



LIETUVOS RESPUBLIKOS
ŠVIETIMO IR MOKSLO MINISTERIJA



LIETUVOS RESPUBLIKOS
ŪKIO MINISTERIJA

The Policies supporting Industrial Biotechnology in Lithuania

A.Keraminas

Secretary, Ministry of Economy

Round Table on Industrial Biotechnology in Lithuania

Vilnius, 4th September 2008



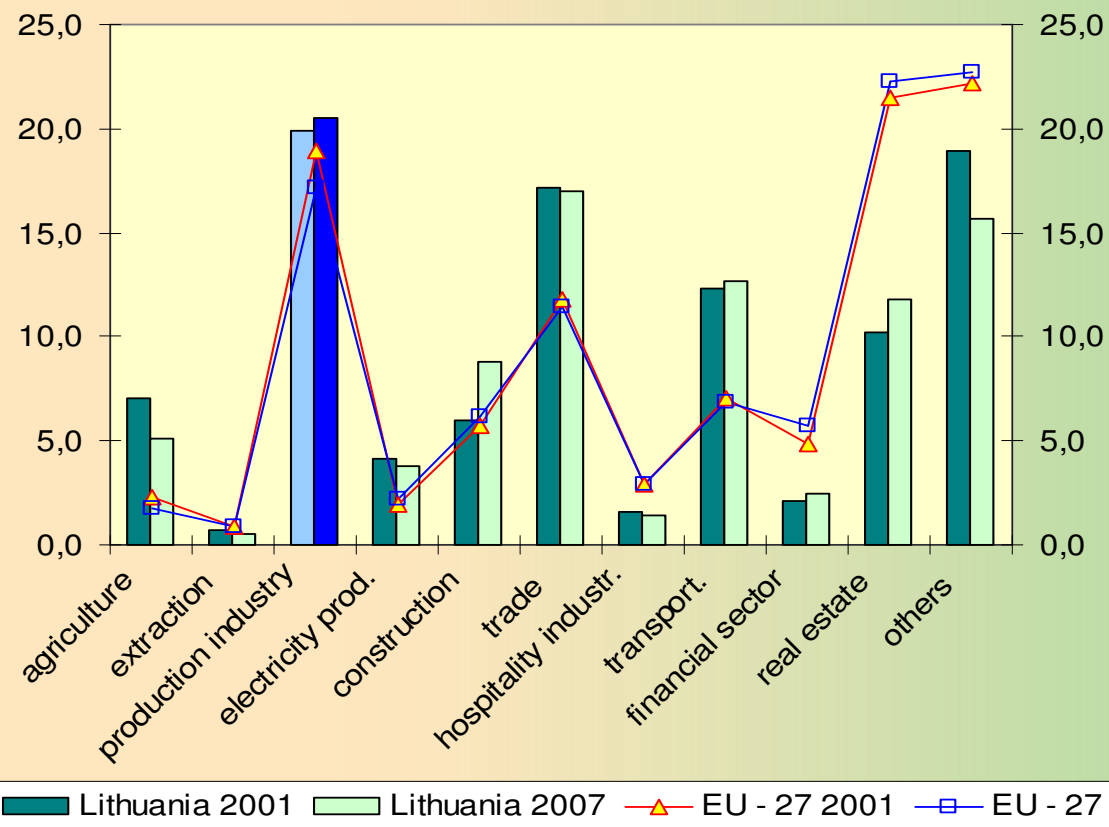
Policy Overview

- Long term Development Strategy for Lithuania
- National Lisbon Strategy Implementation Programme
- EU Structural Support Absorption Strategy for Lithuania for 2007 – 2013
- Priority Trends for Research and Experimental Development in Lithuania
- Operational Programme for Economic Growth and Human Resources Development Programme
- High Technology Development Programme for 2007 – 2013
- Industrial Biotechnology Development In Lithuania Programme for 2007-2010
- Integrated Science, Studies and Business Centres (valleys) (2007)
- Innovation in Business Programme for 2008 – 2013 (under preparation)



