

**Abstract.** *Based on the interdependencies that exist between world economies, the effects of the Europe 2020 strategy is going to affect every company no matter if it operates or not in an EU member state. The purpose of this paper is to forecast the level of achieving the new European strategy by every member state of the EU in order to reveal the vulnerabilities and opportunities that may arise from the macro-environment for every company.*

*To reach this purpose we used a case study approach in which we analyzed the evolution in the last ten years of six indicators (employment rate, gross domestic expenditure on research & development, greenhouse gas emissions, share of renewables in gross final energy consumption, early leavers from education and training, tertiary education attainment) and we estimated with a probability of 95% the level that each one of them will have in 2020. Data were collected from the Eurostat.*

*The main findings show that only 40.74% of the EU member states will achieve the new strategy and the most important vulnerabilities are coming from the labor market, research & development sector and environmental protection.*

**Keywords:** early leavers, employment rate, Europe 2020 Strategy, greenhouse emissions, research & development.

## **EUROPE 2020 STRATEGY – FORECASTING THE LEVEL OF ACHIEVING ITS GOALS BY THE EU MEMBER STATES**

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## **1. Introduction**

In March 2000, European Council aimed to transform the European Union in the most dynamic and competitive knowledge based economy by 2010. In order to achieve this objective the Lisbon Strategy was launched. The result was a resounding failure because of an over-loaded agenda and an insufficient coordination between member states.

Ten years later, as a proof of learning from its own mistakes, European Council proposed a new strategic plan called “Europe 2020 – A strategy for smart, sustainable and inclusive growth” which has only three headline targets and not thirty like its predecessor, Lisbon Strategy. These priorities are mutually reinforcing and are focused on growth which has to be “smart (developing an economy based on knowledge and innovation), sustainable (promoting a more resource efficient, greener and more competitive economy) and inclusive (fostering a high employment economy delivering social and territorial cohesion)” [European Commission, 2010, 3].

The main objectives of the Europe 2020 strategy are: “to raise to 75% the employment rate for women and men aged 20-64, including through the greater participation of young people, older workers, low skilled workers and the better integration of legal migrants; improving the condition for research and development, in particular with the aim of raising combined public and private investment levels in this sector to 3% of gross domestic product (GDP); reducing greenhouse emissions by 20% compared to 1990 levels; increasing the share of renewables in final energy consumption to 20% and moving towards a 20% increase in energy efficiency; improving education levels, in particular by aiming to reduce school drop-out rates to less than 10% and by increasing the share of 30-34 years old having completed tertiary or equivalent education to at least 40%; promoting social inclusion, in particular through the reduction of poverty by aiming to lift at least 20 million people out of the risk of poverty and exclusion” [European Council, 2010, pp. 11-12].

At this level, we can observe that Europe 2020 and Lisbon Strategy have at least three points in common. Just like in 2000, the European Council wants to raise the employment rate up to 75% and to increase the level of investment in research and development by 3% of GDP. On the other hand, it aims to reduce the level of greenhouse gas emissions down with 20%. These objectives are taken from the Lisbon Strategy without taking into consideration the evolution of these indicators in the last ten years.

So, one of the goals is to bring on the labor market, by 2020, 75% of the population aged 20-64 while the highest rate of employment, from 2000 until 2009, was 70.5%, in 2008. In other words, the employment rate should increase until 2020 with almost six percentages in spite of the fact that in the last ten years, when the economic environment was less turbulent, there was only a raise of four percentages.

The situation is similar when it comes to the level of gross domestic expenditure on research and development only this time the fantasy character of the

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objective is much more obvious. The share of this expenditure in GDP should be raised up to 3%, by 2020, after it has fluctuated for the last ten years around 1.85%. Although nobody can deny that the investments in this area have a positive impact on economic competitiveness, setting a target so high can emphasize the splitting of the European Union and may reduce the chances of achieving the entire strategy. On the other hand, this target tends to be unrealistic because it tends to reflect the European Council's hope that the economic crises will stimulate the public and private sector to invest more in research and development.

Another objective that has been taken from the Lisbon Strategy aims the level of greenhouse gas emissions. Although from 2000 till 2004, it had an upward trend, going from 90.9% to 92.5%, by 2008, had decreased with almost 4%. Unlike the other aforementioned targets, this one is likely to be met. In other words, if in four years the level of greenhouse emission was reduced with 4%, in ten years could be decreased with 8%.

