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## **Differences in the Development and Investment in Human Capital in the Member States of the European Union**

### **Abstract**

*Human capital and knowledge are most important factors of current development processes, contributing to the innovativeness and competitiveness of the economies. The important role of these factors was underlined also in Europe 2020 Strategy. However, due to immaterial character of investment in human capital and because of the high level of decentralization of human capital development policy, these actions are characterized by a relatively low efficiency. Thus, the aim of this paper is firstly to identify the importance of human capital development policy within EU policies. Secondly, it is to identify and conduct a comparative analysis of national differences in human capital development and to identify points of reference for key measures of the development in question. Thirdly, this paper is to specify models of human capital development policy from the perspective of how much involved local authorities are in its implementation and efficiency.*

### **1. Introduction**

Majority of economists share the view that resources of well educated and productive labour force currently determine economic development at regional level to a much greater extent than the reduction of costs of economic activity. In strongly urbanised societies, which clearly prevail today, the characteristics of local community defined by its innovativeness, prosperity, education,

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competences, flexibility, motivation, intellectual capabilities and interdependences, relations and mutual trust are decisive for the concentration of companies that wish to use common labour force resources to their advantage.

Concentration of human capital of adequate quality is an important reason for the location of businesses, especially innovative ones, which are the most desired by regions. Thus the answer to a difficult question, how to enhance the competitiveness of a region through the operations of competing economic operators is rather simple: we should strengthen human capital resources in the region. However, doubts arise in connection with one quality of human capital, i.e. mobility. Can we really impact the resources and their availability in a given time and place? By eliminating all barriers in the movement of persons among economies do not we increase the unpredictability of the return on investment in human capital?

Human capital, similarly to businesses, is inclined to concentrate; it even tends to form clusters. (Lucas 1988, p. 38). Thus, we may effectively invest in existing, localised human capital resources expecting economic benefits in return embodied in the agglomeration effects and network benefits. That is confirmed mainly by the data illustrating interregional differences in human capital development in the EU Member States and models of human capital development policies differentiated in terms of decentralisation (autonomy and involvement of local authorities in its implementation). In the paper, the Author shows these differences and specifies desired values of basic measures in selected fields of analysis. In the analysis of the efficiency of applied models of human capital development policy the Author uses results of studies conducted in Poland, Germany, Italy and the United Kingdom<sup>1</sup>.

## **2. Different awareness levels of the importance of human capital for development**

Globalisation of knowledge and technology gave grounds for a new type of economy: the knowledge-based economy. Globalisation, together with the phenomena and tools connected with it, led to the overvaluation of resources decisive for the dynamics and scale of development processes. Paradoxically enough, non-spatial processes of globalisation have increased the importance of

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<sup>1</sup> Studies conducted under the grant of the Ministry of Science and Higher Education: Polityka rozwoju kapitału ludzkiego w regionie (Human Capital Development Policy in the Region, in Polish), No. 1839/B/H03/2010/38, Department of Regional Economics and Environmental Protection, University of Lodz, 2012.

factors and capitals the value of which is determined in territorial terms. (Pietrzyk 2000, pp.31-61). The main resource decisive for achieving competitive advantage, both from the point of view of macroeconomic theories and new regional economy, is human capital. (Romer 1990, pp. 71-102; Lucas 1966, pp. 69-75) Characteristics of regional communities determine the competitiveness of businesses in the global market and, by that, enhance the rate of globalisation. The paradox results from the evolution and nature of innovation which directly determine social and economic growth and development. Thus, the importance of human capital in purely economic terms ranks very high and greatly affects development processes. (Nowakowska, Przygodzki, Sokołowicz 2011, pp. 70-79).

The knowledge, however, is not sufficiently reflected in economic policies pursued by public bodies. We can observe the following dependence: the lower the level of territorial authorities the smaller their propensity to invest in human capital. There are many challenges facing main actors who shape our social and economic life in the area of development policy. Internationally, in Europe the problem was formally specifically addressed in the Lisbon Strategy. European Union Member States recognized that it makes sense to support the development of knowledge-based economy and factors that determine it. Since then, the subsequent most important EU strategic documents repeat the objective. Underinvestment in human capital resources was primarily one of the driving forces encouraging the decision makers to act. We may assume that the importance of human capital was appreciated at the level of transnational policy. EU development policy exploits characteristics and processes typical of human capital. Enhanced innovativeness of the EU economy depends mostly on the investment in human capital, in terms of basic knowledge, advanced knowledge and innovation. (Nowakowska, Przygodzki, Sokołowicz 2011, p. 18) However, bigger discrepancies in the perception of the role of human capital can be noticed in development policies of individual EU Member States where there is not a clear unanimity. Generalising from the point of view of 11 years, we can say that the importance is increasing<sup>2</sup>. Regional public authorities, independently of the type of the state (be it federal, regional or unitary), are much less inclined to invest in intangible values. Even in regional innovation policies we see higher propensity to invest in tangible infrastructure rather than to generate

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<sup>2</sup> M. Stupińska, J. Fila, A. Tomaszewska, Z. Przygodzki, non-published papers in Polish, Human capital development policy in Italy (and respectively in: Germany, UK and in Poland) from regional perspective – objectives, actors, systems and tools, Studies under the grant of the Ministry of Science and Higher Education: Human capital development policy in the region, No. 1839/B/H03/2010/38, Department of Regional Economics and Environmental Protection, University of Lodz, 2012.

organisational, market or marketing innovation. Usually only the most developed regions stress the importance of human capital in their strategic documents and allocate spending for that purpose in Operational Programmes. Often the practice is to declare high importance of human capital in regional development policy and then to leave it out at operational level.