Value added by Sector of Economy as % of GDP

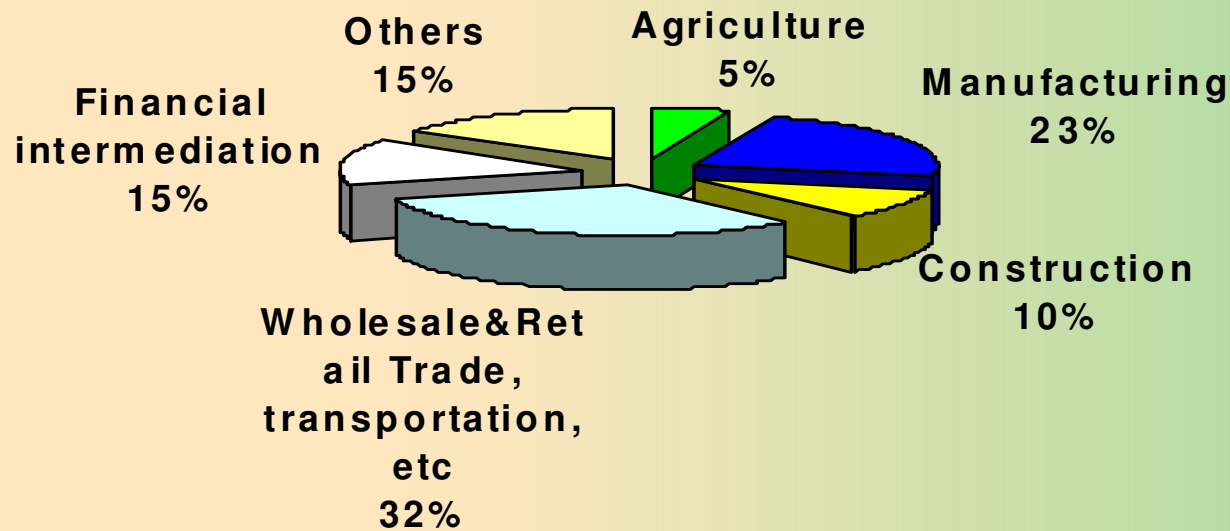
Lithuania compared to EU – 27



Source: National Statistics Department, Eurostat, 2008



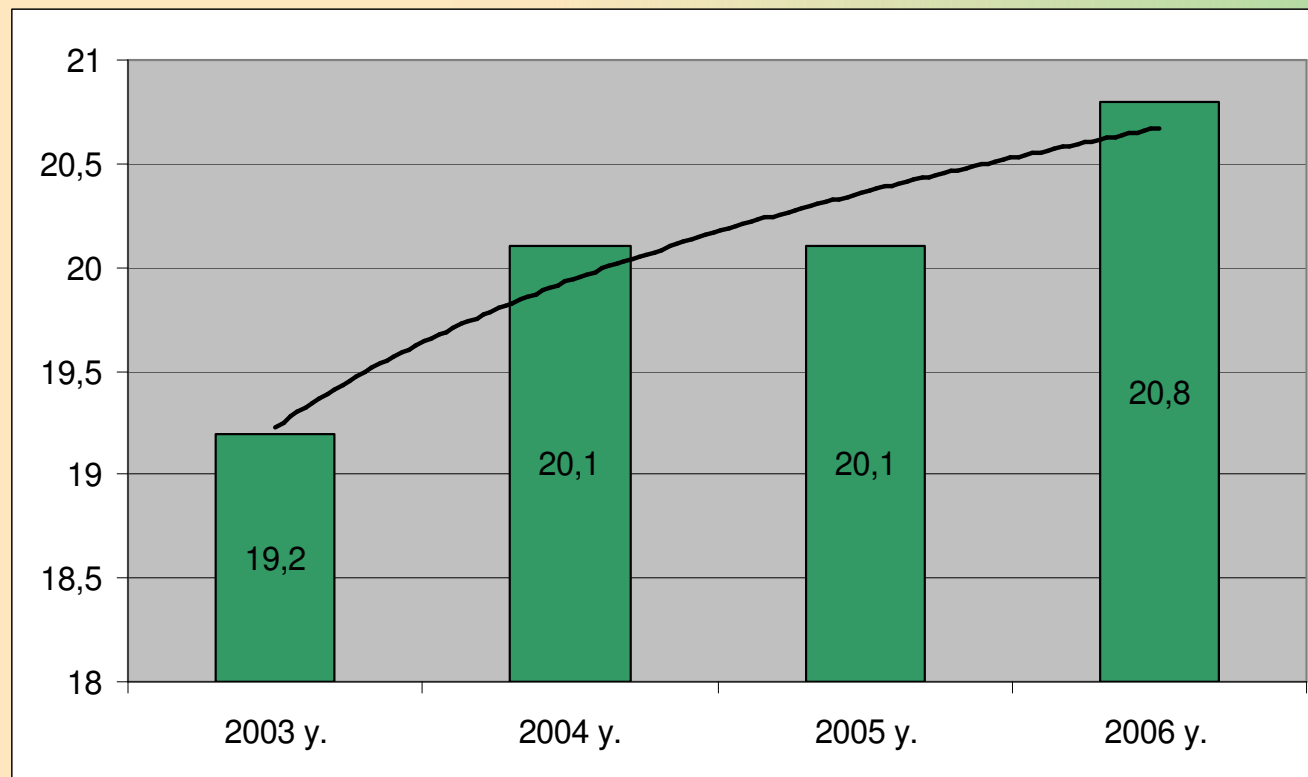
GDP Created by Sectors of Economy in Lithuania in 2007