The Europe 2020 Strategy has two new objectives that refer to energy efficiency and poverty reduction. First of them is not measurable because the increase that the European Council wants to achieve can not be objectively determined as long as the reference period is not clearly defined. In other words, it has been set an increase of 20% in energy efficiency without mentioning the value to which this growth will be reported to.

In the second case, the target is to lift at least 20 million people out of the risk of poverty and reduction by 2020. This time there is a certain value that should be achieved but it is too general, it's focused on the entire European Union and it is not customized for every member state. On the other hand, the European Council has offered three different sub-indicators to measure this objective (persons leaving in households with very low work intensity, persons at risk of poverty after social transfer and severely material deprived persons) and each member state may choose the most convenient one. Every sub-indicator measures something else and this may determine different results in terms of achieving the European target.

If we take into consideration that any objective must be SMART (specific, measurable, achievable, realistic and time-bound) if not SMARTER (specific, measurable, achievable, realistic, time-bound, encompassing and reviewed) in order to be powerful and effective, then the success of the Europe 2020 Strategy may be put under question. As we have mentioned before not all the objectives that have been set for 2020 are specific, measurable, achievable and realistic. This raises a big sign of question regarding the chance of achieving the new strategy by the EU member states and the capacity of the European Council to develop a coherent and viable strategic plan.

## 2. Research methodology

The purpose of this research was to forecast the level of achieving the Europe 2020 Strategy by the European Union member states.

The main objectives were:

- to analyze and to identify the evolving trend of each indicator that the European Council uses to measure the targets that had been set in the Europe 2020 Strategy;
- to forecast the level of these indicators in 2020 for each member state.

In order to achieve these objectives it had been develop a research hypothesis.

**Hypothesis:** If they will follow the same trend like the one they recorded in the last years, only the northern states of the European Union will succeed in achieving the Europe 2020 Strategy.

The method used for testing the hypothesis was the case study which had 27 units represented by the European Union member states.

The first step was to analyze six of the eight indicators established by the European Council for measuring the Europe 2020 Strategy (Table 1). The ones referring to the energy efficiency and reducing poverty hadn't been taken into consideration because they couldn't be measured. Data were collected from the Eurostat database.

Table 1

Indicators analyzed for the Europe 2020 Strategy

Indicator	Reference period	Target 2020
Employment rate, age group 20 – 64	1999 – 2009	75%
Gross domestic expenditure on research & development (R&D)	1998 – 2008	3%
Greenhouse gas emissions, base year 1990	1998 – 2008	80
Share of renewables in gross final energy consumption	2006 – 2008	20%
Early leavers from education and training	1999 – 2009	10%
Tertiary educational attainment, age group 30 – 34	2000 – 2008	40%

**Source:** European Council, "EUCO 13/10", available at <http://ec.europa.eu/eu2020/pdf/115346.pdf> (accessed 5 October 2010), pp. 11-12.

As it ay be observed from Table 2, these indicators are inter-correlated. For example, the employment rate is positive correlated with the gross domestic expenditure on R&D while the greenhouse gas emissions are negative correlated with the share of renewables in gross final energy consumption. The tertiary educational attainment is positive correlated with the employment rate and negative correlated with the early leavers from education and training.

Table 2

Mean, standard deviation and correlations between the indicators analyzed regarding to the Europe 2020 Strategy

Variables	Mean	Standard deviation	Correlations					
			1.	2.	3.	4.	5.	6.
1. Employment rate	68,79	5,59	1					
2. Gross domestic expenditure on R&D	1,36	0,92	0,61	1				
3. Greenhouse gas emissions	95,65	31,75	0,09	0,06	1			
4. Share of renewables in gross final energy consumption	12,29	10,65	0,43	0,47	-0,21	1		
5. Early leavers from education and training	15,62	9,55	-0,34	-0,34	0,43	-0,14	1	
6. Tertiary educational attainment	27,53	9,69	0,54	0,51	0,26	0,06	-0,23	1

Next, it had been developed a strategic matrix for each indicator which had been analyzed. This matrix had shown the current performance as measured by the indicator on the vertical axis and the annual average growth rate recorded in the reference period on the horizontal axis. Taking into consideration the EU average performance, member states had been split in four categories: leaders, followers, catching-up and going with the flow (Table 3).