### **3. Different directions in investment in human capital in European Union development strategies between 2000 and 2010**

In 2000 European Commission adopted a reform package known as the Lisbon Strategy. One of its main assumptions highlighted priorities connected with employment policy, R&D policy and economic growth. Analysing the Strategy we should draw special attention to high priority given to actions aimed at the improvement of the quality of human capital (Szymańska 2004, pp. 244-246; Budzyńska, Duszczyk, Gancarz, Gieroczyńska, Jatczak, Wójcik 2002, p. 10) For education the objectives of the strategy already at that time were consistent with the creation of the European Higher Education Area<sup>3</sup>. We may also note that the strategy urged universities to strengthen the links between R&D centres and businesses, to develop partnership behaviour for new innovative solutions, to invest in human capital through training, post-graduate studies, enhancing competences and skills<sup>4</sup>.

The interim review of the assumptions of the Lisbon Strategy in 2005, which confirmed earlier conclusions of the Kok's Report<sup>5</sup>, contributed to the amendments in the strategy. In relation to the three fields of action which the European Council treated as priority ones for the implementation of the Strategy,

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<sup>3</sup> The creation of the European Higher Education Area was formally launched in 1999 with the signing of the Bologna Declaration and in practice the reform of higher education was already in place in 1988 when the Chancellors of European Universities signed the Magna Charta Universitatum (Bologna (Italy, 1988, [http://www.bologna-bergen2005.no/Docs/00-Main\\_doc/880918\\_Magna\\_Charta\\_Universitatum.pdf](http://www.bologna-bergen2005.no/Docs/00-Main_doc/880918_Magna_Charta_Universitatum.pdf)).

<sup>4</sup> These subjects were maintained and are continued in the subsequent programming periods which is confirmed by e.g.: Council Conclusions on the role of education and training in the implementation of the „Europe 2020” strategy, 2011/C 70/01; Education and training in a smart, sustainable and inclusive Europe, COM(2011) 902 final; Opinion of the Committee of the Regions „European cooperation in vocational education and training to support the Europe 2020 strategy, 2011/C 42/07; Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems, COM(2011) 567 final; Council Recommendation of 28 June 2011 on policies to reduce early school leaving, 2011/C 191/01.

<sup>5</sup> Facing the challenge. The Lisbon strategy for growth and employment, Report from the High Level Group chaired by Wim Kok, European Communities 2004.

the following specific areas were identified as supportive for human capital development<sup>6</sup>:

- investing more in knowledge and innovation (the importance of education was specially highlighted as it was stated that education and training are critical factors to enhance the EU long-term potential for competitiveness and social cohesion and hence these factors must be the leading ones in the programme of the Lisbon reform),
- unlocking business potential, especially of SMEs; the need was stressed here i.e. to create a more favourable business environment and to equip entrepreneurs with adequate skills,
- increasing employment opportunities for priority categories; the following priorities were identified: enhance the attractiveness of the labour market and increase employment, increase labour supply and modernise social protection systems, improve the adaptability of workers and entrepreneurs, increase investment in human capital through better education and skills.

The re-launched Lisbon Strategy stresses the importance of human capital as a factor which, if used effectively, can ensure economic growth and high employment<sup>7</sup>. The document highlights the need to focus even more on human resources which is confirmed by the conclusions of the European Council spring summits where we can read e.g.: „Europe must renew the basis of its competitiveness, increase its growth potential and its productivity and strengthen social cohesion, placing the main emphasis on knowledge, innovation and the optimisation of human capital”<sup>8</sup> and „human capital is Europe’s most important asset”<sup>9</sup>.

The re-launching of the Lisbon Strategy was accompanied by the changes in the way it was implemented. Member States became more responsible for the implementation. The new implementation mechanism for the re-launched Lisbon Strategy meant e.g. that each and every Member State was obliged to draft the so called National Reform Programme. The tool increased the efficiency of the implementation of the Lisbon Strategy both at national and at regional levels as not only Member States but also regions started to play an important role in it. As a result, investment in human capital became more focused and increased its share. In subsequent years the process got

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<sup>6</sup> *Presidency conclusions, 23-24 March 2006*, European Council, Brussels, 24 March 2006 [CONCL 1 7775/06], pp. 6-11.

<sup>7</sup> *Presidency conclusions – Brussels, 22& 23 March 2005*, European Council, Brussels, 23 March 2005 [CONCL 1 7619/05], pp. 2-7.

<sup>8</sup> *Ibidem*, p. 4.

<sup>9</sup> *Ibidem*, p. 10 and *Presidency conclusions, 23-24 March 2006*, European Council, Brussels, 24 March 2006 [CONCL 1 7775/06], p. 6-11.

strengthened. During the summit in Brussels in 2006, the European Council concluded that education and training should become the central element of the reformed Lisbon Strategy and resources should be directed to areas which offer the highest return on the investment and the highest value added. It was decided that universities and R&D centres will provide the basis for increasing the competitiveness of Europe and the leading role of the initiator and promoter of changes in education, research and innovation was entrusted to the newly established *European Institute of Technology (EIT)*<sup>10</sup>. Thus also the importance of lifelong learning was directly enhanced by the adoption of the *Lifelong Learning Programme* for 2007 - 2013<sup>11</sup>.