Source: National Statistics Department, 2008



High and Medium-High Technology Sectors as % of Industry contribution to GDP in Lithuania



Source: National Department of Statistics, 2007



Biotechnology Sector in Lithuania

Decision Making Level

Ministry of
Economy

Ministry of
Education and
Science

Ministry of
Environment

Ministry of
Health

Ministry of
Agriculture

Supply Level

6 Universities

13 Research Institutes

Demand Level

26 Companies

2 Integrated Science, Studies and Business Valleys



Policy Level

Two of 5 priority trends for the Lithuanian Research and Development, approved by the Government Decree, are related to biotechnologies:

- Scientific Research and Experimental Development for the enhancement of International Competitiveness of Lithuanian Industry: Creation of **Biotechnology**, mechatronic, laser, information and other high technologies;
- Scientific Research for assurance of the Quality of the human life (including **Genomics and Biotechnologies** to Health and Agriculture



Supply Level

- 6 Universities
 - 8 Programmes related to Biotechnology
 - 160 Students Entering studies related to Biotechnology, p/a (*bioengineering, biochemistry, microbiology, genetics, bio-information, bio-medical engineering*)
- 13 Research Institutes
 - 296 Scientists with scientific degrees, currently engaged in biotech research



Supply Level

Science and Studies Institutions Acting in Biotechnologies

- Institute of Biotechnology
- Institute of Biochemistry
- Institute of Botany
- Institute of Chemistry
- Institute of Physics
- Institute of Immunology
- Institute of Oncology
- Kaunas University of Medicine
- Kaunas University of Technology
- Lithuanian Forest Research Institute
- Lithuanian Institute of Horticulture
- Lithuanian University of Agriculture
- Vilnius University
- Vilnius Gediminas Technical University
- Vytautas Magnus University
- ...and others



Demand Level

- 26 companies
Of which:
 - Spin-offs of the Institute of Biotechnology of Lithuania – 5
 - Spin-offs of the Kaunas University of Technology – 3
- Annual turnover growth over 20% for the past 5 years
– higher, than the average in the global biotechnology sub-sector, which was approx. 15% p/a
- Share of exports of total production in 2006 - 86%



Support to Promote Innovation and R&D in Lithuania

- Legal Environment Improvement
- Financial Assistance
 - EU Structural Funds for 2008 – 2013
 - National Funds
- Tax Incentives



Legal Environment Improvement

Law on Investments – *legal basis for private capital investments*

Amendments to the **Law on Corporate Income Tax** –
encourage companies to invest in R & D through financial incentives

