



# EU Strategy for Building a Knowledge-based Economy. Ambitious Targets vs. Effective Achievements

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## ABSTRACT

In 2000 the European Union has developed the Lisbon strategy. This strategy designed the key elements for building a knowledge-based economy, using a deep analysis of the situation and developments in the EU compared to the U.S. This paper aims to analyze the extent to which the strategy targets were achieved. In this direction firstly we will present the main objectives of the strategy and then we will analyze the degree of fulfillment of these targets.

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## 1. Introduction

In the new economy, the competitive advantage will belong to those who will be wise enough to recognize that the real resources of the XXI century are knowledge, information, innovation, creativity and intellectual capital.

## 2. The Lisbon Strategy 2000

In 2000 the European Union has developed the Lisbon strategy. This strategy designed the key elements for building a knowledge-based economy, using a deep analysis of the situation and developments in the EU compared to the U.S. The measures proposed in this direction were:

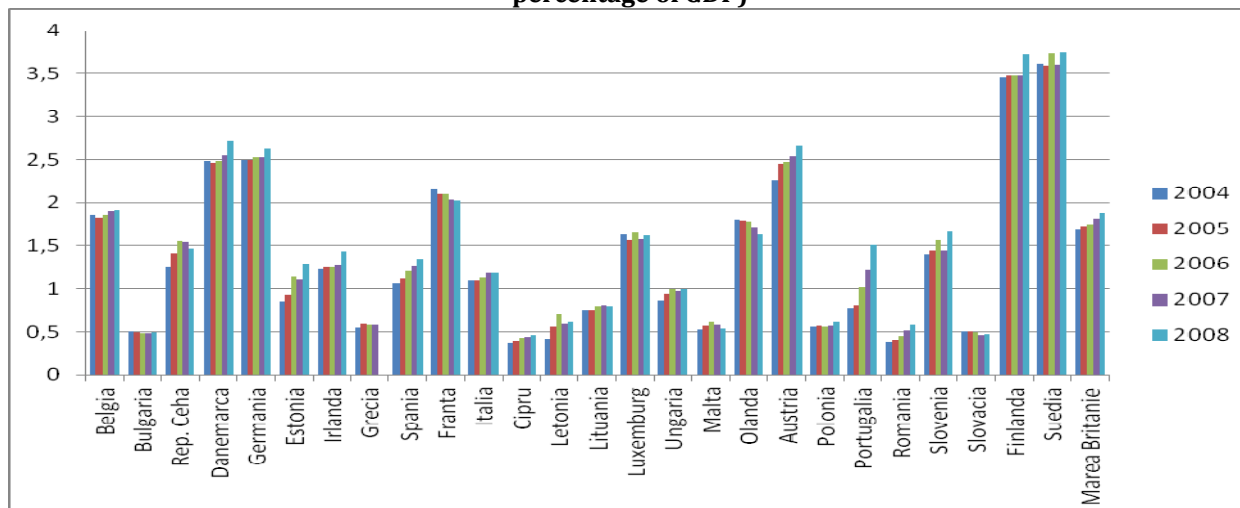
- Completing the process of creating a single market in key sectors such as: telecommunications, energy and financial services.
- Facilitating the access to new technologies, including mobile phones and internet services.
- Increasing the competition in the rail and air transport services.
- Solving the problems faced by small businesses and those who start a business as a vital condition for the growth of employment rate.
- Promoting the competitive markets.
- The professional development of the workers and developing the habit of lifelong learning.
- General review of the pension system in order to ensure the long-term sustainability of public finances.
- Improving the social protection system, reducing the number of people exposed to the risk of social exclusion
- Increase up to 70% the rate of labor participation in general, including women and older workers.
- Encouraging the research activities, by, increasing up to 3% of GDP the expenses allocated to research and technology and by adopting the single European patent regime.

Analyzing this last measure, research and development expenses between 2004 and 2008 in the EU-27 region were EUR 237.001 million, with 3.5% more than the last year.

From the following graph it can be seen that in the EU-27 countries such as Sweden, Finland, Denmark, Germany, Austria allocate high percentages of GDP on research and development unlike countries such as Bulgaria, Greece, Cyprus, Latvia, Malta, Poland, Romania and Slovakia. Thus we can say that only Sweden and Finland have reached one of the goals of the Lisbon Strategy, namely targeting 3% of GDP on research development activities.