Following the directions listed above, in March 2010 the European Commission adopted a new strategic document „Europe 2020”. Strategy for smart, sustainable and inclusive growth. Human capital is one of the key postulates of Europe 2020. Among its five the most important strategic targets, the first three are connected directly with the investment or changes in human capital. The targets were formulated as follows<sup>12</sup>:

- the share of early school leavers should be under 10% and at least 40% of younger generation should have a tertiary degree;
- 75% of the population aged 20 – 64 should be employed;
- 3% of EU’s GDP should be earmarked for R&D.

In order to ensure the implementation of these decisions, the document stresses the need for action in three priority areas, two of which directly refer to the need to increase the value of human capital and knowledge. The efficiency of their implementation will be decisive for actual competitiveness and the future of the European Union:

- smart growth: developing economy based on knowledge and innovation. Actions undertaken under this priority are designed to unlock European potential for innovation, to improve the outcomes of education, the quality and results of education institutions and also to use economic and social potential of digital society. These actions are to be delivered simultaneously at regional, national and European levels;

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<sup>10</sup> Delivering On The Modernisation Agenda For Universities: Education, Research And Innovation, Communication From The Commission To The Council And The European Parliament, COM(2006) 208 final, Brussels, 10.5.2006.

<sup>11</sup> Decision No. 1720/2006/of the European Parliament and of the Council of 15 November 2006 establishing an action programme for lifelong learning, Official Journal of the European Union, L 327/45, in the following period the programme was continued under the title „An Agenda for new skills and jobs”.

<sup>12</sup> *Europe 2020. A strategy for smart, sustainable and inclusive growth*, Communication of the European Commission, Brussels, 3.3.2010, COM(2010) 2020 final.

- inclusive growth: fostering a high-employment economy, ensuring social and territorial cohesion. The implementation of the priority will require modernisation and enhancing the role of employment, education and training policies and the systems of social protection by increasing the employment rate and reducing structural unemployment as well as increasing the sense of corporate social responsibility. In this context it is important to ensure the access to childcare facilities and care for other dependants of the working persons. The critical element will be the application of the model of flexible labour market and social security (flexicurity) and enabling people to acquire new skills to adapt to new conditions and potential career shifts. Combating poverty and social exclusion will require a lot of effort as well as reducing health inequalities to ensure that everybody can benefit from growth. Promoting healthy and active lifestyle of elderly people will be equally important for social cohesion and higher productivity.

Europe 2020 is a clearly pro-active and pro-competitive strategy designed to exploit the competitive advantage worked out in growth poles. That is why the need for a more focused approach is also noticed when it comes to the actors who receive support. In relation to that, numerous initiatives have been maintained and reinforced to increase the transparency, recognition and quality of competences and skills, to support the mobility of students and workers and to build up resources of innovative knowledge. The most important among them are: EQF<sup>13</sup>, Europass<sup>14</sup>, EIT, Erasmus, Leonardo da Vinci, and Grundtvig Programmes.

#### **4. Differences in human capital development in EU Member States**

Human capital is one among critical areas of intervention identified in Europe 2020 strategy. That is because the overall level of its development in various areas is insufficient and development discrepancies among Member States are substantial. Considering just two key areas of investment in human capital: education and lifelong learning we can see the importance of investment needs, especially when we look at competitive world economies.

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<sup>13</sup> Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, 2008 / C 111/01.

<sup>14</sup> Decision No 2241/2004/EC of The European Parliament And of The Council, of 15 December 2004 on a single Community framework for the transparency of qualifications and competences (Europass), L 390/6.

Education related priorities are linked mainly with the problems of early school leavers. About a half of pupils acquire secondary level qualifications which, however, often do not meet the needs of the labour market. Until 2020 the European Commission assumes the reduction of the drop-out rate to 10% against the current ca. 14%. Early school leavers are people at the age between 18 and 24 years of age who finished education only at lower secondary level or below it. Every year about six million pupils drop out of the education system<sup>15</sup>.

**Table 1. Early leavers from education and training - percentage of the population aged 18-24 with at most lower secondary education and not in further education or training<sup>16</sup>**

Country/ Year	2000	2005	2010
<b>European Union (27)</b>	<b>17.6</b>	<b>15.8</b>	<b>14.1</b>
Belgium	13.8	12.9	11.9
Bulgaria	nda	20.4	13.9
Czech Republic	no data	6.2	4.9
Denmark	11.7	8.7	10.7
Germany	14.6	13.5	11.9
Estonia	15.1	13.4	11.6
Ireland	nda	12.5	10.5
Greece	18.2	13.6	13.7
Spain	29.1	30.8	28.4
France	13.3	12.2	12.6
Italy	25.1	22	18.8
Cyprus	18.5	18.2	12.6
Latvia	nda	14.4	13.3
Lithuania	16.5	8.1	8.1
Luxembourg	16.8	13.3	7.1
Hungary	13.9	12.5	10.5
Malta	54.2	38.9	36.9
Netherlands	15.4	13.5	10.1
Austria	10.2	9.1	8.3
Poland	nda	5.3	5.4

<sup>15</sup> Tackling early school leaving: A key contribution to the Europe 2020 Agenda, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, 31.1.2011, COM(2011) 18 final.