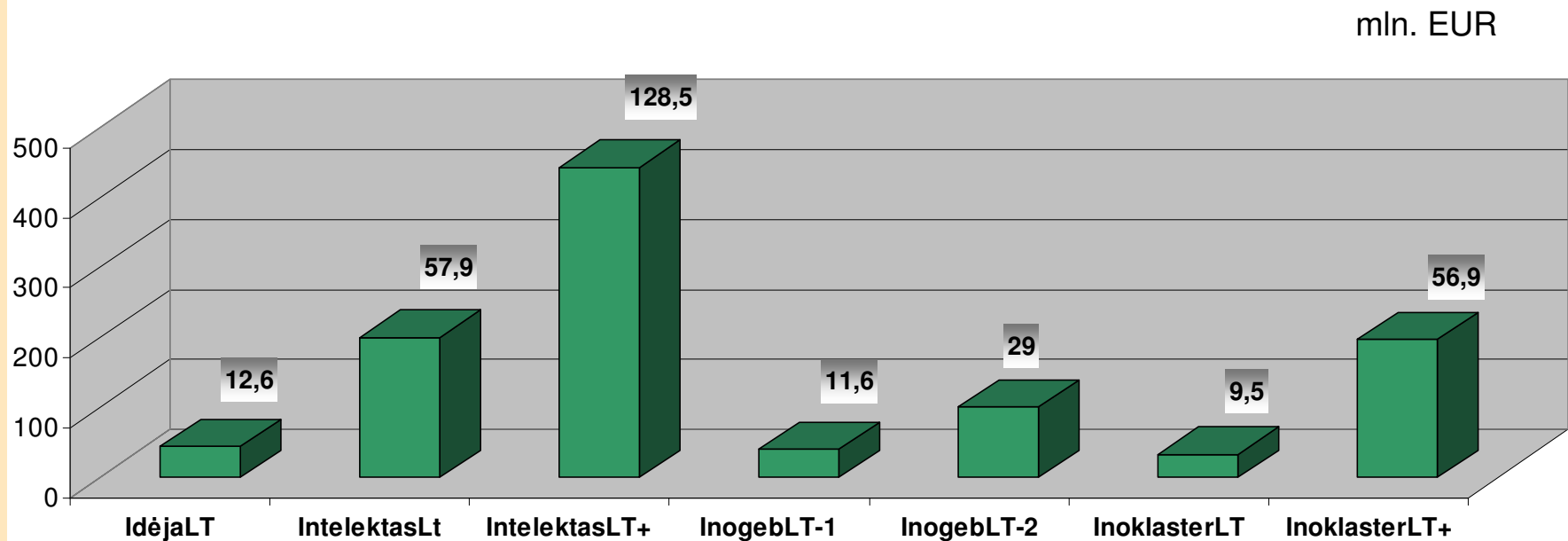
Amendments/changes to the **Law on the Rights to Manage, Own and Dispose the Property of State Universities** –
to make legal basis for Universities to create spin-offs, encourage Universities to commercialise the Results of Research through Patenting

Law on Science and Studies – *to revise education system to meet the challenges of today's economy of being competitive in the global environment, to ensure quality of R&D to excel quality of life*



EU Structural Funds for 2007 - 2013

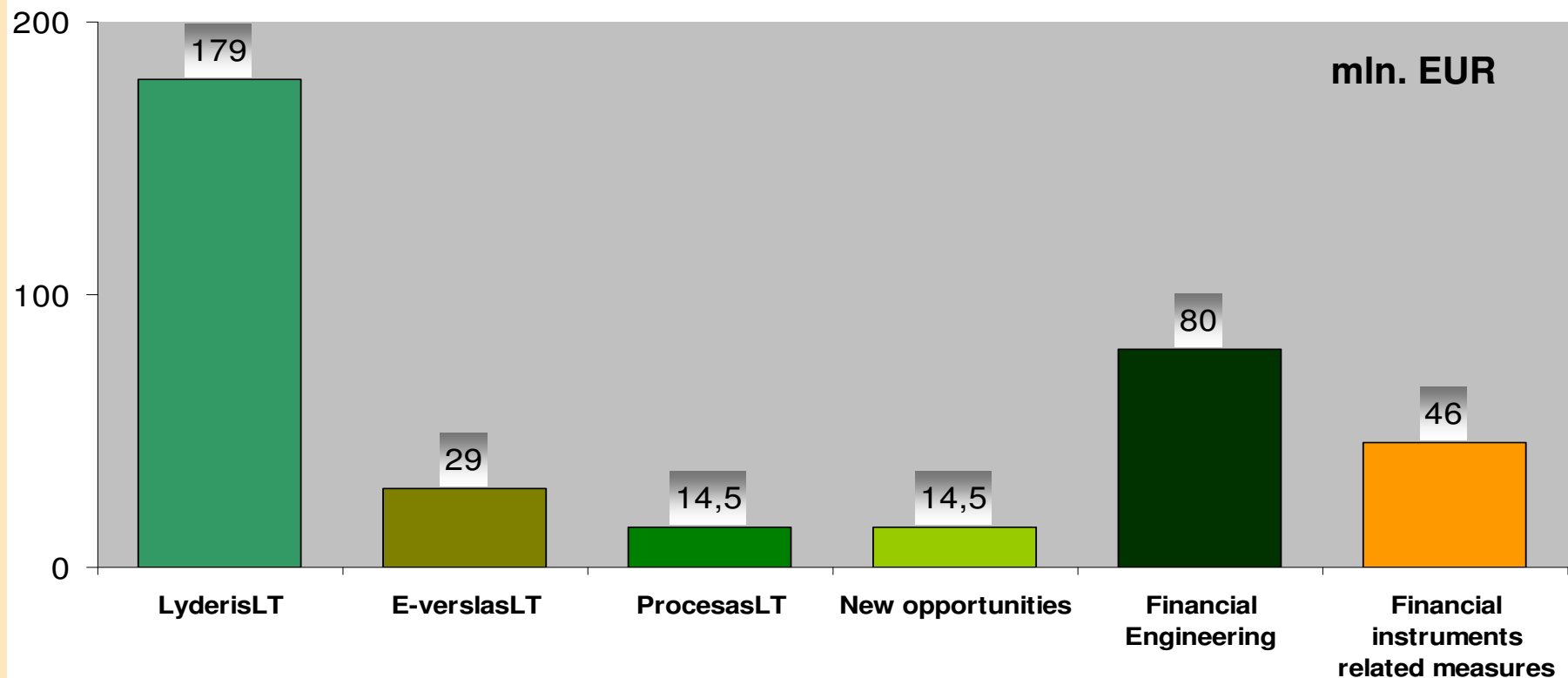
Support of R&D and Innovation Measures provided by Ministry of Economy (304 mln. EUR)





