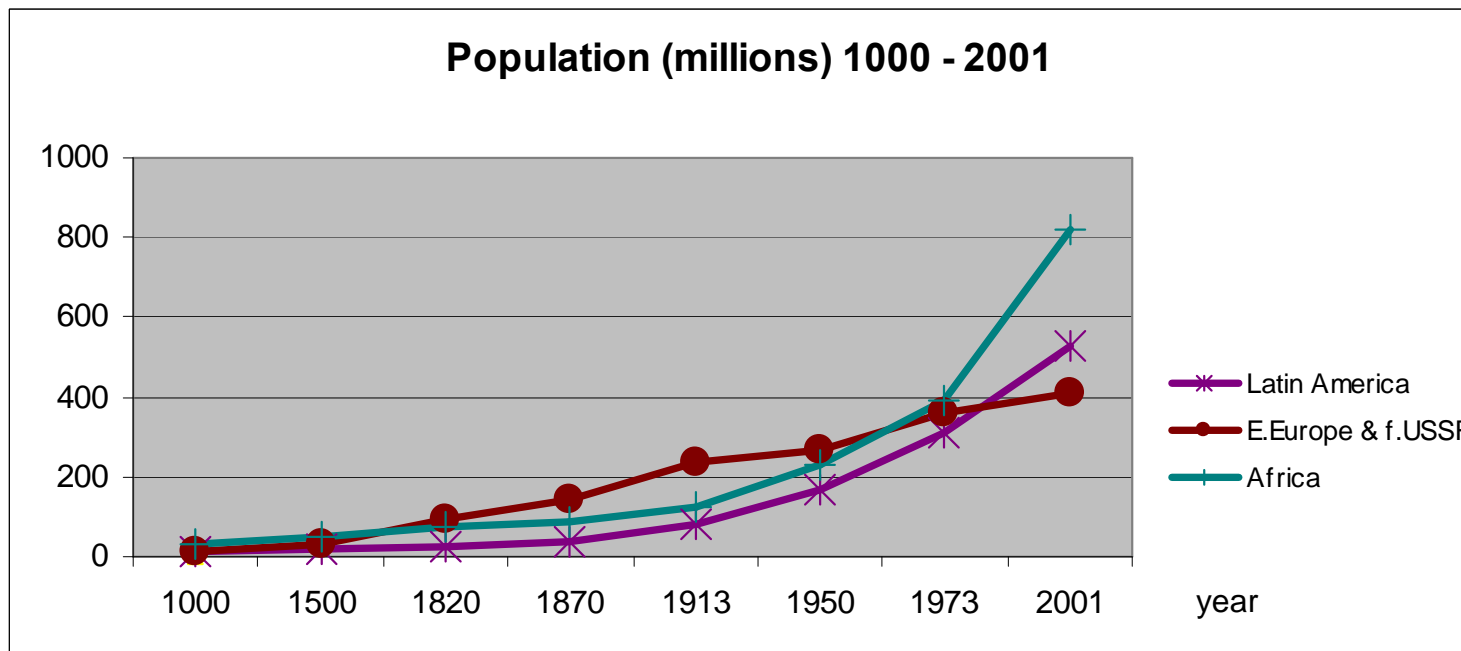
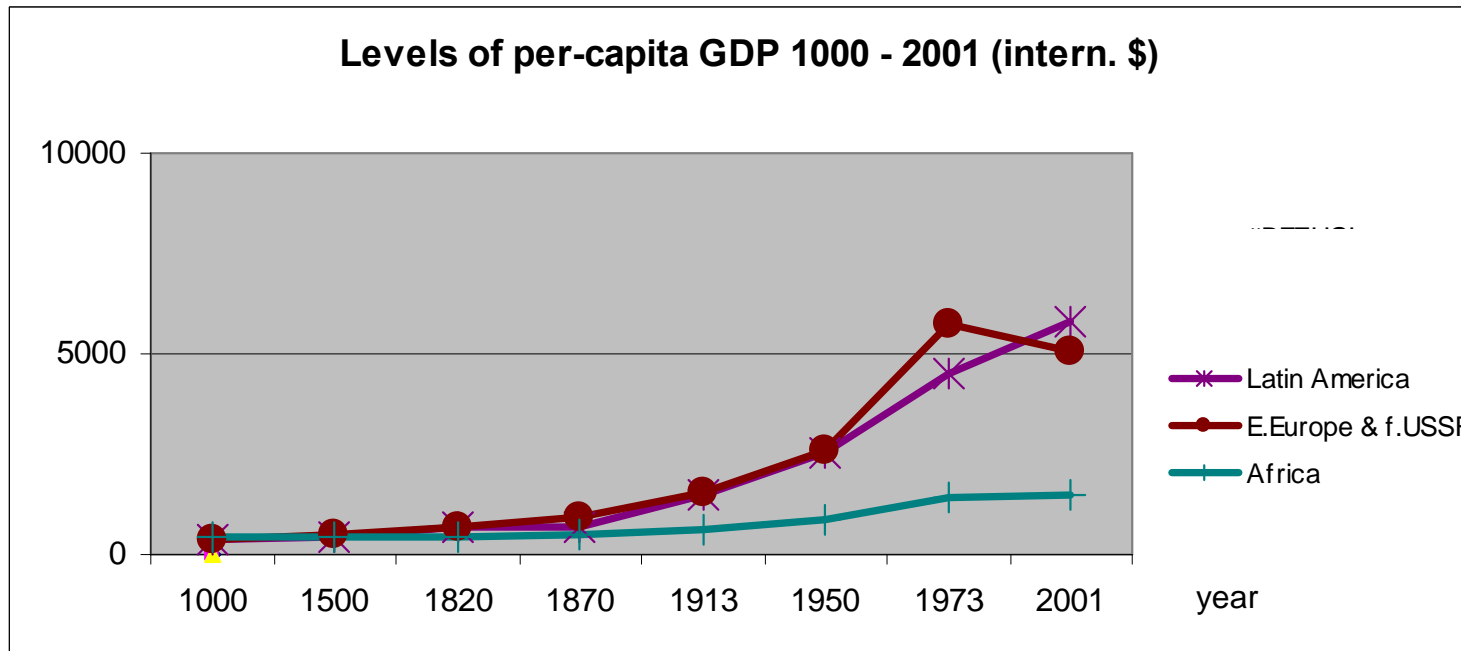
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Ten highest and ten lowest life expectancies in Europe (2004), females

