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CONDITIONS OF SOCIO-ECONOMIC COHESION AND HUMAN CAPITAL DEVELOPMENT IN POLAND

Abstract

The socio-economic cohesion is the key component of the development strategies agreed by the EU-member states. Under the conditions arising from the Lisbon Strategy that are focused on improvement of information and telecommunication economy (ITC) development the socio-economic cohesions is the major criteria. The National development plans of the new EU-member states, including Poland, were developed in regards to fulfill the guidelines of the Lisbon Strategy, the EU *acquis communautaire*, subsidiarity priority and the priorities of the Maastricht Treaty that aim at fostering the balanced the economic growth. Implementation of the economic development that respects the socio-economic cohesion priorities creates the ambitious challenges for Poland and other post socialistic countries. In the real economic sphere and free-market oriented institutional framework of the economy there are number of barriers that limit the productivity growth of the companies, vary economic sectors and in result of the whole economy. The process of overcoming barriers in productivity growth is carried out in the frames of conscious and behavioral obstacles that are inherited from the central planned economy. The inheritance restrains productivity growth and creates the pressure for maintenance vary asymmetries within economy (asymmetries of interests, information, access to physical and financial capital, and labor market and so on). As a result, it is challenged to harmonize the productivity growth and just inequality. In regards to overcome these asymmetries the new approach is recommended. It refers to the human capital development process that is aimed at limitation of the paradoxes of its development and institutional reforms which enable the government to harmonize the economic efficiency improvement and implementing the just inequality. It can be achieved in result of utilizing the interventionism that is coherent with stabilizing functions of budgetary policy.
The article presents the new approach towards the human capital development strategy in post-socialist countries, especially in Poland that enables to harmonize the productivity growth with introduction of just social inequality within an economy. The introduced strategy corresponds with the agendas agreed by the EU institutions and Polish domestic conditions of economic growth.

Key words: Lisbon Strategy, CEEC, human capital, development strategy

Introduction

The socio-economic cohesion is the key component of the development strategies agreed by the EU-member states. Under the conditions arising from the Lisbon Strategy that aims at improvement of information and telecommunication technologies (ICTs) development the socio-economic cohesions is the major criteria. The National development plans of the new EU-member states, including Poland, were developed in regards to fulfill the guidelines of the Lisbon Strategy, the EU *acquis communautaire*, subsidiarity priority and the priorities of the Maastricht Treaty that aim at fostering the balanced the economic growth. Implementation of the economic development that respects the socio-economic cohesion priorities creates the ambitious challenges for Poland and other post socialistic countries. In the real economic sphere and institutional framework of emerging markets there are number of barriers that limit the productivity growth of the companies, vary economic sectors and in result of the whole economy. The process of overcoming barriers in productivity growth is carried out in the frames of conscious and behavioral obstacles that are inherited from the central planned economy. The inheritance restrains productivity growth and creates the pressure for maintenance vary asymmetries within economy (asymmetries of interests, information, access to physical and financial capital, and labor market and so on). As a result, it is challenged to harmonize the productivity growth and just social inequality (fair inequality)[1]. In regards to overcome these asymmetries the new approach is recommended. It refers to the human capital development process that is aimed at limitation of the paradoxes of its development and institutional reforms which enable the government to harmonize the economic efficiency improvement and implementing the just social inequality. It can be achieved in result of utilizing the interventionism that is coherent with stabilizing functions of budgetary policy.

The article presents the new approach towards the human capital development strategy in post-socialist countries, especially in Poland that enables to harmonize the productivity growth with introduction of just social inequality within an economy. The introduced strategy corresponds with the agendas agreed by the EU institutions and Polish domestic conditions of economic growth.