Table 3

The four quadrants of the strategic matrix

		Annual average growth rate	
		<i>Under EU-27</i>	<i>Above EU-27</i>
Indicator's value in 2008 / 2009	<i>Above EU-27</i>	Followers	Leaders
	<i>Under EU-27</i>	Going with the flow	Catching-up

The average growth rate (R) had been determined based on the next relation:

$$(1) R = (\prod r_i - 1) \times 100, \text{ where } r_i = n - 1 \sqrt[n]{\frac{y_n}{y_{n-1}}}, n = \text{number of years taken}$$

into consideration.

In the next step, it had been forecast the value that each indicator will have in 2020. For that it had been used the trend analysis which involved several processes:

- identifying the trend by adjusting the historical series of data ( $y_i$ );

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- choosing the best trend model using the least square method:

$$(2) \sum |y_i - y_t| = \text{minim},$$

where  $y_t$  – was determined based on the next relation:

$$(3) y_t = a + b \times t_i - \text{if the trend was linear,}$$

$$\text{where } a = \frac{\sum y_i}{n}, b = \frac{\sum t_i y_i}{\sum t_i^2};$$

$$(4) y_t = a \times b^t - \text{if the trend was exponential;}$$

$$\text{where } \log a = \frac{\sum \log y_i}{n}, \log b = \frac{\sum t_i \log y_i}{\sum t_i^2};$$

$$(5) y_t = a + b \times t_i + c \times t_i^2 - \text{if the trend was parabolic;}$$

$$\text{Where } a = \frac{\sum y_i \times \sum t_i^4 - \sum t_i^2 y_i \times \sum t_i^2}{n \times \sum t_i^4 - (\sum t_i^2)^2}, b = \frac{\sum t_i y_i}{\sum t_i^2},$$

$$c = \frac{n \times \sum t_i^2 y_i - \sum t_i^2 \times \sum y_i}{n \times \sum t_i^4 - (\sum t_i^2)^2};$$

- extrapolating by extending the identified trend until the forecast horizon;
- determining the variation interval with a probability of 95% based on the next relation:

$$(6) y_t - t\alpha \times s < y_n < y_t + t\alpha \times s,$$

$$\text{where } s = \sqrt{\frac{\sum (y_i - y_t)^2}{n - 2}}, n = \text{number of years taken into consideration.}$$

After that, it had been determined the level of achieving each objective ( $g_i$ ) by every member state of the European Union based on the next relation:

$$(7) \quad g_i = \begin{cases} \frac{\text{forecast\_value\_2020}}{\text{target\_2020}} \times 100, & \text{if it is better to overreach the objective;} \\ \frac{\text{target\_2020}}{\text{forecast\_value\_2020}} \times 100, & \text{if it is better to be under the target.} \end{cases}$$

In the end, it had been determined the level of achieving the Europe 2020 Strategy based on the next relation:

$$(8) GS = \sum_{i=1}^6 g_i \times \alpha_i,$$

where  $\alpha_i = \frac{1}{\text{number of objectives}}$  and represented the importance coefficient.

### 3. Results

If we take into consideration the employment rate registered in 2009 and the annual average growth rate recorded during 1999-2009 (Figure 1), we realize that the European Union is still split: the north is developed, while the south is underdeveloped. As we may observe, most of the northern states are in the “Leaders” / “Followers” category while the southern countries are in the “Catching-up” / “Going with the flow” category. Among northern states, Ireland, Latvia, Lithuania and Belgium make an exception. First two are in the “Going with the flow” category while the last ones are in the “Catching-up” category because although, their employment rate was lower than the European average they managed to have a high annual growth rate. Among southern states, we must remark the position adopted by Portugal, Cyprus and Slovenia. First of them is a “Follower” while the last ones are “Leaders”.

Figure 1 also reflects that eight countries (Netherlands, Cyprus, Austria, Germany, Finland, Slovenia, Luxemburg and France) have great chances to overreach the objective of having on the labor market 75% of the population aged 20-64 years because each one of them had, in 2009, a high employment rate and the annual growth rate registered in 1999 – 2009 was higher than the European average.

Some of the EU countries have exceeded this target since 2009 when they recorded an employment rate of 78.8% (Netherlands), 78.3% (Sweden), 77.8% (Denmark) and 75.7% (Cyprus).