<sup>16</sup> Countries for which or which the indicators positively correlated with the variable they describe exceed the EU average are highlighted in grey. The abbreviation 'nda' stands for 'no data available'.



Portugal	43.6	38.8	28.7
Romania	22.9	19.6	18.4
Slovenia	nda	4.9	5
Slovakia	nda	6.3	4.7
Finland	9	10.3	10.3
Sweden	7.3	10.8	9.7

Source: own calculations based on Eurostat 2012.

Another still important problem for education is the share of people with higher education. We should remember that education directly translates into employment levels. From this point of view, EU priority is to increase by 2020 the percentage of people with higher education aged 30-34 from 33% to at least 40%<sup>17</sup>. The same indicators for the US and Japan are respectively 40% and over 50%, which shows the gap and the needs on the EU side. For individual levels of education, the lowest unemployment rate is recorded for people with higher education. It is estimated that until 2020 the percentage of jobs requiring high qualifications will increase to 35% in the EU while at present only 26% of workers have higher education<sup>18</sup>.

<sup>17</sup> At present more than one third (33,6%) of persons aged 30 - 34 in EU-27 have higher education (in 2010), with women prevailing (37.2%) over men (30.0%). Eurostat 2012.

<sup>18</sup> In the age group 25-64. Supporting growth and jobs – an agenda for the modernisation of Europe's higher education systems, COM(2011) 567 final and Eurostat 2012.

**Table 2. Share of persons with higher education in the age group 30-34 in 2000, 2005 and in 2010**

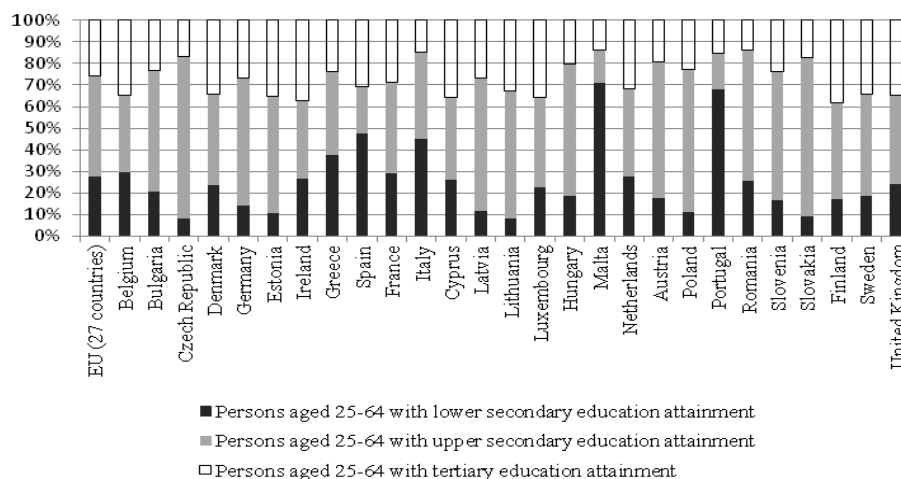
Country/ Year	2000	2005	2010
<b>European Union (27)</b>	<b>22.4</b>	<b>28</b>	<b>33.6</b>
Belgium	35.2	39.1	44.4
Bulgaria	19.5	24.9	27.7
Czech Republic	13.7	13	20.4
Denmark	32.1	43.1	47
Germany	25.7	26.1	29.8
Estonia	30.8	30.6	40
Ireland	27.5	39.2	49.9
Greece	25.4	25.3	28.4
Spain	29.2	38.6	40.6
France	27.4	37.7	43.5
Italy	11.6	17	19.8
Cyprus	31.1	40.8	45.1
Latvia	18.6	18.5	32.3
Lithuania	42.6	37.9	43.8
Luxembourg	21.2	37.6	46.1
Hungary	14.8	17.9	25.7
Malta	7.4	18.4	21.5
Netherlands	26.5	34.9	41.4
Austria	nda	20.5	23.5
Poland	12.5	22.7	35.3
Portugal	11.3	17.7	23.5
Romania	8.9	11.4	18.1
Slovenia	18.5	24.6	34.8
Slovakia	10.6	14.3	22.1
Finland	40.3	43.7	45.7
Sweden	31.8	37.6	45.8
United Kingdom	29	34.6	43

Source: own calculations based on Eurostat 2012.

