

Achievements of the EU Member States

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Abstract

The 5 targets for the EU in Europe 2020 strategy are as follows: 1. Employment; 2. Research & Development; 3. Climate change and energy sustainability; 4. Education; 5. Fighting poverty and social exclusion. The main goals of the EU in the area of education are to reduce the percentage of the population aged 18-24 with at most lower secondary education to less than 10 % and to increase the share of the population aged 30-34 having completed tertiary studies to at least 40 %.

People with low educational level are more likely to be at risk of poverty. The share of early leavers from education has fallen steadily. In 2003, the indicator reached 16.4% with its minimum in Slovenia (4.6%) and maximum in Malta (49.9%). In 2014, the percentage of early leavers dropped to 11.2% with the lowest value in Croatia (2.7%) and the highest in Spain (21.9%). If this trend will continue, the target to reduce early school leaving rates to less than 10% by 2020 can be successfully achieved.

The proportion of the population aged 30-34 with tertiary educational attainment has been continuously increasing. In EU-28, the proportion reached only 25.1 % in 2003, with the lowest level in Malta (7.4 %) and the highest in Lithuania (42.6 %). But in 2014 the level increased to 37.9% with the highest proportion in Lithuania (53.3%) and the lowest in Italy (23.9%). The increasing trend makes it possible to believe that also this goal of the Europe strategy will be successfully reached.

Keywords: Europe 2020, Strategy, Education

Introduction

Education and training belong to the main priorities of the EU Member States. Education and training are crucial for both economic and social progress and increasingly important in a globalised and knowledge-driven economy, where a skilled workforce is necessary to compete in terms of productivity, quality, and innovation (Eurostat regional yearbook, 2015). Through education and training, it is possible also, in time of economic crisis, to boost productivity, competitiveness, or innovation. People who leave education and training prematurely often suffer from social isolation and poverty; these persons are associated with higher unemployment rates and lower paid jobs. Education can be an escalator out of social disadvantage, leading to better job prospects for youths facing greater risks of poverty and reducing the prevalence of income poverty in adult age (Machin, 2006). Tertiary education on the other hand provides highly skilled human capital. Low education and literacy skills belong to the variables that affect the unemployment and pessimisms of unemployed older workers (Hick, 2015). According to Gausas and Vosyliuté (2015) employers are not willing to employ people over 45 years old because they think that older people are at a disadvantage when it comes to communication skills, ICT skills, and foreign language skills. It is possible that a similar unwillingness to employ older people is not only evidence from Lithuania, but that as the ageing of the workforce is typical for all of the EU Member States, employers have to accept this situation. The education of the older population has a very important role in ageing societies. However, not only older people have problems to get a suitable job on the existing labour markets. In Europe, youth unemployment has been consistently higher than that of the older population since 1945, but since 2008, youth unemployment has been increasing at a particularly alarming rate, in some regions of Europe, the youth unemployment rate is well in excess of 50% (European Youth Forum, 2013).

The first main goal of the EU in the area of education is a reduction of the population aged 18-24 with at most lower secondary education to less than 10%. The indicator of early leavers represents the proportion of individuals aged 18-24 who had finished no more than a lower secondary level of education, and who were not involved in further education or training (Europe 2020 – web page). The second of the main goals of the EU in the area of education tend to increase the share of the population aged 30-34 having completed tertiary studies to at least 40%. It is expected that a growing number of jobs in the future will require a tertiary level of education.