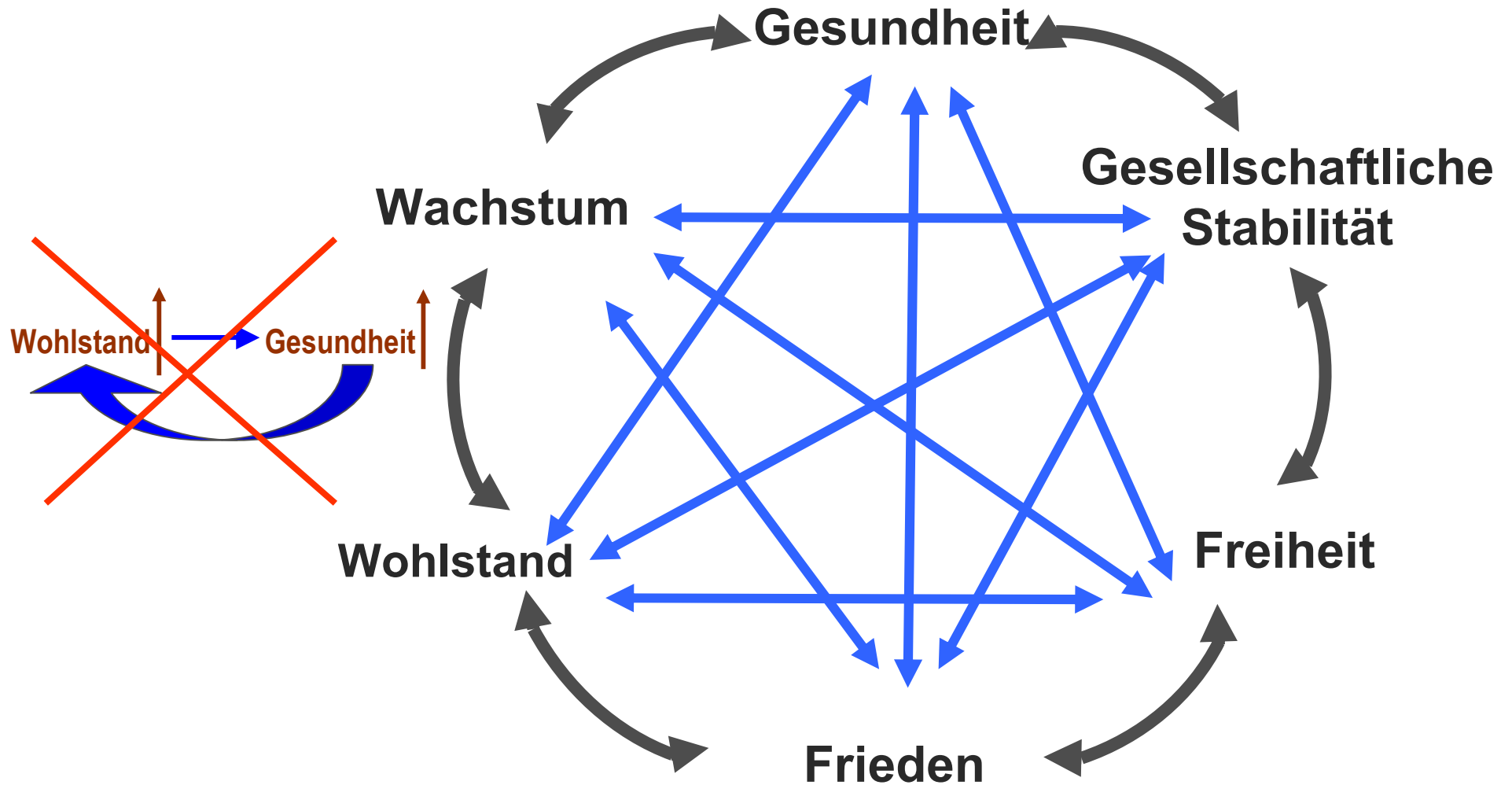


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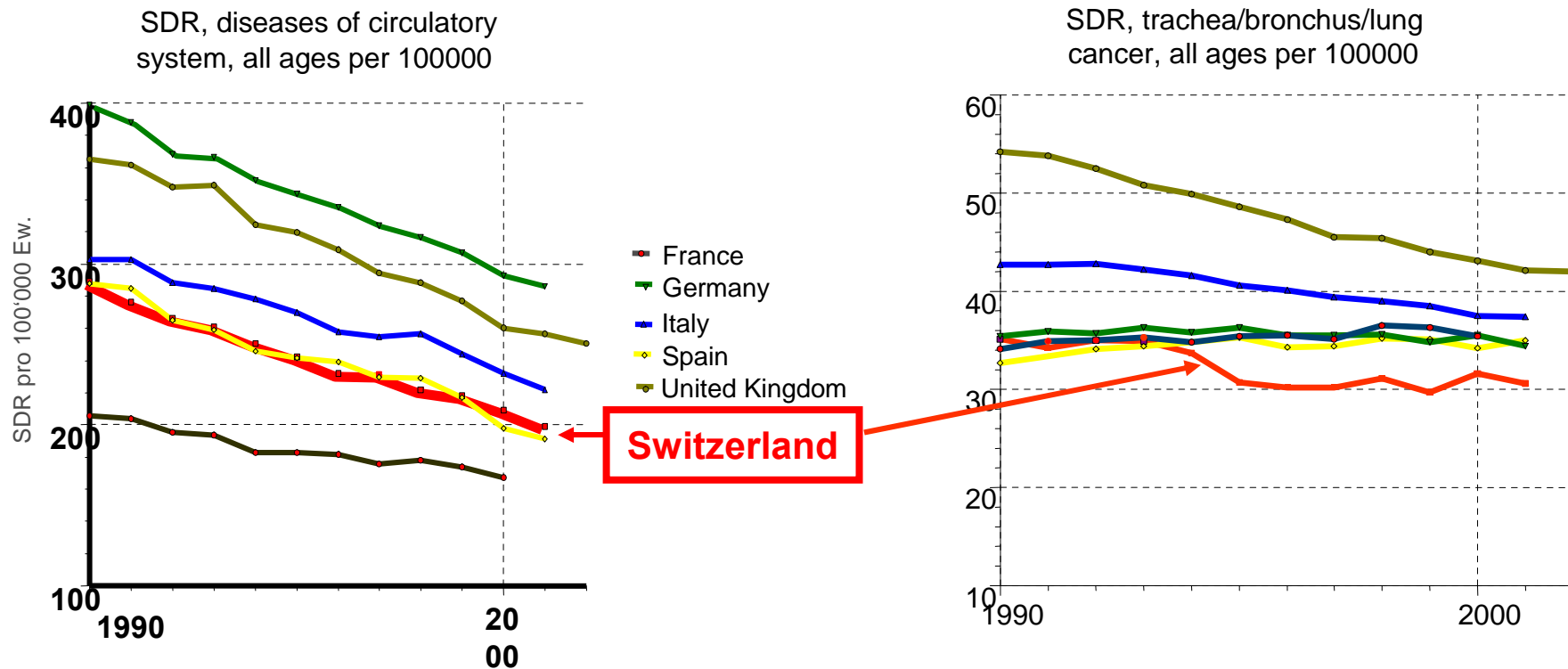




Gesundheit und Gesellschaft



Herz-Kreislauf / Lungenkrebs Mortalität



Source: European Health for All Database, WHO Regional Office for Europe Copenhagen, Denmark, Version Jan 2005

Aging Well in Western Europe

1 FEWER YOUNG

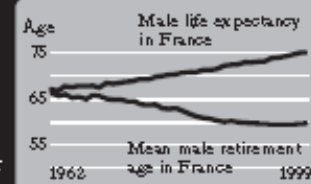
An anemic birthrate means that the pool of western European workers will shrink significantly by 2030—by nearly 16 percent for the cohort aged 15–49.

