



GLOBAL-IQ final meeting

Brussels, 17 June 2014

Impact quantification of global changes

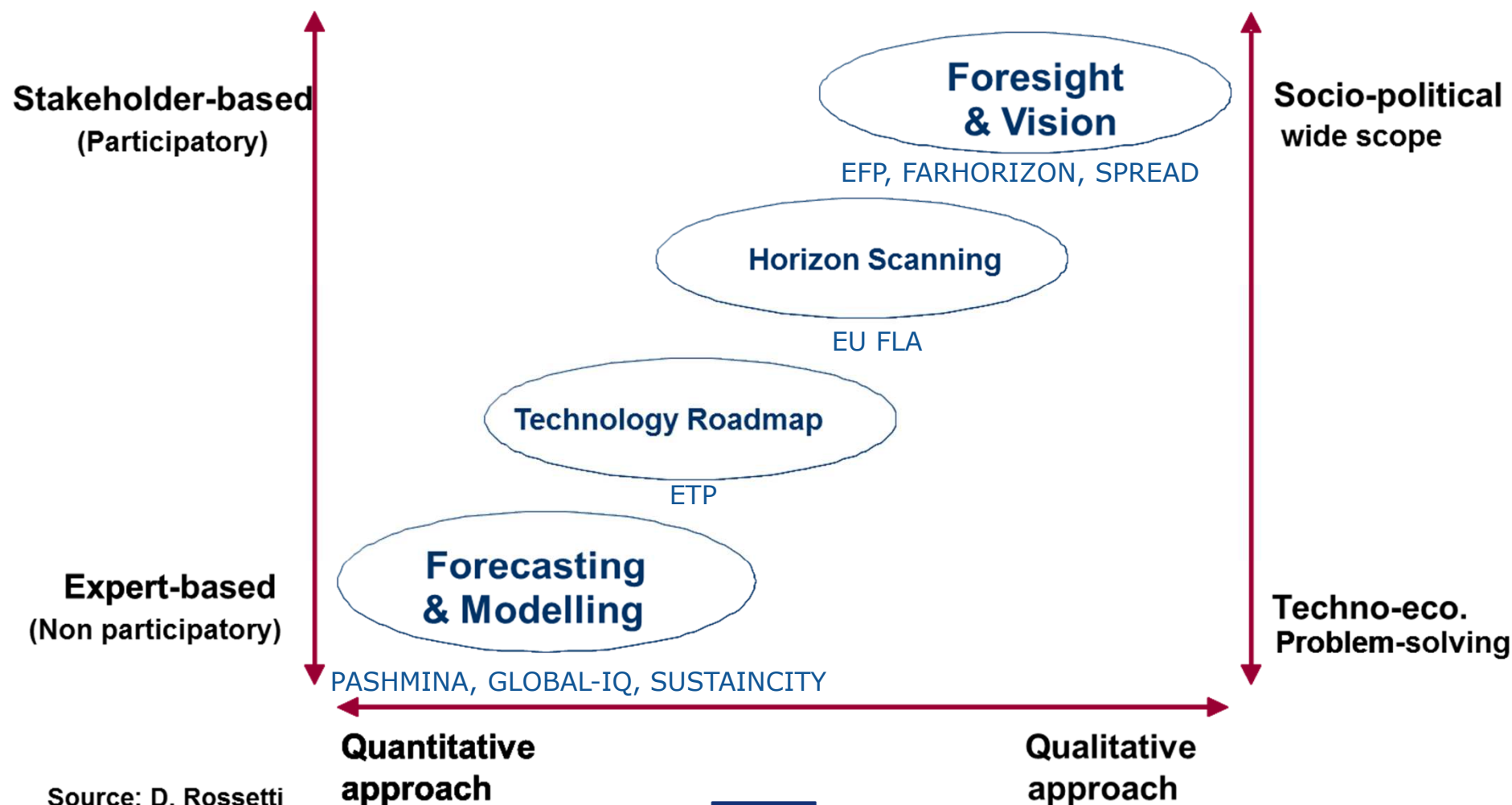
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*** Personally speaking**

Methods: Qualitative and Quantitative





Global changes

- **North-South? East-West? Developed-developing?**
- **Multipolar world, G2, "The end of the West"?**
- **Neo-Keynesian, neo-liberal, State capitalism?**
- **Mega-regional agreements as a basis for world governance or as a tool fragmenting the world economy?**

Population (Million)

	1950	2011	2050	Factor
India	372	1 241	1 692	~X 4 / 5
Brazil	54	197	223	~X 4
USA	158	313	403	~X 2 / 3
China	551	1 347	1 296	~X 2 / 3
EU 28	381	510	520	~X 1 / 1.5