The role of education is important on the job market; for example, the years of education demanded by the average U.S. job grew slowly but steadily from 2005 to 2009. In 2009 the average U.S. job required 13.54 years of education, up from 13.37 years in 2005 (Rothwell & Berube, 2011). More educated individuals fare much better in the labour market than their less educated peers, for example when the U.S. aggregate unemployment rate hit 10 percent during the recent recession, high school dropouts suffered from unemployment rates close to 20 percent, whereas college graduates experienced unemployment rates of only 5 percent (Cairo & Cajner, 2014). The higher the educational degree achieved, the higher the probability to participate to the labour market (Pastore, 2005). Education significantly increases re-employment success for unemployed workers. According to the research of Riddell & Song (2011) on the 1980 Census data, graduating from high school increases the probability of re-employment by around 40 percentage points and an additional year of schooling increases this probability by around 4.7 percentage points. Garrouste, Kozovska and Perez (2010) using the EU-SILC 2005 data confirm the hypothesis that the higher the educational level, the lower the probability of falling into long-term unemployment.

Findings

Positive development of the two main indicators of education give us the hope that the goals of the Europe 2020 agenda set as benchmarks for education will be successfully fulfilled.

Early leavers from education and training

The indicator for early leavers from education and training is defined as the percentage of the population aged 18-24 with at most lower secondary education. Lower secondary education refers to ISCED 2011 levels 0-2. People with low educational level are more likely to be at risk of poverty. The share of early leavers from education in the EU Member States has fallen steadily. In 2000, the indicator reached an average level of 17.6 % in the EU-27 with its minimum in Sweden (7.3 %) and maximum in Malta (54.2 %). In 2014, the percentage of early leavers dropped in the EU-28 to 11.2 % with the lowest value in Croatia (2.7 %) and the highest in Spain (21.9 %). The share of young people in the EU with at most a lower secondary level of educational attainment fell for 14 consecutive years from 17.6 % in 2000. If the trend continues, the EU target to reduce early school leaving rates to less than 10 % by 2020 can be successfully achieved. Unfortunately, in 2000, there were missing values of early leavers for altogether eight EU Member States. From 2002, the database of early leavers is complete. Lowest proportion of early leavers from education and training in 2002 was recorded principally in the east of the EU: Slovenia (5.1 %), Czech Republic (5.7 %), Slovakia (6.7 %), Poland (7.2 %), Croatia (8.0 %). But in Malta in 2002, the share of early leavers was as high as 53.2 %, in Portugal 45 %, in Spain 30.9 %, in Italy 24.2 %.

In 2014, nineteen EU countries achieved the proportion of early leavers lower than the EU average of 11.2 %. The following countries had the share of early leavers under the EU average: Croatia (2.7 %), Slovenia (4.4 %), Poland (5.4 %), Czech Republic (5.5%), Lithuania (5.9%), Luxembourg (6.1 %), Sweden (6.7 %), Slovakia (6.7 %), Cyprus (6.8%), Ireland (6.9%), Austria (7.0%), Denmark (7.8%), Latvia (8.5%), the Netherlands (8.7%), France (9.0%), Greece (9.0%), Finland (9.5%), Germany (9.5%) and Belgium (9.8%). This means that these nineteen EU Member States achieved the share of early leavers lower than the threshold rate of 10% already in 2014. The proportion of early leavers above the EU average was recorded in nine Member States: Spain (21.9%), Malta (20.3%), Romania (18.1%), Portugal (17.4%), Italy (15.0%), Bulgaria (12.9%), United Kingdom (11.8%), Estonia (11.4%) and Hungary (11.4%).

Not only has the indicator's total decline been typical for the EU, but also the disparities between the EU Member States has continued to move in a positive direction. The Treaty establishing the European Community defines economic and social cohesion as one of the main operational priorities of the Union. Cohesion is to be achieved mainly through the promotion of growth-enhancing conditions and reduction of disparities between the levels of development of EU regions (Monfort, 2008). One of the main priorities of the EU is also the convergence process of selected indicators. The convergence process can be measured using specific statistical methods. For detecting possible catching-up processes of early leavers the Sigma-convergence coefficient, which refers to a reduction of disparities among EU countries in time, was selected. The catch up progress was measured by standard deviation as one of the Sigma-convergence coefficients.