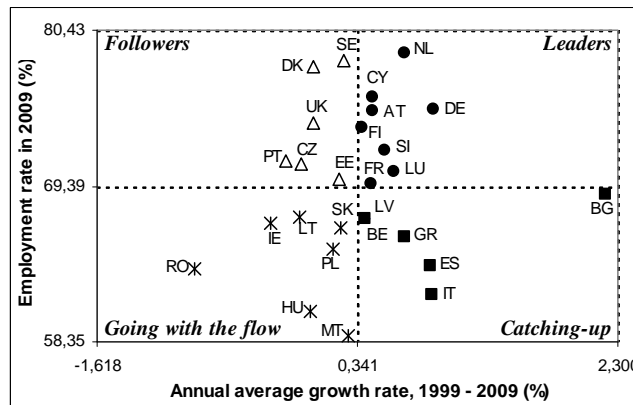


Figure 1. European member states distribution based on the employment rate registered, in 2009, and the annual average growth rate during 1999-2009

The situation is almost the same when it comes to the gross domestic expenditure on R&D (Figure 2). This time, most of the countries from the south of the European Union are included in the “Catching-up” category (except, Italy, Romania and Bulgaria which are in the “Going with the flow” group and Slovenia which is a “Leader”) while most of the ones from the north are “Followers”. As an exception in the north side, Estonia, Latvia and Lithuania gain the title of “Catching up” and Ireland joins the states from the “Going with the flow” category.

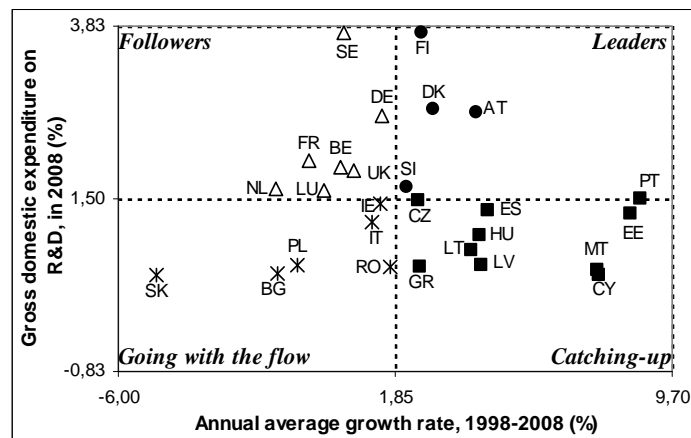


Figure 2. European member states distribution based on the gross domestic expenditure on R&D, in 2008, and the annual average growth rate in 1998-2008

On the other hand, we have to point out that Finland, Denmark, Austria and Slovenia have the highest chances to reach the European objective according to which, by 2020, each member state of the EU has to invest in R&D at least 3% of the gross domestic product (GDP). Sweden and Finland have already surpassed this level in 2008 when they allocated to the R&D sector 3.75% and 3.73% of GDP. So, according to the annual average growth rate registered from 1998 till 2008, only four member states will achieve this objective of the Europe 2020 Strategy.

Things are different when it comes to greenhouse gas emissions. As it may be observed from Figure 3, in 2008, most of the EU member states had a low level of greenhouse gas emissions and a negative growth rate during 1998-2008.

Based on these data, it appears that at least 16 from the 27 EU members have a good chance to fulfill the objective of reducing the level of greenhouse gas emissions to 80%, by 2020. These are: Romania, Bulgaria, Slovakia, Czech Republic, Germany, Hungary, United Kingdom, Poland, Sweden, Belgium, Denmark, France, Latvia, Lithuania, Ireland and Estonia.



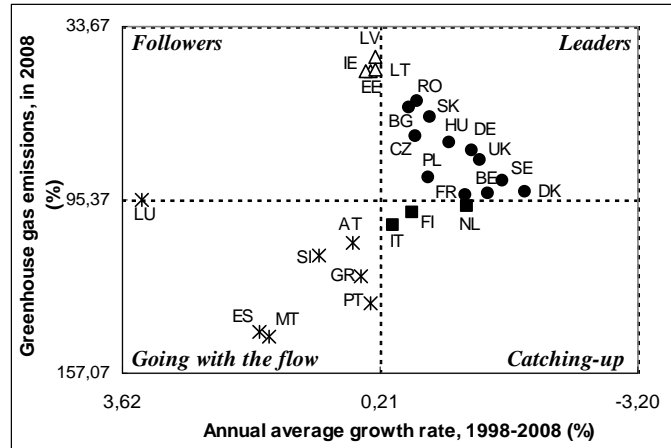


Figure 3. European member states distribution based on the greenhouse gas emissions, in 2008, and the annual average growth rate in 1998-2008

