

Investing in R&D in the EU and Croatia

Common Objectives, Individual Paths

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Zagreb, 9 December 2010

Introduction

- The Lisbon Strategy on R&D and Innovation: Setting the Context
 - Objectives
 - Debates
 - Achievements
- Structure of the Analysis
 - The EU Lisbon Agenda and R&D
 - R&D and Innovation in Croatia
 - Conclusions and Future Prospects

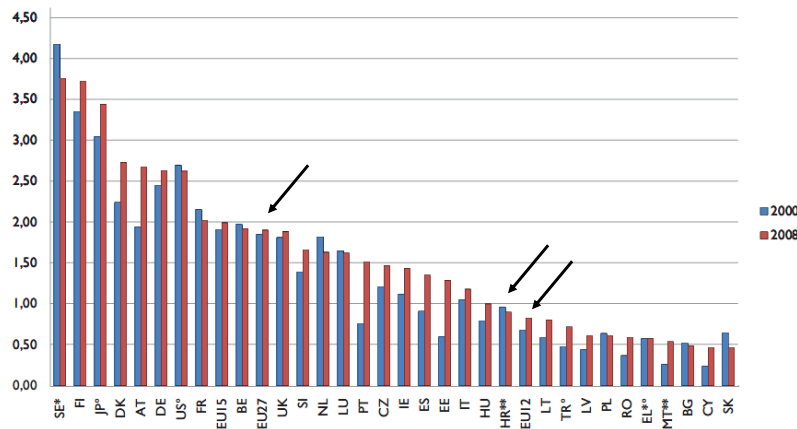
The EU Lisbon Agenda and R&D

- R&D Expenditure – 3% Target
- Private versus Public Expenditure – 2/3 Business Enterprise Expenditure on R&D
- Qualitative Analysis – The Economic Environment
- Single Indicators and Specific Issues
- Towards Europe 2020

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The EU Lisbon Agenda and R&D - R&D Expenditure 3% Target

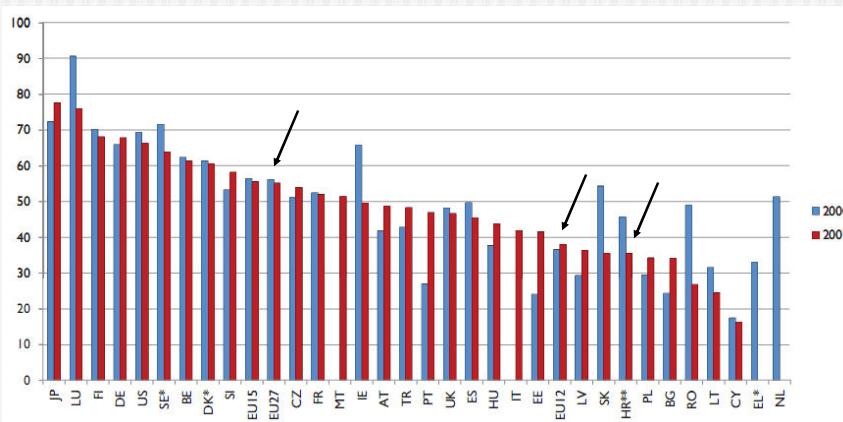
R&D expenditure as percentage of GDP, 2000 and 2008 (Eurostat)



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The EU Lisbon Agenda and R&D - BES Expenditure 2/3

BES expenditure on R&D, percentage of total, 2000 & 2007 (Eurostat)



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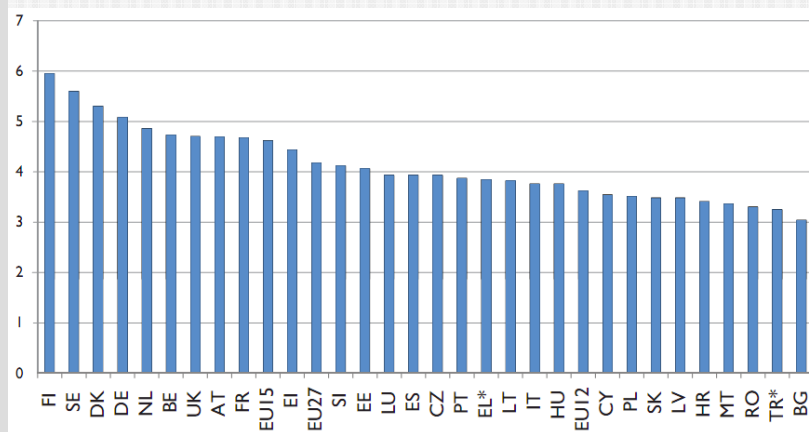
The EU Lisbon Agenda and R&D - Qualitative Analysis I

- Shortcomings in quantitative targets analysis: lack of indication on efficient and effective use of R&D expenditure
 - Input versus output
 - Legal and economic environment
 - GDP growth
- World Economic Forum
 - Lisbon Review 2008 & Global Competitiveness Report
 - Insights into productivity and competitiveness
 - Human capital, innovation, protection intellectual property

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The EU Lisbon Agenda and R&D - Qualitative Analysis II