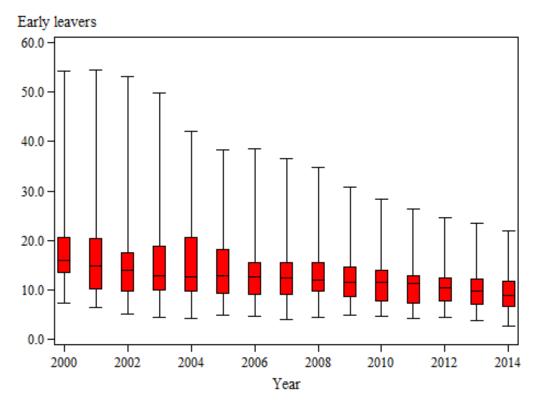


Figure 1 Early leavers from education and training in the EU (percentage of the population aged 18-24)

The variability measured by standard deviation of the early leavers – both male and female - declined steadily from 2002. While in 2002 the standard deviation of early leavers men achieved 12.3%, due to a catching up process the variability declined to only 9.6%. The same positive movement was attained in the variability of female early leavers. The starting value of the standard deviation was lower than the standard deviation of the male early leavers, the variability declined from 9.9% in 2002 to only 4.5% in 2014.

There exist some gender inequalities in education across the EU Member States. Gender inequalities have been shaped through history as a result of ideological, historical, cultural, social, religious, political and economic factors (Eurostat regional yearbook, 2015). Education effects peoples life, it provides qualification and skills that are necessary to enter the labour market and so education affects the potential earnings, career development, employment, social exclusion, poverty.

The likelihood of leaving education or training early is higher among men (19.0 % in 2002) than it is among women (14.9 % in 2002). The proportion of females, aged 18-24, who were not in further education or training fell from 14.9 % in 2002 to 9.6 % in 2014. In the same period, the rate of male early leavers decreased from 19.0% to 12.8% in 2014. The female rate in 2014 already reached the Europe 2020 threshold of 10%. In each year, the female rate for female early leavers was lower than the rate for men. The highest gender gap (gender gap in percentage points represents the difference between the share of the early male and female leavers) was achieved in 2004 (4.6 p.p.). The gap between the share of early male and female leavers closed somewhat and in recent year the female rate of early leavers was 3.2 p.p. lower than the corresponding rate for males. The trend of development of early leavers was positive from 2002. This indicates that not only did the share of 18-24 year old in the EU-28 declined for 14 consecutive years from 2002, but also that the disparity between the EU Member States declined rapidly. The gender gap closed slowly between women and men, which is also a positive sign of development of early leavers.

EU-28	Early leavers, in %		Variability - star	Gender	
	males	females	males	females	gap, in p.p.
2002	19,0	14,9	12,3	9,9	4,1
2003	18,5	14,3	11,7	9,5	4,2
2004	18,3	13,7	11,0	8,4	4,6
2005	17,7	13,6	10,0	7,0	4,1
2006	17,4	13,2	9,6	6,9	4,2
2007	16,9	12,8	9,1	6,8	4,1
2008	16,6	12,6	8,8	6,3	4,0
2009	16,1	12,3	8,2	5,9	3,8
2010	15,8	11,9	7,6	5,5	3,9
2011	15,3	11,5	6,8	4,8	3,8
2012	14,5	10,9	6,2	4,4	3,6
2013	13,6	10,2	5,7	4,5	3,4
2014	12,8	9,6	5,4	4,5	3,2

Table 1 Early leavers from education and training by sex, EU-28

(Percentage of the population aged 18 – 24, standard deviation, and gender gap in percentage points (p.p.))

To continue the successful way in reducing the share of early leavers it is necessary to secure that education has to be free, accessible for all, with measures to prevent early school leaving a measures for second-chance education (European Youth Forum, 2013).