The existing gap across European Union reduces its visibility to the level of renewables energy sources. In this case, although the objective is to increase the share of renewables in final energy consumption to 20%, the target established for each country is customized. As a result, in the “Leaders” and “Followers” category are included member states from the north and the south of the EU (Figure 4).

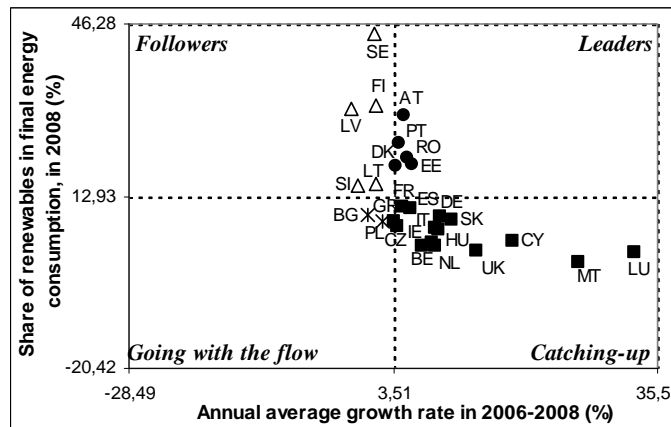


Figure 4. EU member states distribution based on the share of renewables in final energy consumption, in 2008, and the average growth rate in 2006-2008

So, Austria, Portugal, Romania, Estonia and Denmark have big chances to achieve the objective that had been set for 2020. In addition, it should not be neglected the positions held by Sweden, Finland, Latvia, Lithuania and Slovenia. In 2008, for

each one of them the share of renewables in final energy consumption was higher than the European average.

Another target for 2020 aims the share of early school leavers. As we may observe from Figure 5, EU is once again splitted in two: most of the northern states have had, in 2009, a rate of early school leavers smaller than the European average which facilitated their integration in the “Leaders” or “Followers” category while the majority of the southern countries have recorded a high rate of early school leavers.

Therefore, Slovakia, Poland, Luxemburg, Lithuania, Netherlands, Cyprus, Belgium, Germany and Ireland are the member states with the biggest chances of reducing school drop-out rates to less than 10%, by 2020.

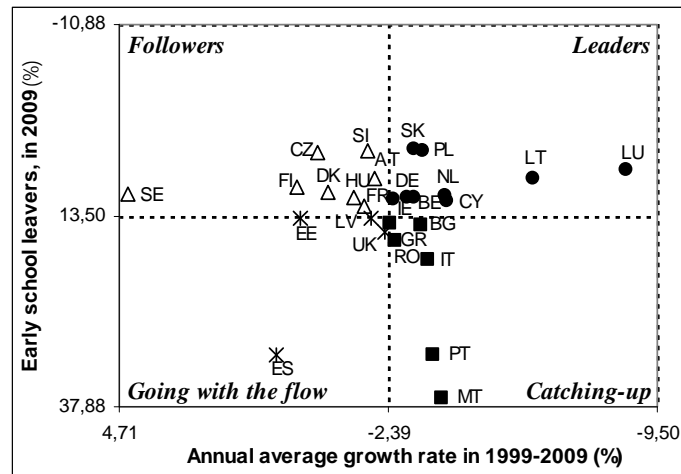


Figure 5. EU member states distribution based on the share of early school leavers, in 2009, and the annual average growth rate in 1999 – 2009

In Figure 6 it's presented the EU member states distribution based on the share of persons aged 30-34 years who had completed the university studies, in 2009, and the annual average growth rate recorded during 2000-2009. It appears that Luxemburg, Ireland, Denmark and Netherlands are the most likely to exceed the objective of increasing the share of 30 – 34 years old having completed tertiary or equivalent education to at least 40%, by 2020. On the other hand, in 2009, the share of persons aged 30-34 years who had completed tertiary or equivalent education was equal to 49% in Ireland, 48.1% in Denmark, 46.6% in Luxemburg, 43.3% in France and 40.5% in Netherlands.