Socio-economic cohesion of the EU

The backgrounds of the EU socio-economic are established by the economic and social issues. The divergence of level of development results in inappropriate exploitation of demand and supply factors of economic growth. Large income disparities within the economy hinder the expansion of domestic markets. Regions with relative lower income level might stimulate the shrinking of the sales markets. As a result, the rate of economic growth falls. The same impact on economic growth might occur if the supply factors of growth are not engaged. The existence of relative higher and lower economic developed regions might result in unequal distribution of production inputs. The labor input and capital input decrease in underdeveloped regions in result of inter-regional migration process. Concentration of economic activity in high developed regions increase the costs of business concentration. However, it is possible that under these circumstances the business concentration costs might exceed the benefit resulting from more dynamic business operation within the high developed areas. Thus, the co-existence of lower developed regions or underdeveloped areas might establish various barriers for economies of the Member States. Consequently, the efficiency of economic integration process might be threatened (Intergacja europejska …, 2004, pp.226-227).

The social arguments for cohesion relate to the promotion of appropriate level of equity in general income distribution amongst countries, regions, social groups and

[1] The fair inequality are considered as the inequality that are economically justified (results from various productivity level of agents' human capital) and socially accepted (do not eliminate the individual from the economic activity). See: Woźniak, 2005.

individuals in the member states. The income transfers for underdeveloped regions have various social and human dimensions. They foster the enhancement of living standard and stimulate the improvement of development opportunities in lower developed regions (Integracja europejska …, 2004, p.227).

The concept of socio-economic cohesion implemented recently has been formed as the result of the debate over the appropriate common policy which was held through the last few decades. The core aim of this policy is to mitigate the asymmetries in regional development amongst the member countries that cannot be eliminated by the market forces. Thus, it is assumed that state intervention is necessary in regards to limit the extension of disparities amongst various areas (Integracja europejska …, 2004, p.225). State interventions is to concern the economic inequality between the regions within the particular member states and economic inequality between the various economies of the EU.

It is worth reminding that the background for founding the European Coal and Steel Community in the 1950s was established by political[2] and economic premises. The starting point for common and sector-based economic policies of the Member states was established in result of singing the Treaty of Rome in 1957. It took decisive steps forward towards the introduction of free movement of people, goods and services, financial capital, common agricultural policy as well as common trade and transport policies. As a result the policy implemented on the communitarian level went beyond purely economic issues and concentrated more on achievement of spatial balanced pattern of economic development. Thus, the EEC policies aimed at closer integration within the European countries were going beyond only economic and sector-based co-operation (Schäfer, 2005, p.45).

The communitarian initiatives formalized in the frames of the consecutive treaties aimed at reduction of regional economic development disparities. It concerned not only the economic dimension but the spatial development of regions and Member states within the EEC. It is worth emphasizing, however, that the EEC policies from the 1960s and 1970s were focused in number of examples on distributing the financial means between the Member states. The financial means transfers for the beneficiary countries (Member states) was meant in principle to compensate their contributions into the EEC budget (Faludi, 2005). As a result, the redistribution mechanism has nothing to do with real empowerment of the cohesion between the regions and countries of the EEC. It was designed *de facto* to continue the economic development of particular Member states and in result smooth running of the EEC an than the EU.

Parallel to the following enlargements of the EEC in 1973 and 1981/86, new arguments for promoting greater economic and social cohesion between Member states emerged. Firstly, as a consequence of joining the new lower developed European countries into the EEC (Spain, Ireland, Portugal, Greece), the Community became more differentiated. Within the Member states, the poorest countries generated only two thirds of average GDP p.c. for the whole EEC (Hall et al., 1998, p.635). Secondly, number of economists provided evidence that the income disparities widened importantly between 1970s and 1990s. In 1960s and early 1970s the real income convergence process was observed between the EEC-countries. However, the convergence process was hampered between 1970s and 1980s and transformed into deepening divergence. As a result, the gaps in average income (GDP) per head within the EEC-area grew (Dunford, 1993, pp. 727-743). The evidenced convergence was the consequence of high rate of economic growth in the EEC-countries in the 1960s and 1970s. Being under influence of the oil shock of the 1970s, in 1980s in the world economy occurred the divergence (Graham et al., 1999, p. 260). In effect, the EEC region experienced the economic growth slowdown.

[2] Establishment of peace through co-operation and integration amongst the European countries that remembered the experiences of two World Wars.