In 2030, there will be
4 deaths for every 3 births

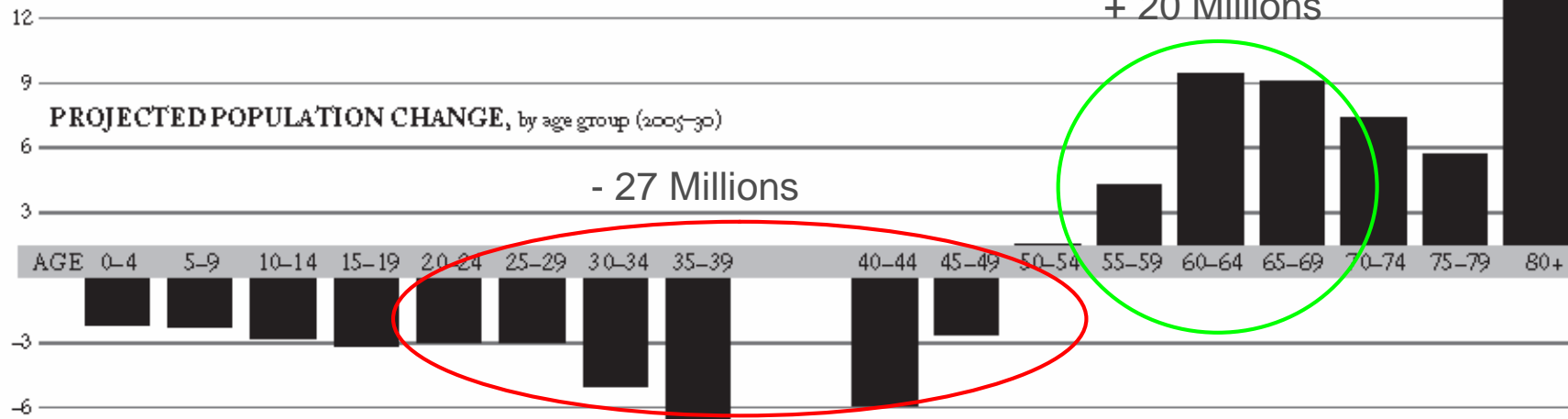


3 LESS WORK

So far, however, western Europeans have translated their increased longevity into more leisure time. Throughout the region, especially in France, the average age of retirement has fallen over the past generation.



Millions



2 MORE ELDERLY

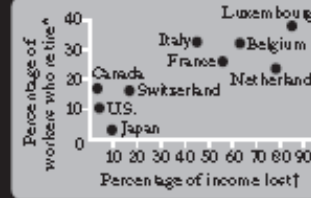
Meanwhile, the pool of older people will increase massively because they are expected to live longer. But they will also be healthier, and more productive senior citizens could bring an economic upsurge.

Healthy Life Expectancy, 2005



4 ONE SOLUTION

A larger percentage of older people leave the work force in western Europe than in other rich societies because of various financial penalties. Changing those incentives could stem the tide.



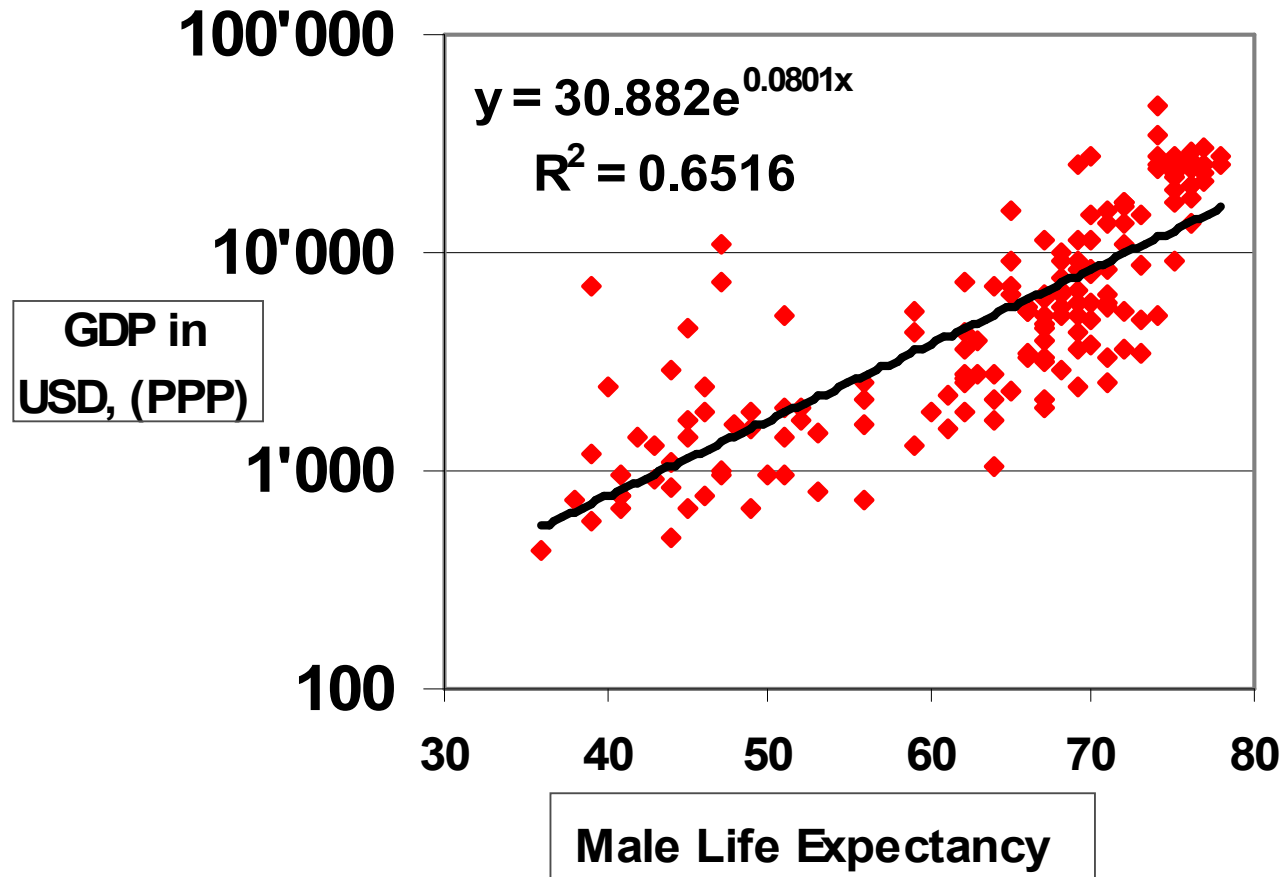
sources: U.S. Census Bureau, International Data Base, 2006; OECD, 2003, 2004, and 2005 Human Mortality Database.