There are also differences in investment in human capital development measured with the share of investment in education in the GDP of a given country. In eight EU Member States the percentage dropped compared against data of 2000 and 2008. Average public investment in human capital in the EU is 5.07% GDP. One regularity, which can be observed in all the EU Member States, is that the investment in question comes mainly from the public sector and the involvement of the private sector is marginal; only in the United Kingdom and in Cyprus it exceeded 1 percentage point reaching respectively

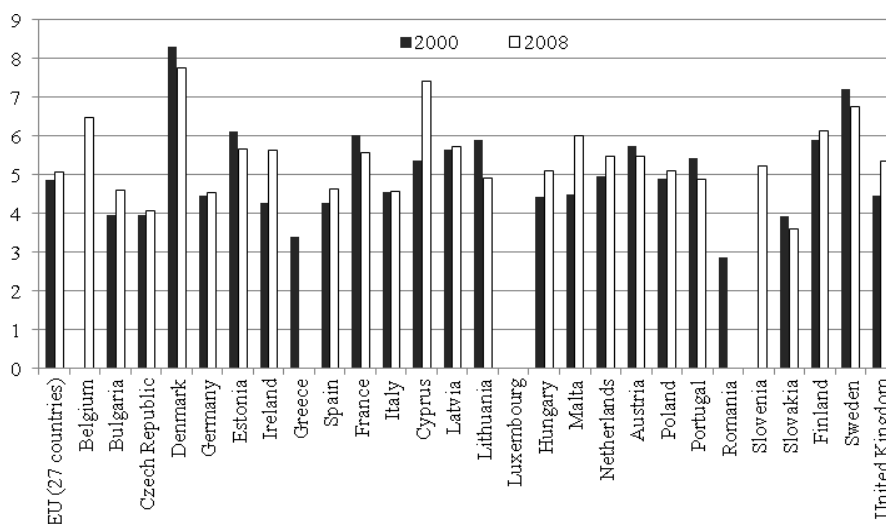
1.72% and 1.35% GDP. That is considerably less than in the US where the private sector contributes 2.1% GDP (2008).

**Figure 1. Share of persons with lower secondary, secondary and higher education in the age group 25-64 in 2010**



Source: own calculations based on Eurostat 2012.

**Figure 2. Spending on Human Resources - total public expenditure on education as a percentage of GDP (empty box on the figure means no data)**



Source: own calculations based on Eurostat 2012.

The efficiency of young people operations in the Community labour market should be shaped and backed up by formal education, especially at the level of postgraduate studies. Hence, in 2014-2020 supporting transnational learning mobility<sup>19</sup> will become an important priority. In particular, in the present situation when the mobility in question, assessed by those who learn abroad and potential readiness to go abroad in terms of e.g. ability to speak foreign languages are in general poor. Here there are also significant differences in the needs of individual countries.

It is estimated that in 2011 ca. 10–15% graduates of higher education institutions spent a part of their studies abroad while for vocational education and training the same can be stated for only 3% graduates. There is a need to further promote mobility, especially within the framework of VET<sup>20</sup>.

In many EU Member States low internationalisation of education reflected in low propensity to study abroad is reinforced by a low percentage of foreign students in the student population (with several exceptions like: the United Kingdom, Austria, France or Germany).

Limited financial resources and insufficient ability to speak foreign languages hamper learning mobility. Investment in human capital in formal and informal education faces substantial communication obstacles. Average ability to speak foreign languages in secondary education in the EU is 1.5 and 13 countries are below the average.

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<sup>19</sup> Learning mobility is defined as physical mobility and takes worldwide mobility into account. It was assumed that: (1) by 2020 an average of at least 20% of higher education graduates in the EU should have a period of higher education-related study or training abroad (including work placement), representing a minimum of 15 ECTS credits or lasting a minimum of three months, and (2) by 2020 an average of at least 6% of 18–34 year olds in the EU with an initial vocational education and training qualification (I-VET) should have had an initial VET-related study or training period (including work placements) abroad, lasting a minimum of 2 weeks or less if documented by Europass. Council conclusions on benchmark for learning mobility 2011/C 372/08, Annex: A reference level of European average performance (European benchmark) in the field of learning mobility.

<sup>20</sup> Education and training in smart, sustainable and inclusive Europe, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of 20.12.2011, COM(2011)902 final.

**Table 3. Students studying in another EU-27, Candidate country - as % of all students**

Country/ Year	2000	2005	2009	2009*
<b>EU (27 countries)</b>	<b>2.1</b>	<b>2.3</b>	<b>2.8</b>	7.98
Belgium	2.4	2.6	2.7	10.92
Bulgaria	3.2	8.7	8.0	3.54
Czech Republic	1.3	1.8	2.7	7.35
Denmark	2.7	2.3	2.5	9.62
Germany	1.8	2.2	3.6	10.53
Estonia	2.5	3.6	5.2	3.72
Ireland	9.4	9.3	14.8	7.08
Greece	12.4	6.0	:	:
Spain	1.1	1.1	1.3	4.72
France	1.8	2.1	2.4	11.47
Italy	1.7	1.5	2.1	3.27
Cyprus	46.5	56.5	56.2	34.74
Latvia	1.3	1.7	3.3	1.27
Lithuania	1.8	2.6	4.0	1.39
Luxembourg	74.5	:	:	:
Hungary	1.7	1.5	2.1	4.25
Malta	8.2	7.8	11.4	4.34
Netherlands	1.9	1.8	2.5	7.18
Austria	3.8	4.4	4.5	19.38
Poland	0.9	1.3	2.0	0.79
Portugal	2.3	2.9	4.4	4.80
Romania	1.5	2.3	2.3	1.39
Slovenia	2.2	2.0	2.2	1.72
Slovakia	3.0	8.6	11.4	2.79
Finland	3.2	2.7	2.8	4.25
Sweden	2.7	2.3	3.2	9.35
United Kingdom	0.6	0.5	0.6	20.66

\* - Foreign students as percentage of student population in the host country (%) - of tertiary education level

Source: own calculations based on Eurostat 2012.