However, the research conducted on a base of the endogenous growth theory could acknowledge the trends of convergence between regions of the integrated Europe. The convergence occurred at a very slow rate. R. Barro and X. Sala-i-Martin proved that regions within the EEC have experienced convergent growth in GDP per capita albeit at a very slow rate of 2% annually over the 1950-1985 period. They concluded simultaneously that the rate of convergence among regions within Member States was similar to the rate of convergence between the EEC Member States (Barro et al., 2004, p.479)[3]. It is worth to emphasize, however, that this study was restricted only to regions of the former 'core' Member States, such as: West Germany, France, the UK, Belgium, Denmark and Netherlands. Having extended the geographical coverage of the analysis to include Ireland, Portugal, Luxemburg and selected regions of Spain and Greece, the real convergence process was acknowledged over 1950-1990 period as well. However, extended study presented two-fold slower convergence process, i.e.: at a rate of app. 1% annually (Graham et al., 1999, p. 260). This group of studies provided also the evidence for hampering the convergence and/or deepening the disparities in income levels within and between the EEC-regions from the beginning of 1960s.

Large differentiation of lifestyles and unsatisfied speed of convergence within and between regions and countries of the EEC were perceived as the important obstacle for smooth running of the integration process in Europe. In consequence, the concept of greater cohesion of Member States became the key challenge which was much more formalized in the mid-1980s (Rivolin, 2005, p.93). The Single European Act (1996) constituted the common regional policy of the Community which, in fact, the integral component was to promote greater economic and social cohesion. Improved socio-economic cohesion of the regions and countries of the EEC was expected to reduce the disparities in spatial economic development and in result to push out the lower income EEC-countries from the underdevelopment (Integracja europejska …, 2004, pp.230-231).

Under pressure of Spain willing to be compensated for disadvantages experienced from the introduced single market, funding for ensuring cohesion was vastly increased. Meanwhile, reforms of structural funds that was introduced at the end of 1980s undermined so far applied principle of redistribution of the financial means between the Member States. Since then the redistribution mechanism had not to balance the financial contribution of the Member States but to support more efficient the subsidiarity principle[4]. Thus, the GDP per capita became the common agreed indicator for providing structural funds between the regions and countries of the EEC. As a result, the structural funds became more accessible for relative lower developed regions defined according to the GDP per capita. Moreover, it was underlined to introduce greater involvement of regional stakeholders in the Communitarian issues. On the insistence of France (J. Delores), the decentralization and mobilizing the 'from the bottom' initiatives of the Members were promoted. Since then, the cohesion policy was envisaged as having the institutional dimension and supporting at the same time the development of what is called nowadays the social capital on communitarian and Member-State levels.

The Commission's Cohesion Report published at the end of 1996, founded apart from successes number of failures at the same time. Among some important successes, the report underlined that the disparities in average income (GDP) per head between the EU-Members were decreasing. The poorest EU-Member countries in the mid-1980s, i.e.: Spain, Portugal, Ireland and Greece, were able to close the development gap in income (GDP) per head from

[3] It is worth emphasizing that annual rate of convergence was fluctuating in the 1950-1990 period, i.e.: 1950-60 – 1,8%; 1960-70 – 2,3%; 1970-80 – 2%; 1980-90 – 1%.

[4] The communitarian initiative associated with greater support of relative lower developed Member States was proposed by the richest EEC countries, i.e.: the UK, Luxemburg.

two-thirds to three-quarters of the EU average within 10-year-period. Additionally, it was proved that these countries increased the level of human capital and physical capital acquisition as a result of using the EU structural funds (Hall et al., 1998, p. 635).

The Cohesion Report also found that there have been no progress. There were lack of evidence for closing development gap in income level (GDP per capita) between the EU-regions. However, the Report pointed out few unquestioned achievements of some EU countries in terms of speeding-up the economic growth and economic development. Nevertheless it was emphasized that the differences in GDP per capita within the EU area were still vast. However, it concerns especially the new EU-Member countries. Moreover, there were number of examples underlining the failures in social dimension of the EU cohesion policy. The criticism was addressed towards the sustained high rate of unemployment and social exclusion. The report concluded that existing unemployment consists in 50% of persons who had stayed outside the labor market for longer then one year. Additionally, the very high unemployment rate persisted amongst youth and women. It related especially to some specific regions and urban areas.