Tertiary educational attainment

Employment opportunities may be one of several pull effects that result in an increase of the proportion of highly-qualified young people. Low levels of tertiary educational attainment can hinder competitiveness and undermine the EU's potential to generate "smart growth" (Eurostat regional yearbook, 2015). The proportion of the population aged 30-34 with tertiary educational attainment has been continuously increasing. In the EU, the proportion reached only 22.4 % in 2000, with the lowest level in Malta (7.4 %) and the highest in Lithuania (42.6 %). In 2014, the EU average level increased to 37.9 % with the highest proportion in Lithuania (53.3 %) and the lowest in Italy (23.9 %). If the trend will continue, the EU target to increase the share of the population having completed tertiary studies to at least 40 % by 2020 can be successfully reached.

Due to lack of data on tertiary educational attainment for some EU Member States, in table 2 the comparison of the share of 30-34 year-olds young people who has completed a tertiary or equivalent education is presented. Tertiary educational attainment in the EU rose on the year-to-year basis from 2002 for both sexes. In 2002, only in one EU country (Finland) did the proportion of tertiary educational attainment over count the Europe 2020 benchmark of 40%. In the same year, the share of population with tertiary educational attainment lower than 20% was achieved in the following EU Member States: Romania (9.1%), Malta (9.3%), Slovakia (10.5%), Czech Republic (12.6%), Portugal (12.9%), Italy (13.1%), Poland (14.4%), Hungary (14.4%), Croatia (16.2%) and Latvia (17.3%).

A positive development in the field of education was signified by an enormous increase of number of countries which in 2014 over count the threshold of 40% for tertiary educational attainment versus only one country in 2002. Altogether 16 EU countries had the share of population aged 30-34 with tertiary education higher than the forecasted threshold of 40%: Lithuania (53.3%), Luxembourg (52.7%), Cyprus (52.5%), Ireland (52.2%), Sweden (49.9%), the United Kingdom (47.7%), Finland (45.3%), Denmark (44.9%), the Netherland

(44.8%), Belgium (43.8%), France (43.7%), Estonia (43.2%), Spain (42.3%), Poland (42.1%), Slovenia (41.0%) and Austria (40.0%).

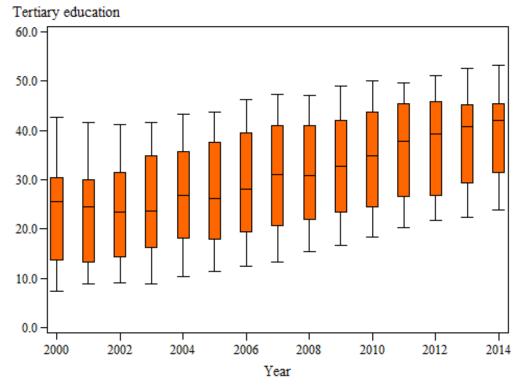


Figure 2 Tertiary educational attainment, EU - 28 (percentage of the population aged 30 - 34)

In the EU 22.6 % of men, aged 30-34 years had attained a tertiary level of education in 2002; this was lower than the share for women of the same age, which stood at 24.5 %. The 2002gender gap reached 1.9 percentage points. But the gender gap rose steadily on an annual basis. In 2014, the proportion of men, aged 30-34, with tertiary education increased to 33.6%, but the share of women with tertiary education increased more rapidly to 42.3%. Therefore, to a faster increase of the share of well-educated women the disparity between the sexes widened and reached 8.7 p.p. in 2014. Although the proportion of 30-34 year-olds with a tertiary level of education rose considerably between 2002 and 2014 in total, due to a slower increase in share of men with tertiary education compared to women, the gender gap between both sexes increased. The variability of share of tertiary educational attainment did not change a lot. The standard deviation of men's proportion was lower than the variability of women's tertiary educational attainment.