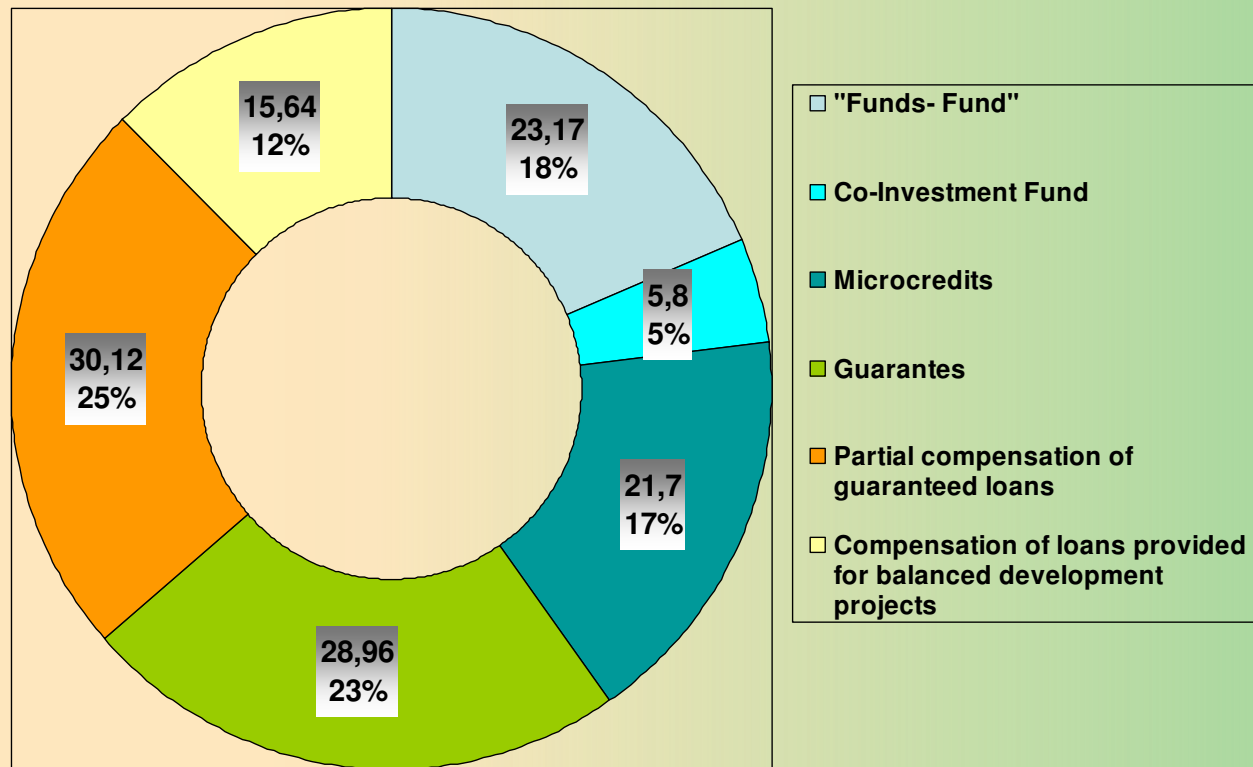
EU Structural Funds for 2007 - 2013

**Increase of Business Efficiency and Improvement of
Business Environment
Measures provided by Ministry of Economy
(460.5 mln. EUR)**