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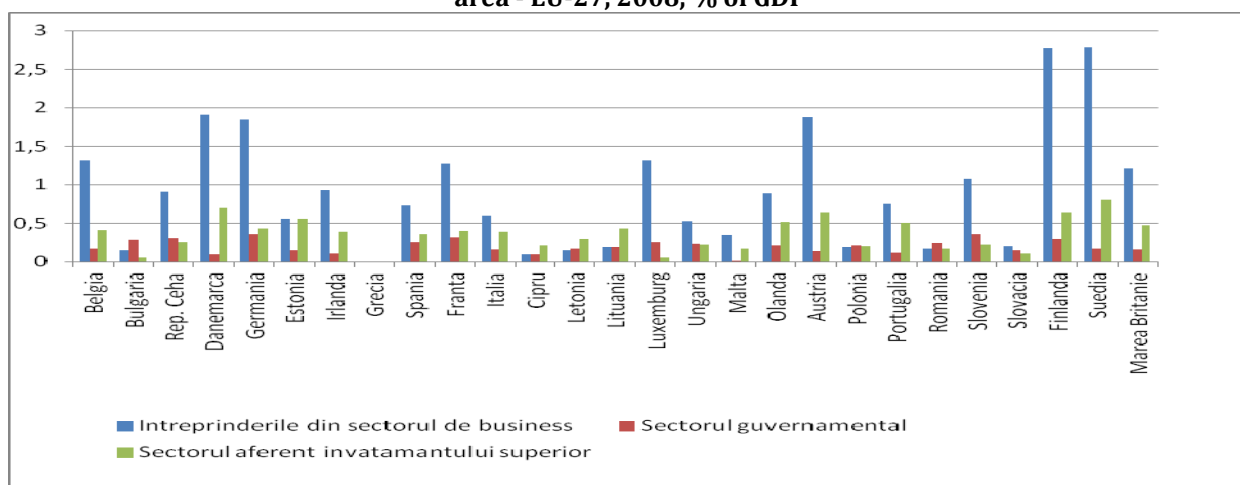
**Figure 1. Expenditure on R & D in the EU-27 region between 2004 and 2008 (expressed as a percentage of GDP)**



Source: \*Eurostat statistical books, Eurostat Yearbook 2011, "Science and Tehnlogy", section p. 574

In the EU-27 the R & D expenditure are localized mainly in the business sector, secondly in the academic area, and the lowest rate of R & D expenditures in GDP is allocated to the governmental sector. (fig. no. 2 - Research and development expenses in the business sector, government, higher education area - EU-27, 2008, % of GDP). From the same chart we can observe that in countries like Cyprus, Latvia, Lithuania, expenditures on research and development are mainly directed in the academic area. In Bulgaria and Romania we can see that the government sector receive the largest share of GDP, spending on research and development.

**Figure 2. Research and development expenses in the business sector, government, higher education area - EU-27, 2008, % of GDP**



Source: \*Eurostat statistical books, Eurostat Yearbook 2011, "Science and Tehnlogy", section p. 579

This strategy set very ambitious targets, for example, proposed that by 2010 to overcome the economic, tehnic and scientific development of the U.S.A. The strategy failed because it was not sufficiently built, to which were added also the international circumstances.

### 3. The 2020 Strategy

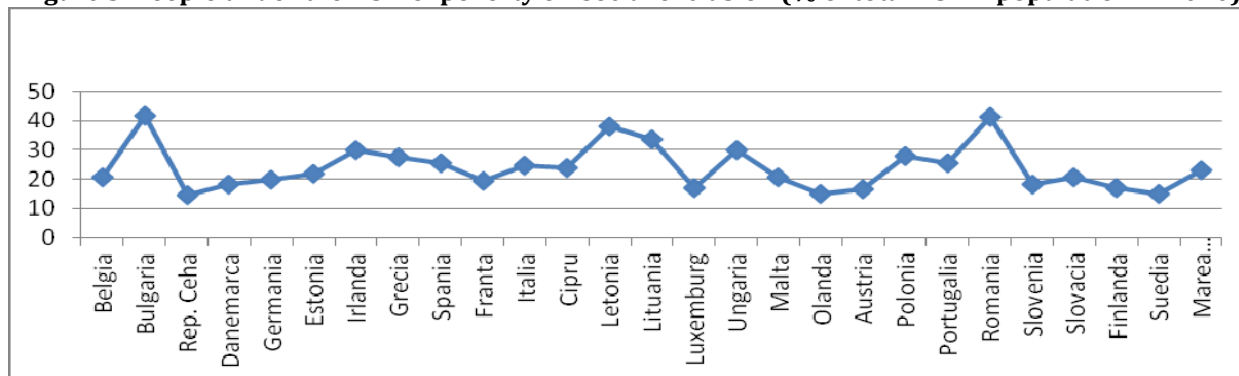
After the failure of the 2000 Lisbon strategy, a new strategy was established, namely the 2020 Strategy. This new strategy states several measures that indirectly express the same objectiv as the 2000 Lisbon Strategy: creating a knowledge based economy. The new directives are related to five major domanins:

- Research, development and innovation: targeting a level of public and private investment in research and development up to 3% of EU GDP.
- Climate changes and energy: the reduction of the emissions of greenhouse gases with 20% from the level registred in 1990 (or even 30% under favorable conditions); increasing up to 20% the energy renewble sources..