**Table 4. Average number of foreign languages spoken per student in secondary education in 2000, 2005, 2010**

Country/ Year	2000	2005	2010
<b>EU (27 countries)</b>	<b>1.3</b>	<b>1.4</b>	<b>1.5</b>
Belgium	1	1.2	1.2
Bulgaria	1.1	1.2	1.2
Czech Republic	1.1	1	1.3
Denmark	nda	2	1.8
Germany	1.2	1.2	1.3
Estonia	2	2	nda
Ireland	1	1	1
Greece	nda	1.9	nda
Spain	1.5	1.4	1.4
France	1.5	1.5	1.5
Italy	1.1	1.4	2
Cyprus	2	1.9	2
Latvia	1.5	1.6	1.7
Lithuania	1.7	1.8	1.8
Luxembourg	2.5	2.5	2.5
Hungary	0.7	1	1
Malta	2.1	2.2	nda
Netherlands	nda	2	2.1
Austria	1.1	1.1	1.1
Poland	1.3	1.1	1.3
Portugal	nda	1.9	1.4
Romania	1.9	1.9	1.9
Slovenia	1	1.2	1.4
Slovakia	1.1	1.1	1.4
Finland	2.3	2.2	2.2
Sweden	1.7	1.7	1.8
United Kingdom	nda	1	1

Source: own calculations based on Eurostat 2012.

Cooperation of the EU Member States in education is based on the document *Strategic framework for European cooperation in education and training – ET2020*, adopted by the EU Council for Education, Youth and Culture in May 2009. The document sets the objective to increase the percentage of adults aged 25-64 participating in lifelong learning to the EU average of 15%.

In 2010, the share of persons aged 25-64 benefiting from any form of education or training was 9.1% (a drop by 0.7 percentage point compared against 2005)<sup>21</sup>.

**Table 5. Percentage of adults aged 25-64 participating in lifelong learning in 2000, 2005 and 2010**

Country/ Year	2000	2005	2010
<b>European Union (27)</b>	7.1	<b>9.6</b>	<b>9.1</b>
Belgium	6.2	8.3	7.2
Bulgaria	nda	1.3	1.2
Czech Republic	nda	5.6	7.5
Denmark	19.4	27.4	32.8
Germany	5.2	7.7	7.7
Estonia	6.5	5.9	10.9
Ireland	nda	7.4	6.7
Greece	1	1.9	3.0
Spain	4.5	10.5	10.8
France	2.8	7.1	5.0
Italy	4.8	5.8	6.2
Cyprus	3.1	5.9	7.7
Latvia	nda	7.9	5.0
Lithuania	2.8	6.0	4.0
Luxembourg	4.8	8.5	13.4
Hungary	2.9	3.9	2.8
Malta	4.5	5.3	6.2
Netherlands	15.5	15.9	16.5
Austria	8.3	12.9	13.7
Poland	nda	4.9	5.3
Portugal	3.4	4.1	5.8
Romania	0.9	1.6	1.3
Slovenia	nda	15.3	16.2
Slovakia	nda	4.6	2.8
Finland	17.5	22.5	23.0
Sweden	21.6	17.4	24.5
United Kingdom	20.5	27.6	19.4

Source: own calculations based on Eurostat 2012.

<sup>21</sup> Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training („ET 2020”), 2009/C 119/02.

In summary, we may conclude that enhancing the potential of the European economy we should simultaneously strive to achieve the commonly set objectives. However, the differences in the achievements so far in the field of human capital indicate that the policy should be pursued in a flexible way, adjusted to the real investment needs of countries and their regions. That is why the Europe 2020 strategy rightly assumes the necessity for a continuous dialogue among all levels of national administration for its successful implementation. „All national, regional and local authorities should implement the partnership, closely associating parliaments, as well as social partners and representatives of civil society”<sup>22</sup>. In other words, the European Commission clearly promotes a deeper than before decentralisation of development policy in the field of human capital involving EU resources.

### **5. Centralisation of human capital development policy and how it is made operational in selected EU Member States**

Member States consider human capital development policy and the way it becomes operational as one of the most important areas of necessary EU structural interventions. Usually, like e.g. in Poland, human resources are diagnosed at the national level in subsequent programming periods, which provides the basis for human capital development strategies, and, then, for operational programmes. Human capital development tools are defined directly at the national level based on diagnoses generalised for the central level. It is important, however, to what extent the regions are involved or to what extent they engage themselves in the use of human capital as a factor of development. In the EU Member States, the differentiation of the scope, forms and the share of human capital development policy in the overall development policy is relatively high. These differences are mainly due to four reasons:

- territorial and organisational differences among Member States (different ways in which they are organised from the point of view of the autonomy of territorial units),
- differentiated organisational models of higher education<sup>23</sup>,
- differences in the organisation of regional systems of innovation (Nowakowska 2011),

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<sup>22</sup> Europe 2020. A strategy for smart, sustainable and inclusive growth, Communication of the Commission, Brussels, 3.3.2010, COM(2010) 2020 final.

<sup>23</sup> Organisational models of higher education suggested by e.g.: B. Clark, F. van Vought or D. Braun and F-X Merrien. (Thieme 2009, pp. 47-58).