*Amongst the workers aged 55–69 in 2004.
†Income lost to taxes and lost pension payments, for example.

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Health Drives Economic Performance



On a global scale, an increase in life expectancy at birth by 10% produces further economic growth of 0.4% a year (WHO)

Source: World Development Indicators CD-ROM, Washington, DC: The World Bank, 2003.

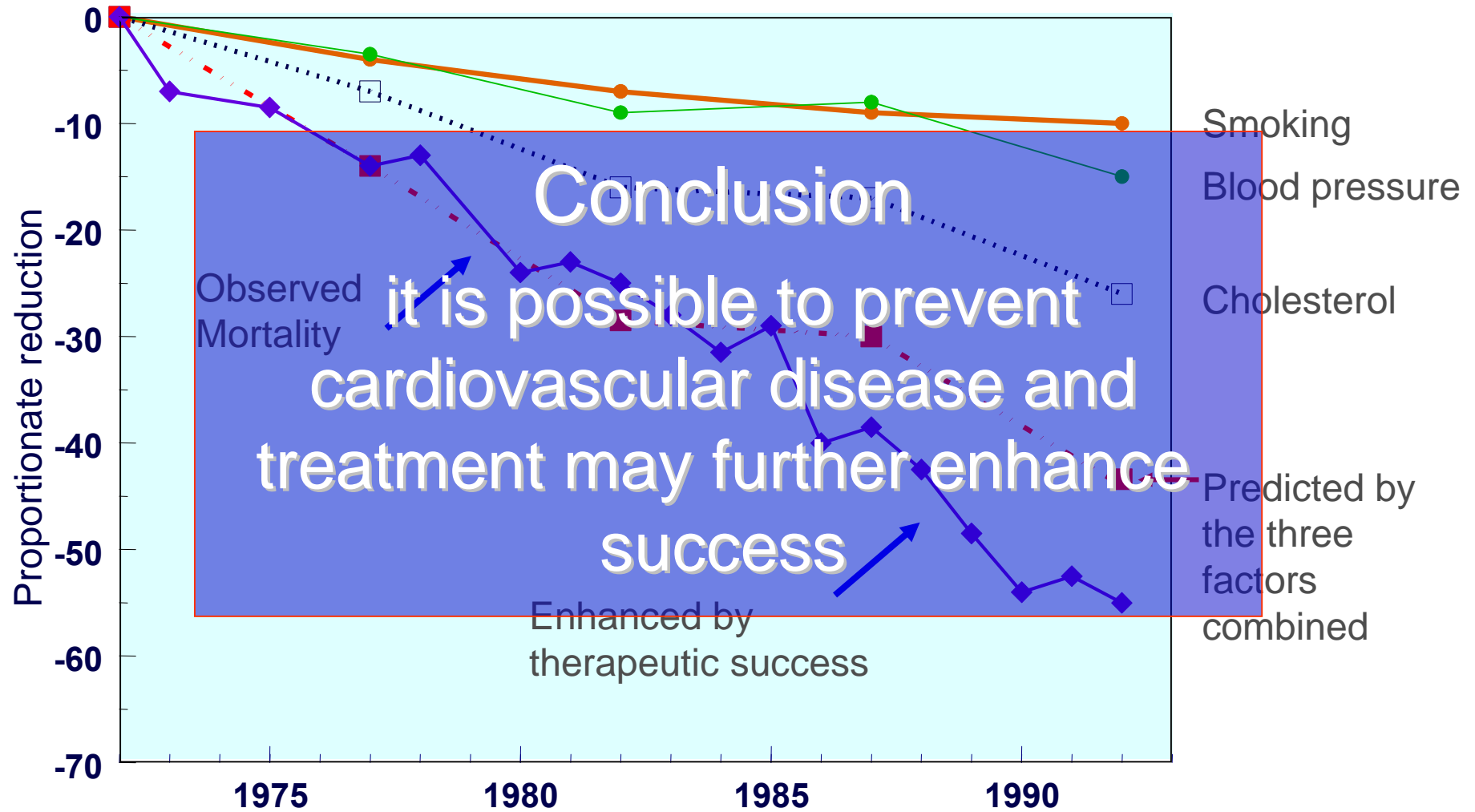
Ungarn's „Healthy“ Revolution 1993-2004

Verbesserung der
Lebenserwartung (Jahre)