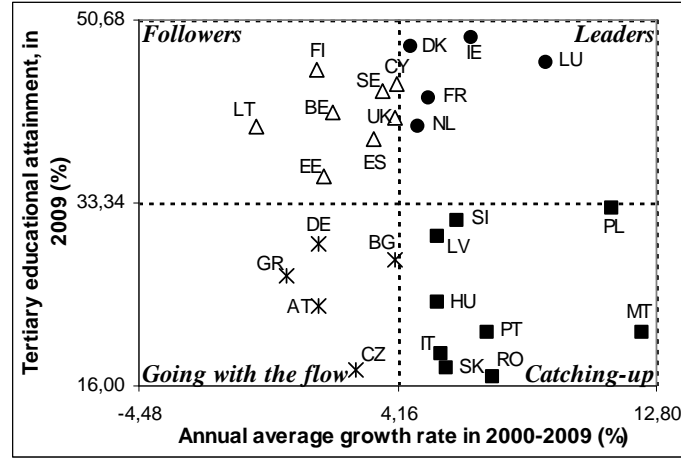


Figure 6. EU member states distribution based on the tertiary educational attainment, in 2009, and the annual average growth rate in 2000-2009

If we assume that the countries from the “Leaders” category are the most likely to achieve the objectives stated, for 2020, by the European Council then we can observe that the majority of the member states that are in the north side of the EU will fulfill at least 2 objectives while the ones from the south will not perform more than one (Table 4).

On the other hand, we must point out that according to the annual average growth rate, Latvia is the only country situated in the north of the European Union that will fulfill none of the Europe 2020 Strategy’s objectives. The situation is the same for Spain, Italy, Malta and Greece only this time they are representing the southern countries of the EU.

If we take into account the evolving trend of all indicators, the situation from the EU level changes (Table 5). Only three objectives will be fulfilled at the average level of the EU if the member states will evolve according to the same trend. These are referring to the share of renewables in gross final energy consumption, to the early leavers from education and training and to the tertiary educational attainment.

In other words, we may estimate with a 95% probability that European average for the share of renewables in gross final energy consumption will be 28.97% (with almost 9% higher than the target’s value), the school drop-out rates will be 9.08% (less than 10%) and the share of persons aged 30-34 years who had completed tertiary or equivalent education will be raised to 46.98% (with almost 7% over the target).

Based on the forecasted value for each objective, we may estimate that the level of achieving the entire strategy by EU-27 will be equal with 99.20% (Table 6). In other words, if the EU member states will evolve after the same pattern then the entire European Union will have a 0.8% deficiency in fulfilling the Europe 2020 Strategy.

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Regarding the southern states of the European Union, we may observe that Slovakia, Poland and Slovenia will be the only ones that will have a degree of accomplishing the Europe 2020 Strategy of 112.40%, 108.80% and respectively 107.64%. The other ones will not fulfill the plan established by the European Council.

*Table 4*

**Number of objectives that may be fulfilled by every member state of EU**

Objective Country	Employment rate	Gross domestic expenditure on R&D	Greenhouse gas emissions	Share of renewables in gross final energy consumption	Early leavers from education and training	Tertiary educational attainment	Total
Denmark (DK)		X	X	X		X	4
Germany (DE)	X		X		X		3
France (FR)	X		X			X	3
Luxemburg (LU)	X				X	X	3
Netherlands (NE)	X				X	X	3
Austria (AT)	X	X		X			3
Belgium (BE)			X		X		2
Ireland (IE)					X	X	2
Cyprus (CY)	X				X		2
Poland (PL)			X		X		2
Romania (RO)			X	X			2
Slovenia (SL)	X	X					2
Slovakia (SK)			X		X		2
Finland (FI)	X	X					2
Bulgaria (BG)			X				1
Czech Republic (CZ)			X				1
Estonia (EE)				X			1
Lithuania (LI)					X		1
Hungary (HU)			X				1
Portugal (PT)				X			1
Sweden (SE)			X				1
United Kingdom (UK)			X				1
Greece (GR)							0
Spain (ES)							0
Italy (IT)							0
Latvia (LV)							0
Malta (MT)							0