The EU GDP in % of global output

- **37% in 1970**
- **28% in 2010**
- **20% in 2030**
- **17% in 2050**



CO2 emissions – Old and new actors

	2000	2050	
49%	USA & Canada	23%	27%
	Enlarged EU	14%	
	Russia & CIS	8%	
	Japan	4%	
51%			73%
	S-E Asia - China	20%	
	South Asia - India	7%	
	Africa	7%	
	Latin America	7%	
	Others	10%	

Gonzales Report "Europe 2030"

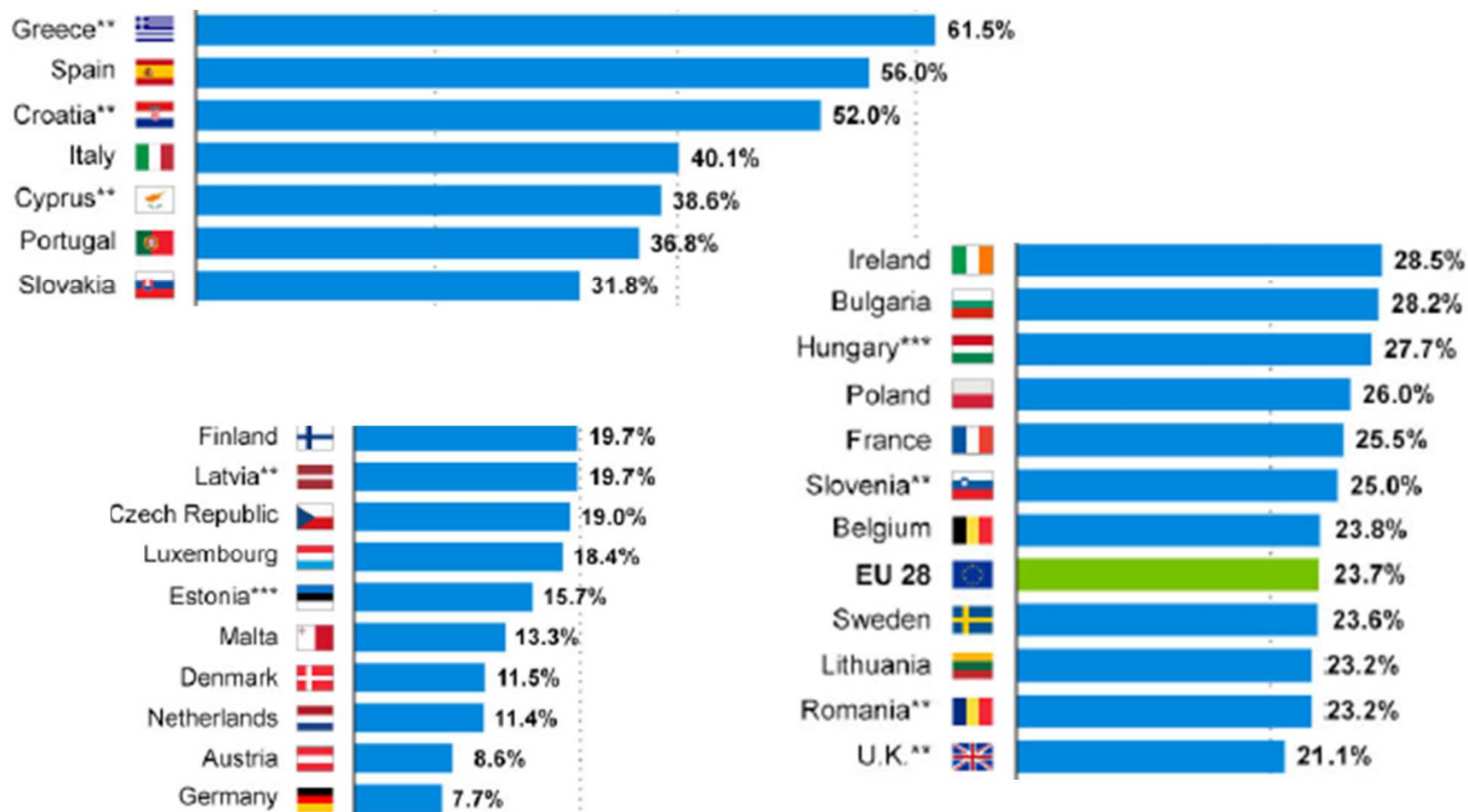


"Europe is at a crossroads: either we keep and strengthen the role as one of the main global actors, or we become an increasingly irrelevant outgrowth on the Asian continent"