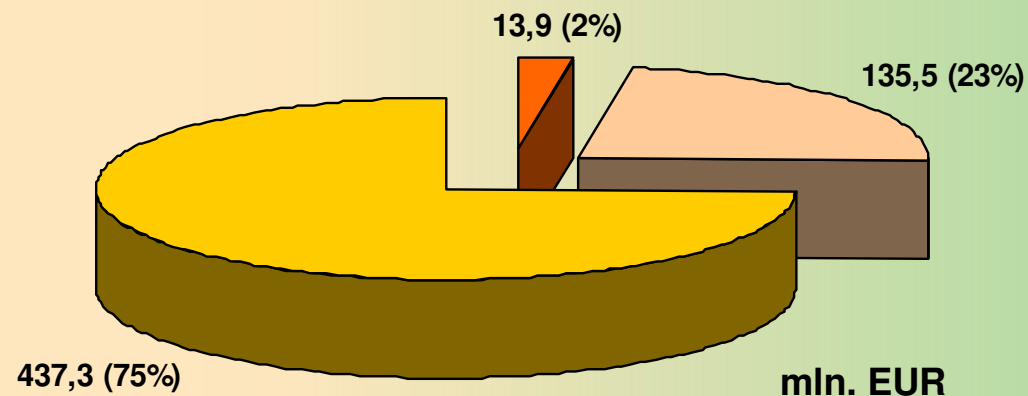
Financial Engineering and Related Measures Ministry of Economy (125.4 mln. euro)





EU Structural Funds for 2007–2013

Support of R&D, According to Priorities of Operational Programmes (Ministry of Education and Science)