Table 5

**Forecasted level of the Europe 2020 Strategy’s objectives for each member state, according to the evolving trend**

Country	Objective (Target)	Forecasted level for 2020 (%)					
		Employment rate	Gross domestic expenditure on R&D	Greenhouse gas emissions	Share of renewables in gross final energy consumption	Early leavers from education and training	Tertiary educational attainment
		75	3	80	20	10	40
Belgium (BE)		71,08	1,80	80,24	7,50	7,78	53,75
Bulgaria (BG)		72,15	0,38	65,37	10,02	14,46	35,80
Czech Republic (CZ)		71,82	1,58	74,42	12,97	5,49	18,81
Denmark (DK)		79,04	3,30	92,87	32,90	10,72	67,93
Germany (DE)		81,60	2,88	68,32	24,15	11,06	32,09
Estonia (EE)		76,47	1,35	56,99	39,93	13,26	42,44
Ireland (IE)		72,95	3,39	126,44	9,40	10,36	73,49
Greece (GR)		72,87	0,62	129,94	13,77	9,14	29,01
Spain (ES)		71,14	1,39	163,10	21,80	32,48	54,45
France (FR)		73,48	2,07	85,96	20,77	11,36	63,73
Italy (IT)		70,56	1,33	111,47	17,02	17,24	30,46
Cyprus (CY)		80,99	1,33	231,51	15,23	12,40	68,05
Latvia (LV)		75,88	0,80	49,63	21,49	13,70	41,57
Lithuania (LI)		77,43	0,65	57,36	19,23	5,37	45,52
Luxemburg (LU)		73,52	1,21	115,43	10,67	8,78	74,36
Hungary (HU)		62,93	1,53	78,47	17,15	11,00	27,66
Malta (MT)		60,72	1,42	177,91	0,92	31,88	41,39
Netherlands (NE)		83,71	1,42	89,67	8,15	5,11	53,17
Austria (AT)		78,73	3,69	119,82	54,38	9,07	22,97
Poland (PL)		66,10	0,43	85,47	11,32	4,22	57,72
Portugal (PT)		70,65	1,26	140,45	42,22	19,99	35,69
Romania (RO)		56,97	0,62	64,06	40,62	15,60	20,52
Slovenia (SI)		78,16	1,79	127,55	12,40	4,12	50,77
Slovakia (SK)		71,55	0,40	63,39	23,83	4,60	20,73
Finland (FI)		78,86	4,35	116,06	40,93	9,91	50,03
Sweden (SE)		82,01	3,48	79,51	56,52	17,75	64,63
United Kingdom (UK)		76,04	1,81	73,50	7,05	11,86	47,13
EU - 27		71,31	1,51	103,42	28,97	9,08	46,98

Table 6

**Forecasted level of achieving the objectives and of fulfilling the Europe 2020 Strategy by each member state, according to the evolving trend**

Country	Level of achieving the objective (%)						Level of fulfilling the strategy (%)
	Employment rate	Gross domestic expenditure on R&D	Greenhouse gas emissions	Share of renewables in gross final energy consumption	Early leavers from education and training	Tertiary educational attainment	
Slovakia	95,40	13,33	126,20	170,24	217,39	51,83	112,40
Denmark	105,39	110,00	86,14	109,67	93,28	169,83	112,38
Sweden	109,35	116,00	100,62	115,34	56,35	161,56	109,87
Finland	105,15	145,00	68,93	107,72	100,91	125,08	108,80
Poland	88,13	14,33	93,60	75,44	236,97	144,30	108,80
Lithuania	103,24	21,67	139,47	83,62	186,22	113,80	108,00
Slovenia	104,21	59,67	62,72	49,60	242,72	126,93	107,64
Netherlands	111,61	47,33	89,22	58,21	195,69	132,91	105,83
Estonia	101,96	45,00	140,38	159,73	75,44	106,10	104,77
Germany	108,80	96,00	117,10	134,17	90,42	80,21	104,45
Austria	104,97	123,00	66,77	159,95	110,25	57,43	103,73
Ireland	97,27	113,00	63,27	58,75	96,53	183,71	102,09
Luxemburg	98,03	40,33	69,31	96,97	113,90	185,90	100,74
France	97,97	69,00	93,07	90,29	88,03	159,31	99,61
Czech Republic	95,76	52,67	107,50	99,74	182,15	47,03	97,47
Belgium	94,77	60,00	99,70	57,69	128,62	134,36	95,86
Cyprus	107,99	44,33	34,56	117,18	80,65	170,11	92,47
Hungary	83,91	51,00	101,95	131,92	90,91	69,15	88,14
United Kingdom	101,39	60,33	108,84	47,00	84,32	117,83	86,62
Latvia	101,17	26,67	161,19	53,73	72,99	103,93	86,61
Romania	75,96	20,67	124,88	169,24	64,10	51,30	84,36
Portugal	94,20	42,00	56,96	136,18	50,03	89,23	78,10
Spain	94,85	46,33	49,05	109,00	30,79	136,11	77,69
Bulgaria	96,20	12,67	122,38	62,60	69,16	89,50	75,42
Italy	94,08	44,33	71,77	100,10	58,00	76,15	74,07
Greece	97,16	20,67	61,57	76,48	109,41	72,53	72,97
Malta	80,96	47,33	44,97	9,17	31,37	103,48	52,88
EU-27	95,08	50,33	77,35	144,86	110,13	117,45	99,20