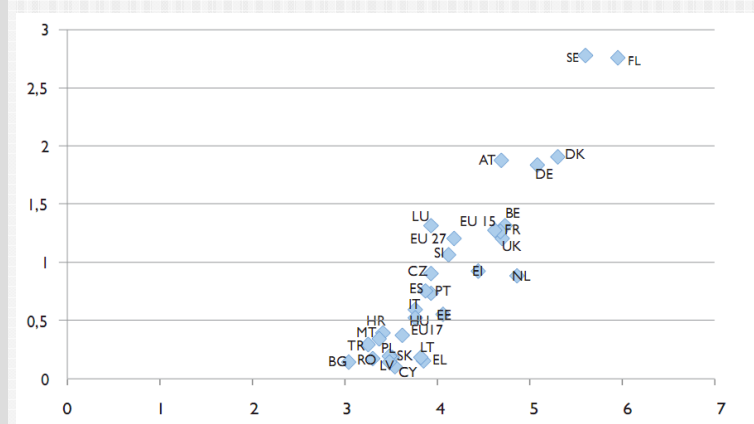
WEF's innovation and R&D score (GCR, 2008)



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The EU Lisbon Agenda and R&D - Qualitative Analysis III

WEF's Innovation/R&D score and BES expenditure as % of GDP (2008)



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Single Indicators & Specific Issues

- Breaking down the GCR's Innovation and R&D Subindex
 - Capacity for innovation (companies' acquisition of new technologies through research)
 - Transparency and predictability of economic and legal environment
 - Entrepreneurial sector's environment (fiscal benefits, administrative burdens, start-up conditions etc)
 - Education and Human Capital
 - The knowledge triangle and the importance of human capital
 - Some indicators within WEF's GCR and Lisbon Review (quality of scientific research institutions, availability of scientists and engineers, university-industry collaboration in R&D)

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Towards Europe 2020

- Disappointing picture of EU achievements
- Additional difficulties caused by economic crisis
- Foundations for renewed post-2010 Lisbon Strategy have been laid
- Key issues for the future
 - Restructuring economic environment and legislation fostering research and innovation
 - Ensuring that inputs in R&D are used efficiently
 - Greater private investment in R&D
 - Attention to structural differences between MS: tailored measures, especially for new MS still catching up

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R&D and Innovation in Croatia

- Research Sector in Croatia
- Evaluation of Croatia's Progress and Future Prospects in R&D

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Research Sector in Croatia I

- Why a candidate country should follow the LS goals
 - Long time for achievement such objectives
 - Conditionality and *acquis*
 - Cope with competitive pressures EU market in the future
- Croatia and R&D Documents
 - 2008 Pre-Accession Economic Programme of the Republic of Croatia;
 - Action Plan to Encourage Investment in Science and Innovation, Ministry of Science, Education and Sports, April 2008;
 - Action Plan on Science and Technology Policy for 2007-2010
- Croatia and R&D Commitments
 - "channelling of resources in education, research, development and lifelong learning" to develop a "knowledge-based society and economy"
 - No 3% target, but "intensify investment and system reforms"
 - Definition of roles for different actors (public and private)
 - Increase funding research from state budget

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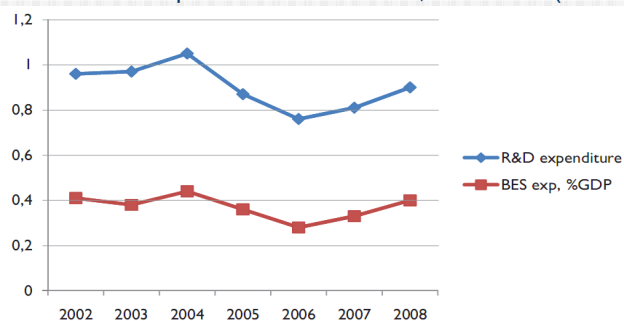
Research Sector in Croatia II

- R&D expenditure 2007 0.81%, similar to EU12 average
- BES from 35.5% in 2006 and 2007 to 40.8% in 2008
- €19.5m state budget for scientific projects, 16% of Ministry of Science Education and Sports budget
- Qualitative measures
 - Economic transition, from efficiency to innovation driven growth (WEF GCR 2009): need for changes in structure economy first
 - State involvement and expenditure in research activities
 - Worsening competitiveness
 - from 4.2 and rank 57 in 2007-8 to 4 and rank 71 in 2009-10 (GCI)
 - GCR performance worse most indicators, except quality research institutions
 - Total innovation score remains above EU12 average
 - Need for greater sustainability

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Research Sector in Croatia III

Croatia's R&D expenditure as % of GDP, 2002-2008 (Eurostat)



- No constant increase R&D expenditure 2002-2008, but high GDP growth rates 2004-2006 so rise in absolute value (Erawatch)
- 2008 expenditure as % GDP is lower than 2002

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Croatia's progress and future prospects in R&D

- Important documents and policies are in place but need greater focus on implementation and sustainability
 - BICRA and HITRA programmes for technology transfer and entrepreneurial culture
 - GOVBOST creation cooperation research and enterprise sector
 - Fiscal policies since 2003: tax relief, exemption VAT and custom duties on scientific equipment, corporate tax deduction for enterprises investing in innovation
 - Plans to encourage return young researchers 2006-2009
- Structural Issues
- Transition Process

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Conclusions and Future Prospects

- Failure to achieve 2010 goals
- Some positive steps and lessons learned can help formulating approaches for the future
- The EU needs realistic objectives
 - Commit to invest as much as possible in R&D and innovation
 - Focus on creating conditions for higher private expenditure
- Croatia does not set specific and unrealistic targets
 - Advantages: newcomer, education system and human capital, momentum EU accession
- Medium and Long-term perspective to ensure sustainability: creating an environment conducive to innovation is more relevant than the achievement of quantitative targets

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Hvala – Thank You

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