European
Commission

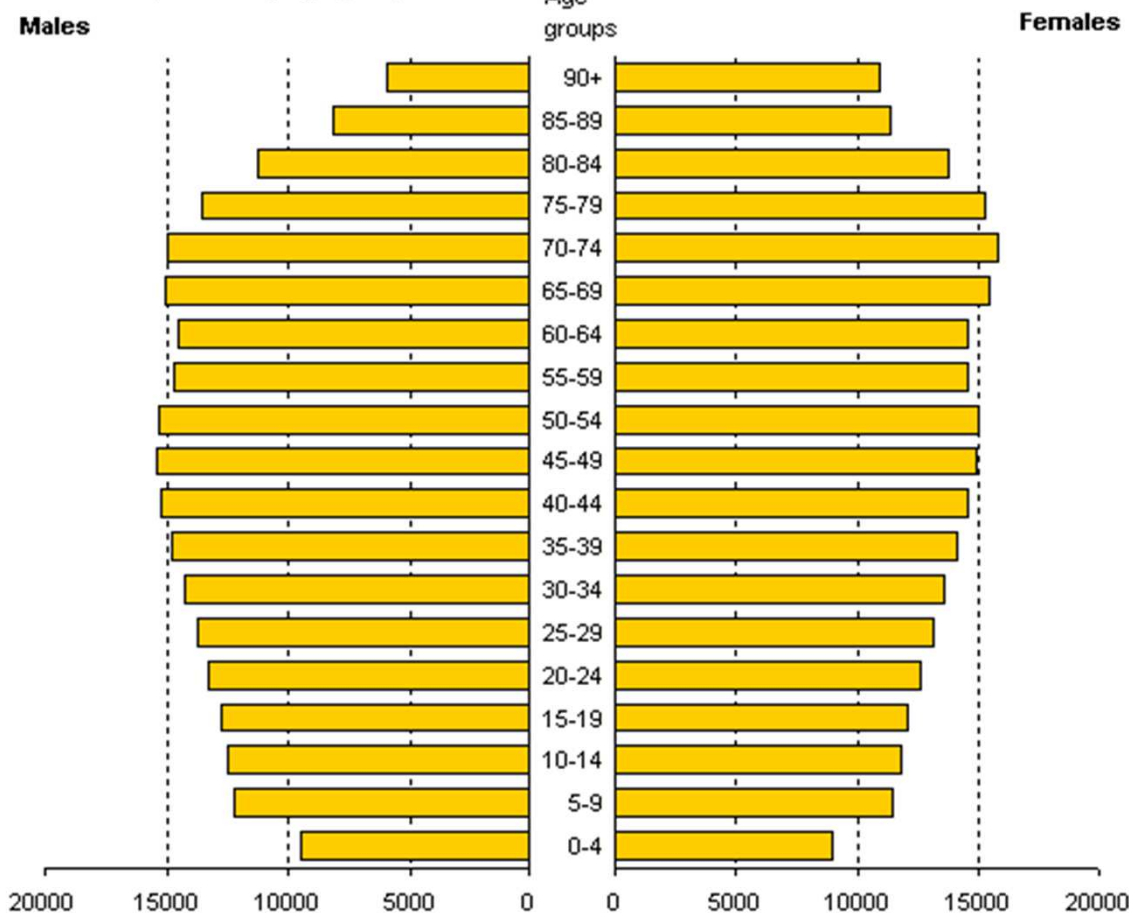
Youth unemployment in the EU (in %)



Source: Eurostat,
Statista, 2013

Ageing EU population (000 people)