- Education: reducing scholar dropout below 10%, increasing to 40% the share of graduates among the population aged 30-34 years.
- Employment: achieving an employment rate of 75% between the population aged 20 - 64 years.
- Poverty and social exclusion: a reduction with at least 20 million the number of people suffering or likely to suffer from poverty and social exclusion.

2020 Strategy sets this ultimate goal when 23.5% of the EU-27 population is suffering or likely to suffer from poverty and social exclusion. From the chart below we can see that in the EU-27, the three countries under the risk of poverty and social exclusion are Bulgaria, Romania and Latvia.

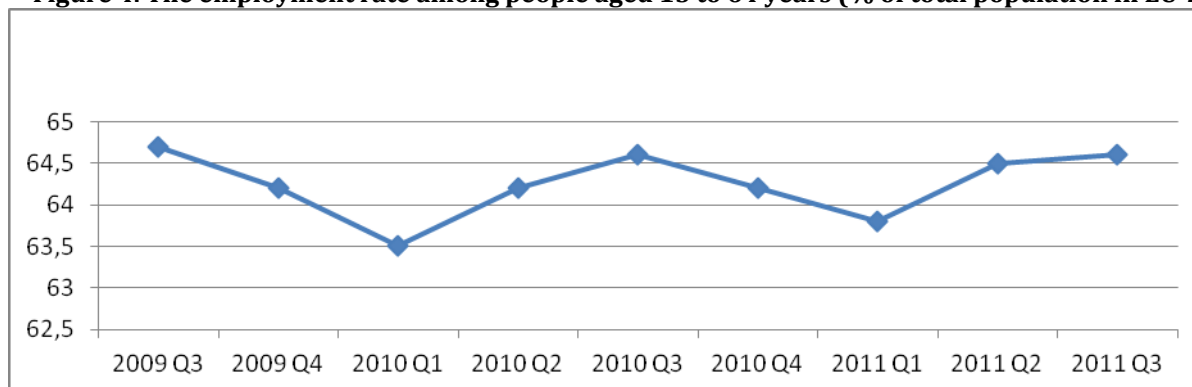
**Figure 3. People under the risk of poverty or social exclusion (% of total EU-27 population in 2010)**



Source: Eurostat

A goal set by the 2020 strategy is linked to obtaining an employment rate of 75%. From the above graph it can be seen that in the EU-27, in the third quarter of 2011, the employment rate stood at around 64.6%.

**Figure 4. The employment rate among people aged 15 to 64 years (% of total population in EU-27)**



Source: Eurostat

The 2020 strategy hasn't established fundamental objectives. The directives mentioned are secondary goals (eg. reducing carbon emissions). When we talk about economic development we should refer to: GDP, productivity, exports, standard of living, objectives that weren't mentioned in this strategy.

This strategy is not what it should be for Europe, because it has no fundamental goals. If we ask our self why these secondary targets were set, we can think that the fundamental objectives were established in the 2010 Lisbon Strategy and weren't achieved. The 2020 strategy has no fundamental elements or its elements are insufficiently presented:

- the strategy has no clear mission (Where will Europe be in 2020?),
- the fundamental objectives are missing completely,
- the strategic objectives are incomplete because these directives doesn't cover the economic and technique area,
- the resources of the strategy aren't established and a strategy without resources is not applicable,
- the time of application of this strategy is also vague (the strategy is divided into stages, sustaining that the goals will be reached in 10 years),
- the strategy has no competitive advantage established (does not specify what will be the advantage of the European Union in addition to the U.S.A.)

#### 4. Conclusions

It is very important to realize that the knowledge revolution and the transition to a knowledge based economy represents both an opportunity and a threat to Romania because it is a reality that we don't understand enough.

The transition to a knowledge based economy represents a huge opportunity for Romania because when switching from one production system to another, there are always changes in the world powers hierarchy and if a country catches this revolution has the chance to recover from several gaps in 10 years that otherwise would take decades or are unrecoverable.

Knowledge revolution also represents a tremendous threat. Every revolution has a limited period, involves changes, and the knowledge-based revolution means a change more quickly than the industrial revolution. If we don't catch this revolution we risk that in 10, 15 years to be the last country in EU.

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