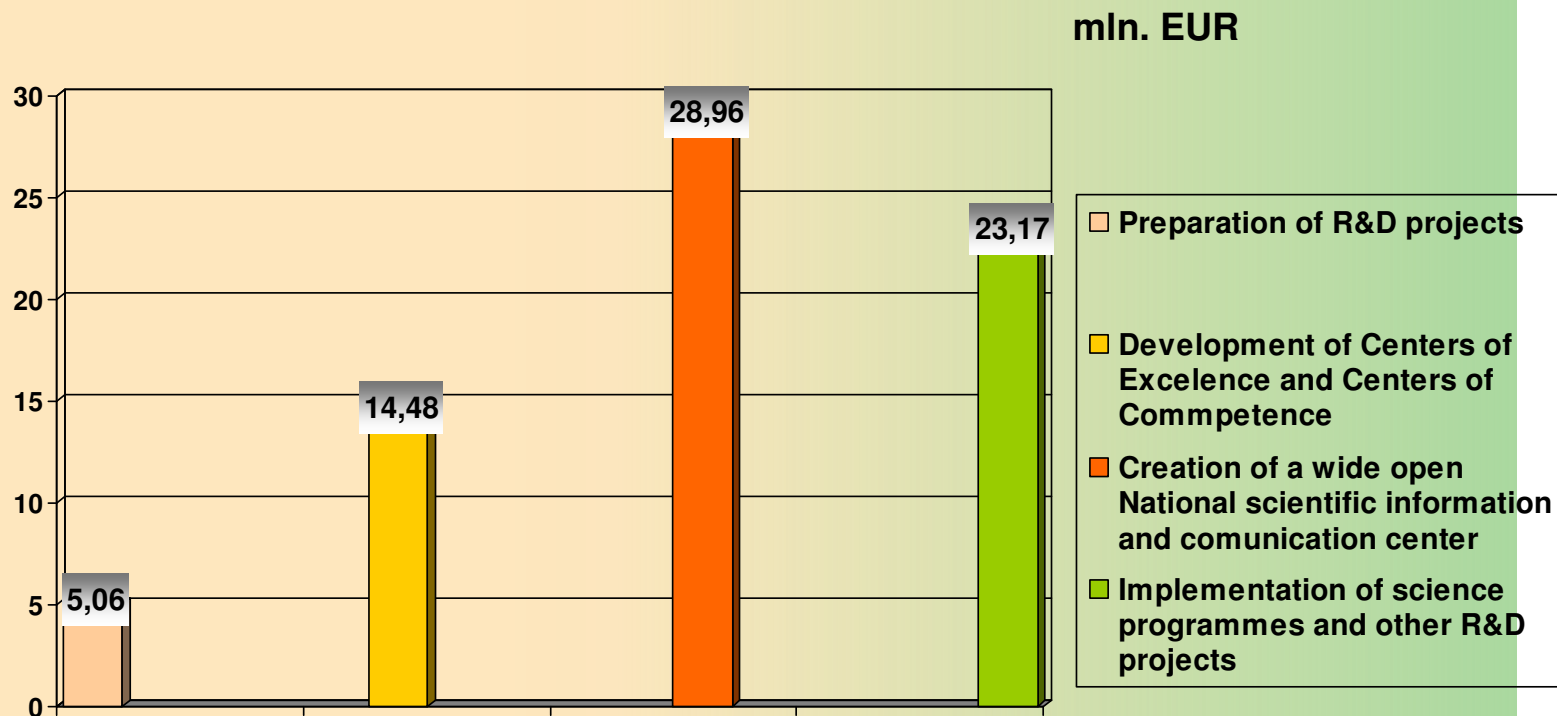


- 1.2 priority „Lifelong Learning“
- 1.3 priority „Strengthening researchers abilities“
- 2.1 priority „Research and development for competitiveness and growth of the economy“ - total available for financing



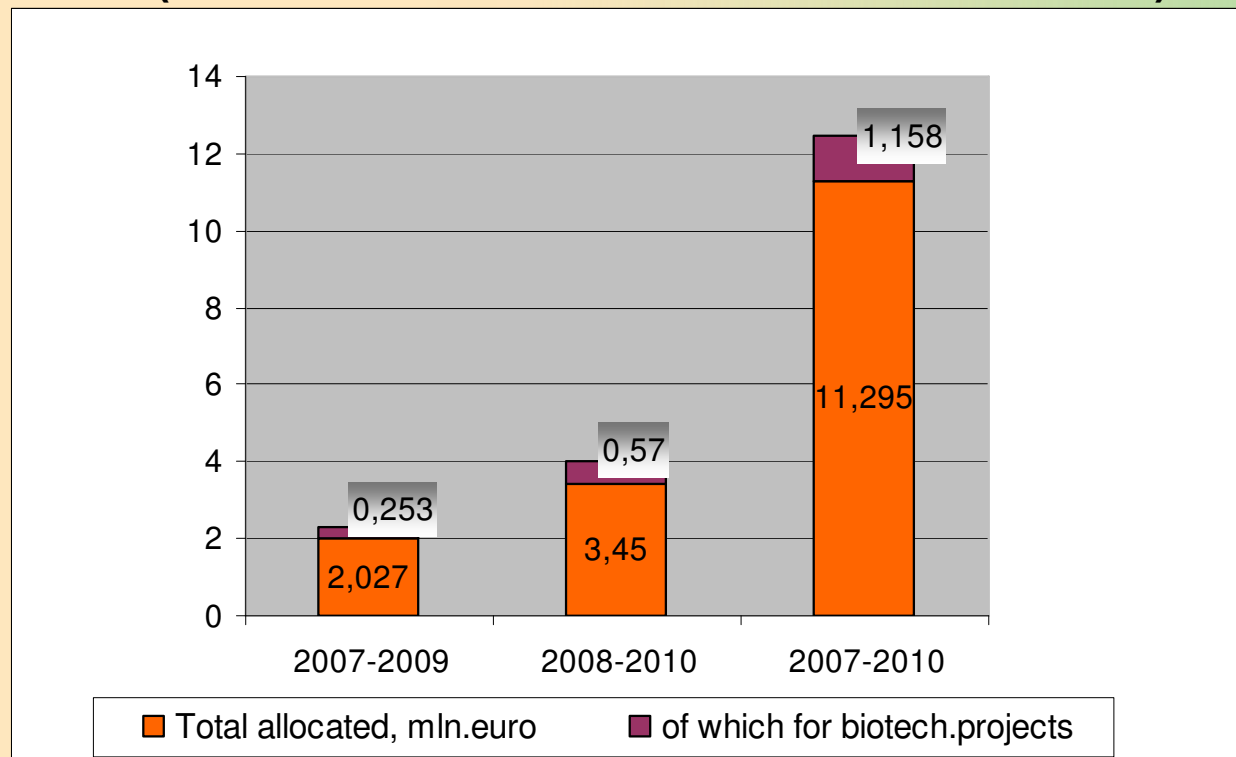
EU Structural Funds for 2007 – 2013

Support of R&D Measures provided by Ministry of Education and Science (already approved measures) (71,7 mln. EUR)