EU-28	Tertiary education	ndard deviation	Gender		
	males	females	males	females	gap, in p.p.
2002	22,6	24,5	9,0	10,6	-1,9
2003	24,0	26,1	9,5	11,0	-2,1
2004	25,3	28,6	9,8	11,0	-3,3
2005	26,1	30,1	10,0	11,5	-4,0
2006	26,3	31,6	10,1	12,2	-5,3
2007	27,2	32,9	9,9	11,9	-5,7
2008	28,0	34,4	9,5	12,2	-6,4
2009	29,0	35,7	9,9	11,7	-6,7
2010	30,3	37,3	9,5	11,2	-7,0
2011	31,0	38,6	9,0	11,3	-7,6
2012	31,8	40,2	9,2	11,5	-8,4
2013	32,8	41,4	8,7	11,1	-8,6
2014	33,6	42,3	8,7	10,2	-8,7

Table 2 Tertiary educational attainment by sex, EU-28

(Percentage of the population aged 30 - 34, standard deviation, and gender gap in percentage points (p.p.))

Conclusion

The Member States of the European Union have understood the very important role of education. The main targets of the EU in the field of education are ambitious. The trend of development of the selected indicators is positive.

For both Europe 2020 indicators related to education is typical a strong convergence process. The aim of reducing disparities between the EU Member States is enshrined in the EU Treaty. The disparity, measured by coefficient of variation, of the early leavers was in 2000 as high as 65.3%. Due to a positive convergence process, the disparity declined to 40.4% in 2012. A slower divergence was achieved in 2013 and 2014 compared to 2012. The disparity of the tertiary education indicator was smaller than in case of the early leavers. The coefficient of variation reached in 2000 a level of 44%. Due to a positive convergence process, the disparity indicator dropped to 24 % in 2014.

References

- Cairo, I. & Cajner, T. (2014). *Human Capital and Unemployment Dynamics: Why More Educated Workers Enjoy Greater Employment Stability*. Washington: Federal Reserve Board, Finance and Economics Discussion Series.
- European Youth Forum. (2013). *Policy paper on youth employment*. Adopted at the Council of Members. Brussels. COMEM/GA 0166-13.
- Europe 2020. (n.d.). Retrieved from http://ec.europa.eu/europe2020/index en.htm.
- Eurostat. Databeses. (n.d.). Retrieved from ttp://ec.europa.eu/eurostat/data/database.
- Eurostat regional yearbook 2015. (2015). Luxembourg: Publications Office of the European Union.
- Garrouste, Ch., Kozovska, K. & Perez, E.A. (2010). *Education and Long-Term Unemployment*. Ispra: Joint Research Centre, Institute for the Protection and Security of the Citizen.
- Gausas, S. & Vosyliute, L. (2015). Local economic strategies for ageing labour markets: Marijampolé's Third Age University in Lithuania. *OECD Local Economic and Employment Development Working Papers*, 2015/01. Paris: OECD Publishing.
- Hicks, P. (2015). Local economic strategies for ageing labour markets: The Canadian Targeted Initiative for Older Workers in Fort St. James, British Columbia. *OECD Local Economic and Employment Development Working Papers*, 2015/03. Paris: OECD Publishing.
- Machin, S. (2006). Social Disadvantage and Education Experiences. Paris: OECD, Directorate for Employment, Labour and Social Affairs. OECD Social, Employment and Migration Working Papers
- Monfort, P. (2008). Working papers. Convergence of EU regions Measures and evolution. European Commission, Regional Policy: A series of short papers on regional research and indicators produced by the Directorate-General for Regional Policy.
- Pastore, F. (2005). To Study or to Work? Education and Labour Market Participation of Young People in Poland. Bonn: Institute for the Study of Labour. Discussion Paper No.1793.
- Riddell, W. C. & Song, X. (2011). *The Impact of Education on Unemployment Incidence and Re-employment Success: Evidence from the U.S. Labour Market*. Bonn: Institute for the Study of Labour. Discussion Paper No.5572.
- Rothwell, J. & Berube, A. (2011). *Education, Demand, and Unemployment in Metropolitan America*. Washington: Metropolitan Policy Program at Brookings.