Infektionskrankheiten	+ 0.06
Neoplasmen	+ 0.20
Kardiovaskuläre Erkrankungen	+ 1.64
Lungenerkrankungen	+ 0.23
Magen-Darm-Erkrankungen	+ 0.55
Unfälle und Gewalt	+ 0.56
Andere	+ 0.60
	<hr/>
	= 3,8 Jahre

Mortality in CVD Eastern Finland

related to that predicted from risk factor reduction



(Vartiainen et al. BMJ 1994;309:445)

Call 140 90 5 3 0 immediately

140/90

Healthy people have to have a blood pressure below this level. Easy to measure!

5

Cholesterol below 5 is good for the health.
It may be checked!

3

At least a three km walk/day -
physical activity at least 30 minutes!

0

Tobacco kills. Zero tolerance!

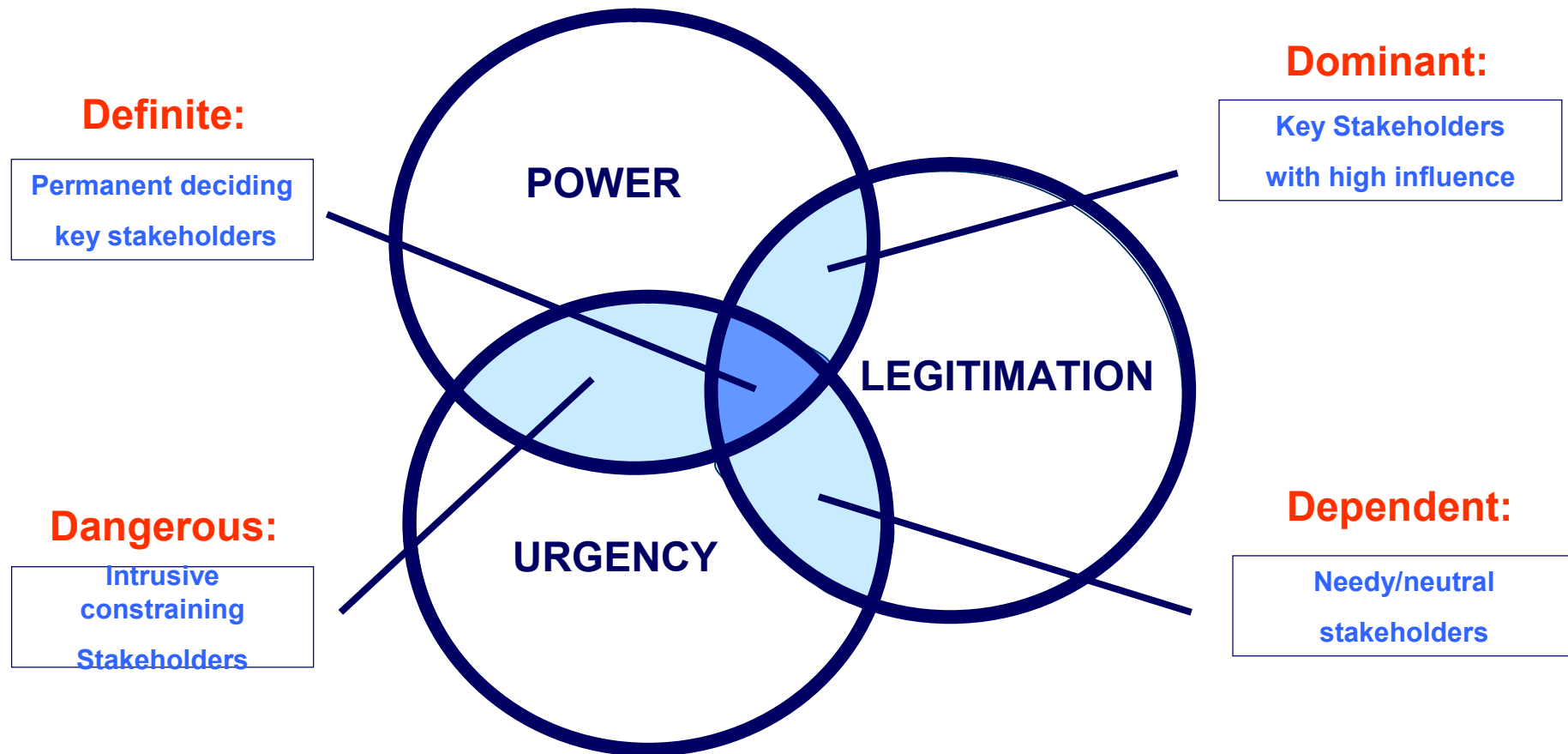
Definition of Stakeholder

A stakeholder is:

“Any group or individual who can affect or is affected by the achievement of the organization’s objectives”

Freeman, 1984

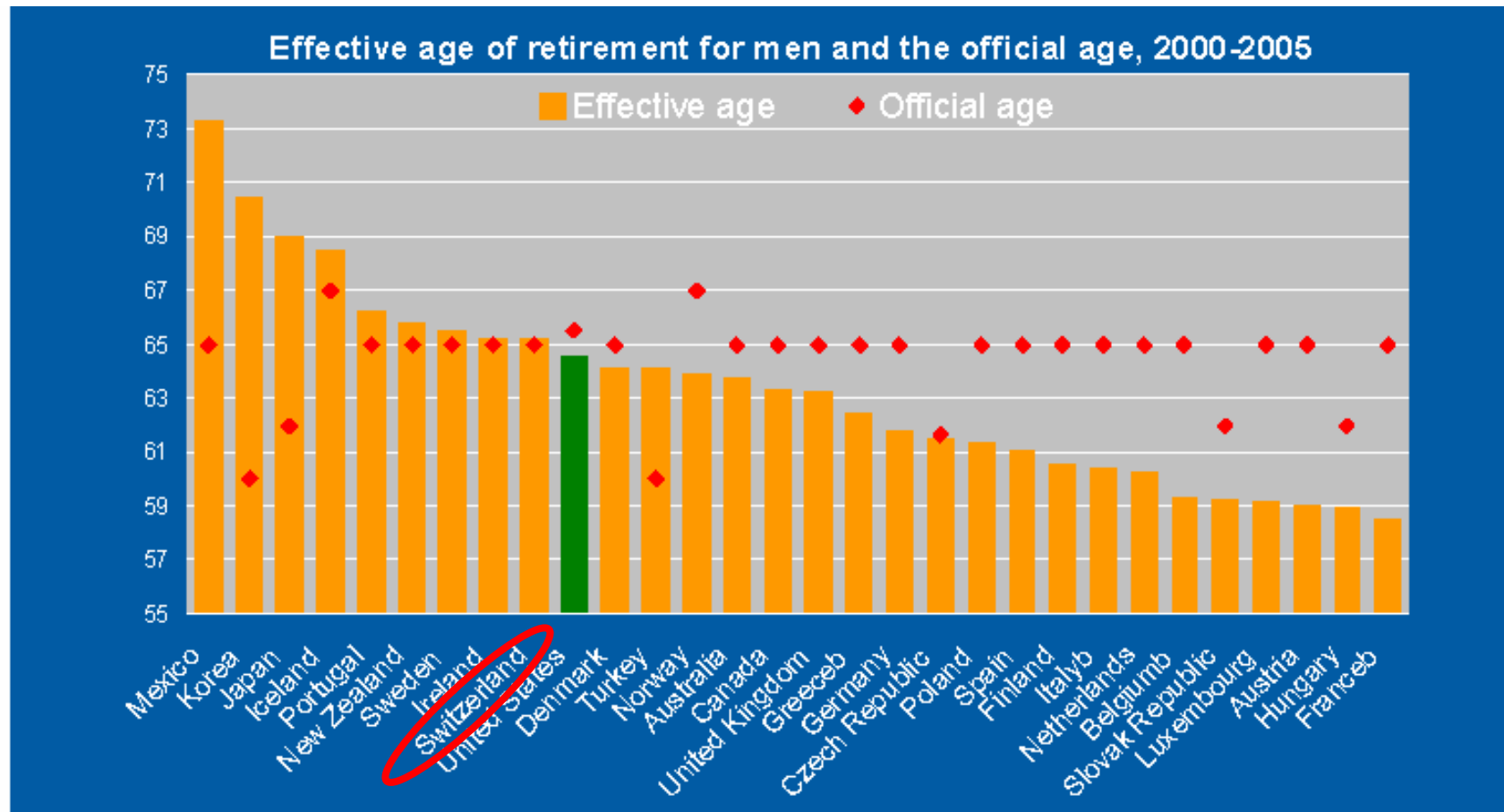
Different Stakeholder Categories



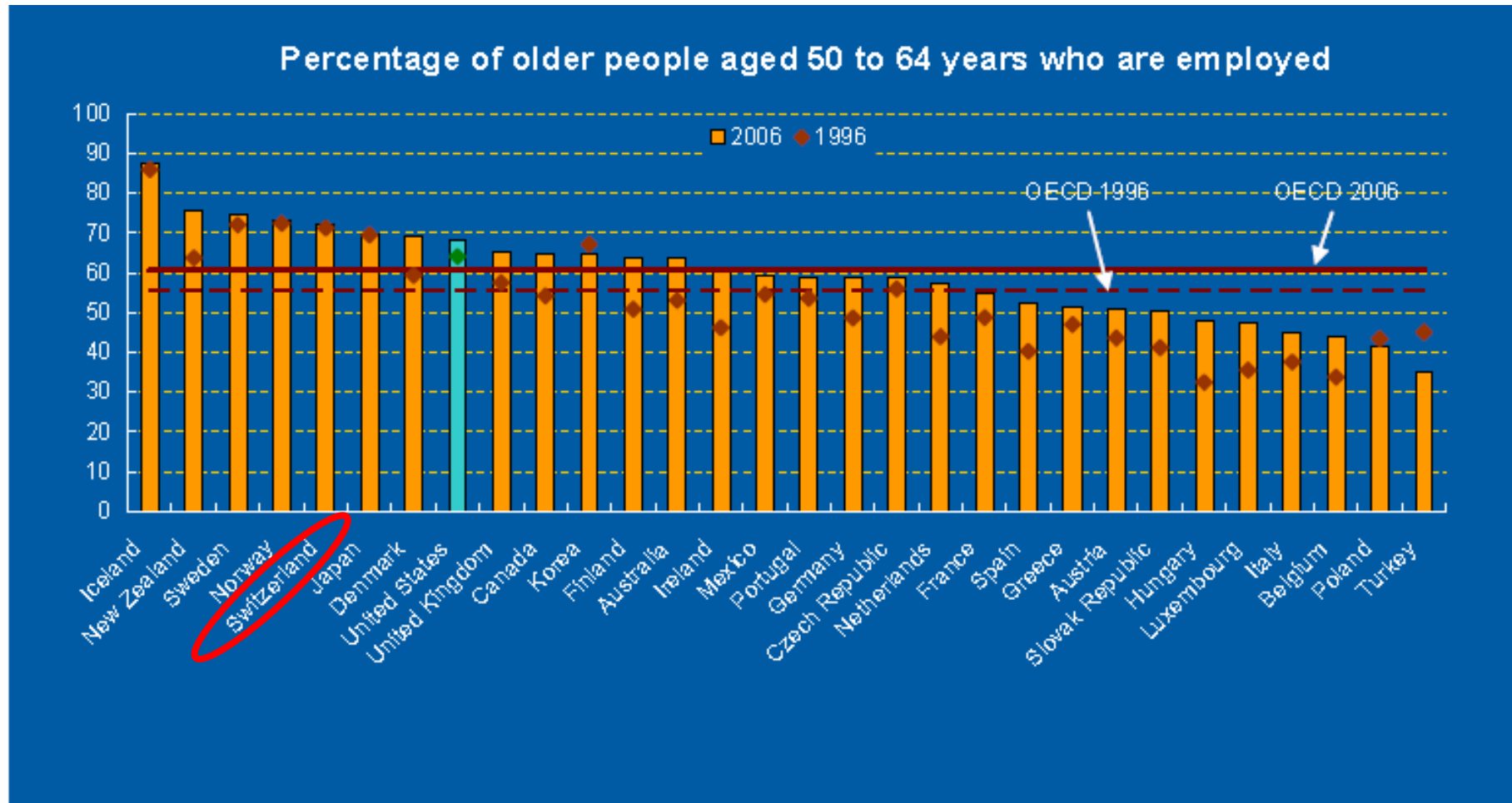
✚ HCI classified as “**definite**” since they are legitimate, urgent and powerful

* Adapted from Mitchell, Agle, Wood 1997

Rewarding work



Encouragement of older people



Smoking: Impact on Health & Wealth



The Costs of Addiction

Epidemiological Data	Tobacco	Alcohol	Illegal Drugs
Consumers	1'950'000	357'000	30'000
Deaths per year	8'300	2'137	322
Lost productive years	49'700	28'500	11'300
Costs [in billions CHF*]			
Direct costs	1.5	0.8	1.4
Indirect costs	4.0	1.5	2.3
Intangible costs	5.2	4.4	0.4
Total Social costs	10.7	6.7	4.1

*estimation year 2000 for the costs of alcohol and tobacco

Source: Schweizerische Fachstelle für Alkohol- und andere Drogenprobleme (SFA), 2004

Smoking : Direct medical costs per case and per year

Cardiovascular Diseases	CHF 2'239 Smala (2002)
Cerebrovascular Diseases	CHF 21'436 Andlin-Sobocki (2005)
Malignome of lower respiratory tract	CHF 30'082 Dees (2004)
COPD	CHF 3'200 (€1'944) Nowak (2004) Costs of COPD in Germany translated to Switzerland at a cross rate of €1 = CHF1.65 Schramm (2005): CHF 4'900 – CHF 5'800 depending on treatment

Joint Research Project
Pfizer Switzerland, Institute for Social & Preventive Medicine (University of Zürich), American Enterprise Institute (Washington DC)

Activating Demographic Potentials through Public Health Strategies

- Impact of increase in total “working years” on national economy and social security (current working times, illness road, untimely retirements)
- Options for health improvement (priorities, impact, likelihood to succeed)
- Demographic fitness : Are prevention efforts an indicator of demographic fitness?
- Social and political dimensions of change (education, pension fund & tax reforms, work/life balance)
- Country-specific patterns
- The future role of the R & D-based industry (empirical medicine, stratified medicine, individualized medicine)



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