- different perception of the importance of human capital as a development factor.

These differences and discrepancies in the intervention in human capital development policy in the EU Member States make it difficult to specify clear policy models and to assess their systemic disadvantages and advantages. Studies conducted in Poland, the United Kingdom, Germany and Italy allowed us, however, to identify some types of the applied policy in terms of the organisation of the system and its centralisation<sup>24</sup>. Taking account of the decision-making powers in identifying the objectives and in making them operational, we can distinguish the following types:

- fully centralised,
- centralised with respect of strategic objectives with certain discretion in the interpretation of operational objectives,
- decentralised - autonomous at regional level.

Centralised approach to the implementation of human capital development policy in a country limits the role of the regions only to being either a beneficiary of the policy delivered directly by the government administration in the country or a passive intermediary who transfers financial resources and administers tools adopted at the central level. The model is relatively highly effective when it comes to achieving goals but relatively little efficient. That is, probably, one of the reasons why progress in achieving goals, accompanied by concrete indicators, of the Lisbon Strategy and its renewed version is so small. At that time, governments of the Member States and EU bodies were the main actors responsible for the implementation of strategic goals. Recent two years and the conclusions of Europe 2020 strategy have shifted the responsibility more to the authorities at lower levels of the territorial structure of state organisation<sup>25</sup>.

In the states with centralised model in place accompanied by some possibility to autonomously shape the human capital development policy, a region becomes an active actor of the policy in question. It independently makes operational the goals specified at the central level, using its endogenous potential. On top of that, the efficiency of the policy increases as it is possible to use its outcomes regionally by better adjusting the actions to the potential and needs of a given area. The advantage of the model is that regional actors get

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<sup>24</sup> Wnioski na podstawie badań pt. Polityka rozwoju kapitału ludzkiego w regionie, No. 1839/B/H03/2010/38 (in Polish) (*Conclusions from the study on Human capital development policy in the region*), Department of Regional Economics and Environmental Protection, University of Lodz, 2012.

<sup>25</sup> Europe 2020. A strategy for smart, sustainable and inclusive growth, Communication from the Commission, 3.3.2010, COM(2010) 2020 final, item 5.2.

ready to implement such policy in the future when external funding will no longer be available. However, it is hard to declare to what extent today's structures and actors remain unchanged in the future. We may assume that even if the present processes and structures turn out instable, silent knowledge connected with best practices will constitute an important value added for a region.

Decentralised type means human capital development policy is actively pursued simultaneously at national and regional levels. A region is a partner for central authorities and it is largely autonomous in translating strategic goals into operations. It can also define its own strategic objectives (different from those of the upper level) and the way they become operational<sup>26</sup>. The model makes the policy of human capital development relatively highly effective, although it may be less effective in terms of national or European objectives. Undoubtedly, investing in human capital in such an institutional environment should lead to the effects of sustainable growth.

## 6. Conclusion

What type of human capital development policy should we aim at? Should we use the model followed in the implementation of regional policy or regional innovation policy? Should the policy be presented in specific, dedicated regional documents, e.g. in the regional strategy of human capital development? The questions cannot be answered unambiguously, mainly because in the area in question it is hard to identify best practices to substantiate the justification with real life examples. The EU Member States rather universally, although usually unofficially, complain about low efficiency of investment in human capital. Hence, it is worth considering how the policy should be reorganised, bearing in mind, however, that in a knowledge-based economy, giving the policy up completely would be an „economic suicide”. The problem tackles especially countries (e.g. Poland), where human capital development policy is defined at the central level and takes little account of the use of specific (strategic) resources needed to enhance the competitive potential of regions. Both the diagnosing and strategic planning take place at the national level without considering the specificity, needs and opportunities of individual regions. The implementation of operational documents and of goals is partly entrusted with

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<sup>26</sup> Often operational weakness of local authorities in the model leads to the so called 'pushing out' of the policy of local authorities by the policy of the central government. (Nowakowska 2010, pp. 207-212).

the regional level. We might wonder whether such a policy structure is optimal from the point of view of actual needs and capabilities of regions which are so different. Should not we increase the importance of human capital development policy in the region by taking it out of other policies (general development policy of the region and regional innovation policy) where it is clearly marginalised and where its priorities lose in competition with infrastructural investment? The efficiency of currently implemented the so called soft investment is largely controversial. Perhaps more responsibility resulting from making the policy more regional and drafting regional strategic documents better tailored to actual needs and capabilities of a given region, could help adjust the policy to regional needs and would give it more empowerment. By that, we could increase its efficiency and effectiveness. For sure, such modifications would expand the scope of drafting human capital development policy at regional level, which would enlarge the catalogue of tools and optimise investment in building up innovative knowledge in the region, both basic and advanced, from the point of view of expected results. We may also assume that more independence and responsibility in decision-making when identifying regional priorities of human capital development policy could better adjust actions to actual needs of the region and would make its improvements more realistic thanks to more efficient monitoring and scrutiny of implemented operations.