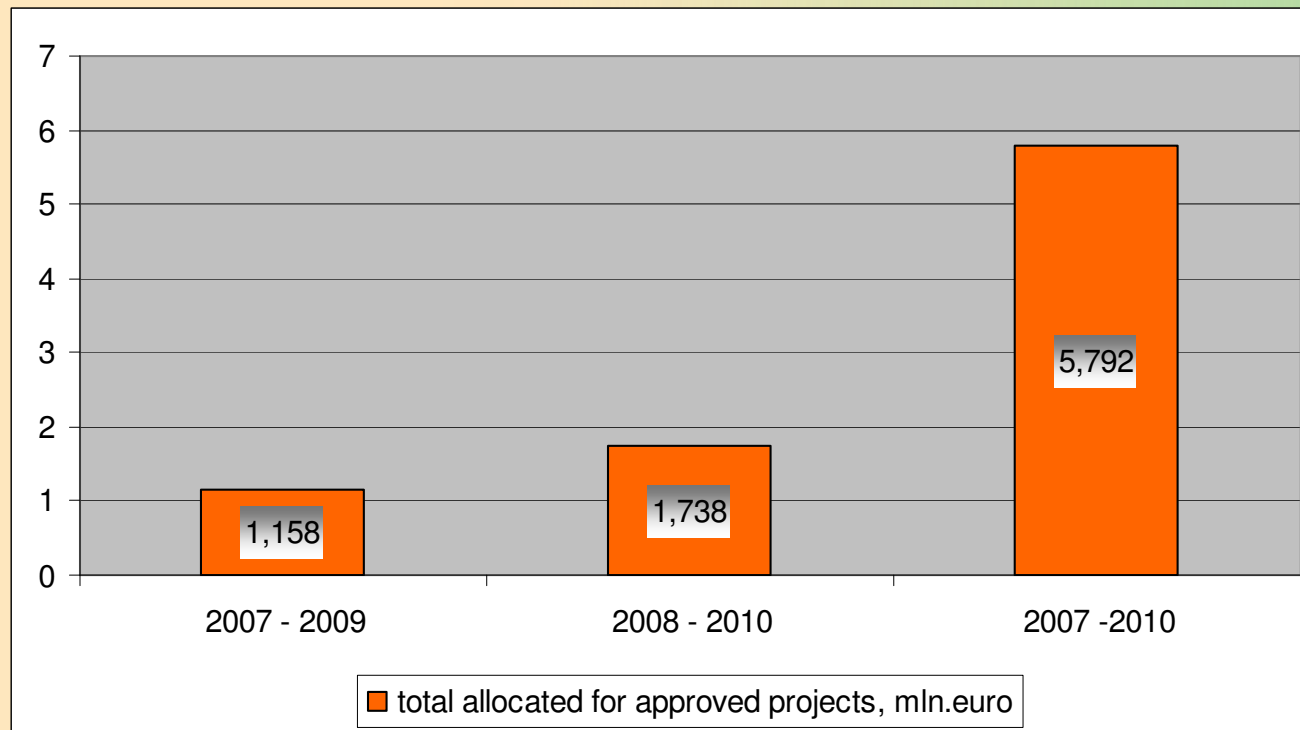


National Financing High Technology Development Programme for 2007 – 2013 (Lithuanian State Science and Studies Fund)





National Financing Industrial Biotechnology Development In Lithuania Programme for 2007-2010 (Lithuanian State Science and Studies Fund)





National Financing

Ministry of Economy

- Special Programme to Promote Economy Growth and Competitiveness (compensation of patenting related expenses),

2007	29 th. EUR
2008	144.8 th. EUR

Patent Expenditures can be compensated up to 100% for European patent or Patent Cooperation Agreement



Tax Incentives

- Expenditures for R&D reduce taxable income 3 times
- Amortisation process is reduced to 2 years
- Tax Relief for Investments into new Technologies up to 12% of Tax Amount (*under preparation*)



New Initiative – Valleys **Study, Research and business cooperation**

- 5 Integrated Science, Studies and Business Centres (Valleys) will be established
- 2 Valleys - “**Santara**” and “**Nemunas**” – will include biotechnologies as one of Directions for their Development



Conclusion

- During the last 5 years Lithuania created mechanisms enhancing R&D and Innovation development, applying them into life
- To meet the challenges to become competitive in the global world Lithuania seeks to complement the supply-side innovation measures with the demand - side policies
- A substantial driving force to the development of R&D and Innovation were EU Structural Funds
- Bulk of all the EU Structural Funds are being allocated for the development of new products to create added value, to meet the challenges of today's economy