EU27: 2060 Population by age groups and sex

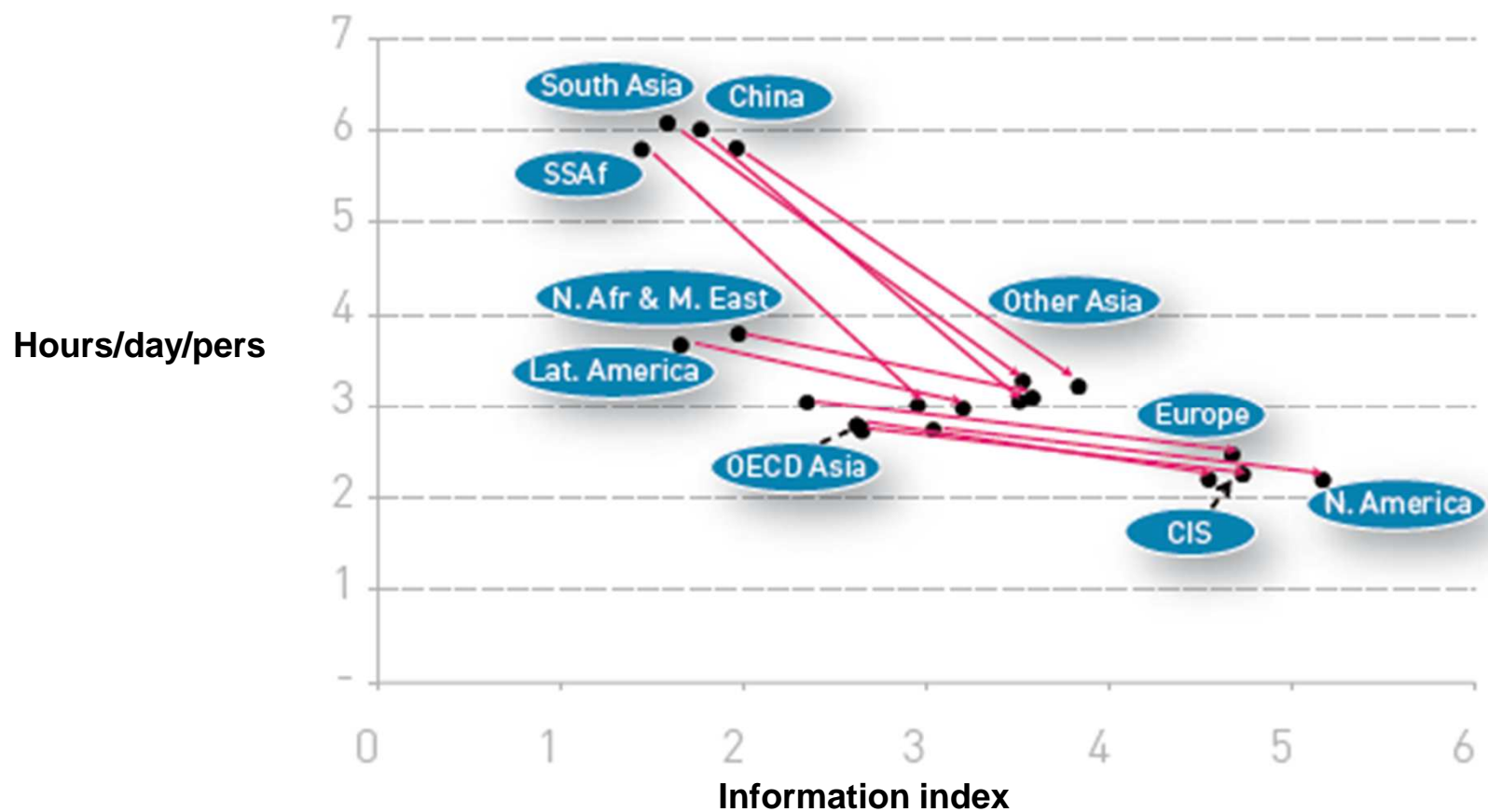


The number of people over 65 will double in 50 years (up to 150 M in 2060)

The "oldest old" (85 and over) will almost triple

The share of health expenditures in the EU is expected to increase from 8% of GDP today to 13% in 2060

Towards "intangible" Food and information (2000-2100)



Source: EC, DG RTD, WETO-T
(Chateau and Rossetti)

European road & congested links (2030)



Source: EC, JRC-IPTS, Transtools

Morning peak hours: 7-9

EU oil consumption and production



Source: Grande Reportagem





EU targets

20% by 2020 EU GHG reductions

40% by 2030

20% by 2020 EFFICIENCY improvements

20% by 2020 RENEWABLES

27% by 2030

BIOFUELS

E-ELECTRICITY

HEATING
AND COOLING

NATIONAL TARGETS and ACTION PLANS

Right policy messages but wrong anticipation of technological progress

- **Malthus "*Essay on the principle of population*"**
- **Meadows Report "*The Limits to Growth*"**
- **Association for the Study of Peak Oil and Gas**

Sobriety vs. Excess

- *Lagom*
- *Negawatt*
- **Genuine Progress Indicator (GPI)**
- **Against planned or wished obsolescence**
- *European way of life*





H2020 – Europe in a changing world

➤ ***Inclusive Societies:***

- ❑ Smart, sustainable and inclusive growth
- ❑ Building resilient, inclusive, participatory, open and creative societies
- ❑ Europe's role as a global actor
- ❑ Sustainable & inclusive environments - spatial & urban planning

➤ ***Innovative societies:***

- ❑ Strengthening the evidence-base and support for the IU and ERA
- ❑ New forms of innovation, social innovation and creativity
- ❑ Innovative, creative and productive potential of all generations
- ❑ Cooperation with third countries

➤ ***Reflective societies:***

- ❑ European heritage (memory, identity)
- ❑ European countries' and regions' history
- ❑ Europe's role in the world; intercultural relations



Five Calls in Societal Challenge 6

EURO call: Overcoming the crisis: new ideas, strategies and governance structures for Europe

YOUNG call: The young generation in an innovative, inclusive and sustainable Europe

REFLECTIVE call: Reflective societies: cultural heritage and European identities

INT call: Europe as a global actor

INSO call: New forms of innovation



http://ec.europa.eu/research/social-sciences/forward-looking_en.html