## 1. Conclusions

On the European Union level, this new strategy for 2020 will not be fulfilled if the member states will develop themselves after the same pattern. The most important vulnerabilities of this plan are coming from the labor market, R&D sector and environmental protection.

The objective of raising to 75% the employment rate may be achieved by 40.74% of member states (11 from the 27) if these will have the same evolving trend until 2020. As a result, we estimated with a 95% probability that more than 75% of the active population will be employed in Netherlands (83.71%), Sweden (82.01%), Germany (81.60%), Cyprus (80.99%), Denmark (79.04%), Finland (78.86%), Austria (78.73%), Slovenia (78.16%), Lithuania (77.43%), Estonia (76.47%), United Kingdom (76.04) and Latvia (75.88%). The fact that a country is capable of exceeding this target reflects a high degree of economic development and a very good absorption capacity of the available human resource.

The results which will be obtained in the case of investments in R&D will have implications on the innovation capacity and on the economic competitiveness. This time, according to the forecasts that have been made, only five member states (18.52%) will exceed the target if they will maintain the same evolving trend. These are Finland (4.35%), Austria (3.69%), Sweden (3.48%), Ireland (3.39%) and Denmark (3.30%). For each of them the public investments in R&D will attract private funds which will reduce the brain drain phenomenon and will encourage the collaboration between research institutes and business environment. All this cumulated will be reflected in an increase of the products / services competitiveness.

Another vulnerability of the Europe 2020 Strategy is represented by the environmental protection. Just like ten years ago, the European Council wants to protect the environment by reducing the level of greenhouse gas emissions to 80%. It is important to mention that if the member states will follow the same pattern of developing like the one they had from 1998 until 2008, the greenhouse emissions will not be reduced but raised to 103.42%.

The member states that will achieve this objective, according to the predictions that had been made for 2020, are: Latvia (49.63%), Estonia (56.99%), Lithuania (57.36%), Slovakia (63.39%), Romania (64.06%), Bulgaria (65.37%), Germany (68.32%), United Kingdom (73.50%), Czech Republic (74.42%), Hungary (78.47%) and Sweden (79.51%).

We have to point out that if we take into consideration only six of the eight objectives established for 2020, we realize that most of the northern states of the European Union will accomplish the strategic plan which has been developed by the European Council, in March 2010, while the majority of the southern countries will have deficiencies in achieving the targets.

So, according to the forecasts which have been made based on the evolving trend the new European strategy will be fulfilled by only 48.15% of the member states (13 countries from 27). These are: Slovakia (112.40%), Denmark (112.38%), Sweden

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(109.87%), Finland (108.8%), Poland (108.80%), Lithuania (108.00%), Slovenia (107.64%), Netherlands (105.83), Estonia (104.77), Germany (104.45%), Austria (103.73%), Ireland (102.09) and Luxemburg (100.74%). As it may be remarked, three of them (23.08%) are from the south side of the European Union while the other ones are from the north which reflects that the hypothesis of this research has been validated.

In conclusion, the Europe 2020 Strategy will not be achieved by following the same pattern. Its success depends on the concrete action plans that every member state will establish in order to raise the flexibility of the labor market, to attract investments in the R&D sector and to promote a sustainable development by reducing the level of greenhouse gas emissions, in the first place.

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