## References

- Budzyńska A., Duszczyk M., Gancarz M., Gieroczyńska E., Jatczak M., Wójcik K. (2002), *Strategia Lizbońska. Droga do sukcesu zjednoczonej Europy*, Departament Analiz Ekonomicznych i Społecznych, Urząd Komitetu Integracji Europejskiej, Warszawa
- Council conclusions of 12 May 2009 on a strategic framework for European cooperation in education and training („ET 2020”), 2009/C 119/02
- Council conclusions on benchmark for learning mobility 2011/C 372/08, Annex: A reference level of European average performance (European benchmark) in the field of learning mobility
- Council Conclusions on the role of education and training in the implementation of the „Europe 2020” strategy, 2011/C 70/01
- Council Recommendation of 28 June 2011 on policies to reduce early school leaving, 2011/C 191/01
- Decision No 2241/2004/EC of The European Parliament And of The Council, of 15 December 2004 on a single Community framework for the transparency of qualifications and competences (Europass), L 390/6

Decision No. 1720/2006/of the European Parliament and of the Council of 15 November 2006 establishing an action programme for lifelong learning, Official Journal of the European Union, L 327/45, in the following period the programme was continued under the title „An Agenda for new skills and jobs”

Delivering On The Modernisation Agenda For Universities: Education, Research And Innovation, Communication From The Commission To The Council And The European Parliament, COM(2006) 208 final, Brussels, 10.5.2006

Education and training in a smart, sustainable and inclusive Europe, COM(2011) 902 final

*Europe 2020. A strategy for smart, sustainable and inclusive growth*, Communication of the European Commission, Brussels, 3.3.2010, COM(2010) 2020 final

Lucas R. E. (1988), *On the mechanics of economic development*, University of Chicago, Journal of Monetary Economics

Nelson R., Phelps E. (1966), *Investment in humans, technological diffusion, and economic growth*. *The American Economic Review*, Vol. 56, No. 1/2, American Economic Association

Nowakowska A. (2010), *Zdolności innowacyjne polskich regionów*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź

Nowakowska A. (2011), *Regionalny wymiar procesów innowacji*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź

Nowakowska A., Przygodzki Z., Sokołowicz M. (2011), *Region w gospodarce opartej na wiedzy. Kapitał ludzki - innowacje - korporacje transnarodowe*, Difin, Warszawa

Opinion of the Committee of the Regions „European cooperation in vocational education and training to support the Europe 2020 strategy, 2011/C 42/07

Pietrzyk I. (2000), *Polityka regionalna Unii Europejskiej i regiony w państwach członkowskich*, PWN, Warszawa 2000

Presidency conclusions – Brussels, 22& 23March 2005, European Council, Brussels, 23 March 2005 [CONCL 1 7619/05]

*Presidency conclusions, 23-24 March 2006*, European Council, Brussels, 24 March 2006 [CONCL 1 7775/06]

Recommendation of the European Parliament and of the Council of 23 April 2008 on the establishment of the European Qualifications Framework for lifelong learning, 2008 / C 111/01

Romer P. (1990), *Endogenous technological change*, ‘Journal of Political Economy’, Vol. 98, No. 5, Part 2 The University of Chicago Press

Supporting growth and jobs – an agenda for the modernisation of Europe’s higher education systems, COM(2011) 567 final

Szymańska A. (2004), *Efektywność wykorzystania zasobów ludzkich jako priorytet Strategii Lizbońskiej* [in:] M. Klamut i E. Pancer-Cybulska (red.) *Polska w rozszerzonej Unii Europejskiej - uwarunkowania i perspektywy rozwoju*, tom 1, red. M. Klamut i E. Pancer-Cybulska, Prace

Naukowe Akademii Ekonomicznej im. O. Langego we Wrocławiu Nr 1031, Wydawnictwo Akademii Ekonomicznej im. O. Langego we Wrocławiu, Wrocław

Tackling early school leaving: A key contribution to the Europe 2020 Agenda, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Brussels, 31.1.2011, COM(2011) 18 final

The Lisbon strategy for growth and employment, Report from the High Level Group chaired by Wim Kok, European Communities 2004

Thieme J. K. (2009), *Szkolnictwo wyższe. Wyzwania XXI wieku. Polska, Europa, USA*, Difin, Warszawa

### Streszczenie

#### ZRÓŻNICOWANIE POZIOMU ROZWOJU I KIERUNKÓW INWESTYCJI KAPITAŁU LUDZKIEGO W KRAJACH UNII EUROPEJSKIEJ

*Kapitał ludzki i wiedza są dziś najważniejszymi czynnikami rozwoju decydującymi o innowacyjności i konkurencyjności gospodarek. Rola tych czynników została również podkreślona w dokumencie Europa 2020. Jednak z uwagi na niematerialny charakter inwestycji we wzrost wartości kapitału ludzkiego w połączeniu z dużym stopniem centralizacji polityki rozwoju kapitału ludzkiego działania te odznaczają się stosunkowo niskim stopniem efektywności. Stąd celem pracy jest po pierwsze zidentyfikowanie rangi polityki rozwoju kapitału ludzkiego w strategiach UE. Po drugie identyfikacja i analiza porównawcza między krajowych zróżnicowań rozwoju kapitału ludzkiego, wraz ze wskazaniem punktów odniesienia w zakresie kluczowych miar tego rozwoju. Po trzecie natomiast celem pracy jest wskazanie modeli polityki rozwoju kapitału ludzkiego z perspektywy oceny zaangażowania władz samorządowych w jej realizację i efektywność.*