The cohesion policy introduced from the end of the 1980s being vastly empowered by the Maastricht Treaty met with only partial success in terms of improvement the real socio-economic cohesion within the EEC an then EU. While the visible economic growth slowdown within the EU-area in the 1990s, the development gap towards the US economy began to grow. Especially in the second half of the 1990s, the US economy experienced: (a) higher annual rate of productivity growth – 2.2% in USA and 1.3% in EU; (b) greater contribution of the ITC technologies in GDP – 7% in USA and 4% in EU; (c) global dominance in world high technology production – among 50 largest producers of the high-tech in the world 36 companies are from the US and only 4 from the EU. In effect, the EU countries were not able to generate the economic growth as high as in the US. The annual average rates of economic growth in the US and EU-area were much different over 1996-2000 period. The US economy grew at level of app. 3.4% annually and the EU-economy at level of 2.0% annually (Action for competitiveness …, 2001).

Growing more distinctive development gap between the EU and USA produced the demand for remodeling and, in result introduction of new approach to stimulate the economic development of the EU. In regards to close the development gap towards the USA economy, the Lisbon Strategy was adopted in March 2000. The Strategy consists of guidelines for national economic policies of the EU-Members. Introduction of the set out guidelines and directives were hoped (supposed) to bring a clear competitiveness improvement in the European position in the world economy.

The Lisbon Strategy has set number of vast changes in the economies of Member countries, which were designed to follow along a number of main axes: development and applying the advanced Information and Communication Technologies (ICTs); liberalization and deregulation of internal markets (free provision of services, labor market) and vary spheres of an economy; setting up an attractive environment for entrepreneurship development, governmental support for business entities in access to financial capital and advanced technologies; and improvement of quality of natural environment. The key complement of Strategy guidelines were promotion of greater social cohesion that would limit the growth of poverty and social exclusion (Radło, 2004).

Achievements and failures of the Lisbon Strategy

While the launch of the Lisbon Strategy (2000) and the summit in Barcelona (2002), number of opinion-leaders shared the common view. They stated that achievement of the Lisbon targets and in result replacement of the EU-economy towards higher trajectory of economic growth and development. It required, however, to go beyond the general rhetoric and meet commonly set targets.

Formalized in the Lisbon Strategy the willingness to accelerate structural reforms in EU-countries, while emphasizing social cohesion, and setting quantitative targets such as the 70% employment rate and increase of annual spending on research and development (R&D) to 3% of GDP could have established a good starting point for decisive change in the EU economy (Begg, 2005).

At present stage of implementing the socio-economic cohesion that is based on the Lisbon Strategy, it becomes clear that achievement of its priorities and objectives seams to be impossible. Missing the cohesion targets results in growing the development gap between the EU and USA (Table 1).

Table 1. GDP p.c. and labor productivity in EU-area in comparison to the USA in 2000-2004, USA = 100

	2000	2001	2002	2003	2004
GDP per capita					
EU-25	63,8	65,3	65,7	65,3	64,8
EU-15	70,1	71,6	71,8	71,2	70,5
Poland	29,2	30,0	29,9	30,1	30,4
Labor productivity per employed person					
EU-25	78,0	78,1	77,0	76,6	75,8
EU-15	84,5	84,4	82,9	82,2	81,3
Labor productivity per working hours					
EU-15	92,3	92,6	92,9	93,1	-

Source: M. J. Radło, 2006.

Several reports released already in 2003 indicated that the EU-countries invested much less in R+D area than the United States or Japan, 1.9% of GDP compared with 2.8% for the USA and 3.0% for Japan in 2000. Amongst the EU-Members only Finland and Sweden completed the criteria of spending on R+D at the level of 3% of GDP annually. Other countries are far behind the research investment target. Furthermore, Europe employed much less number of researchers than the US and Japanese economies (5.4 researchers per 1,000 inhabitants compared with 8.7 for the US and 9.7 for Japan). It seams to be a paradox, while the EU produces more scientists and researchers (2.14 million in 2000 in EU compared with 2.07 million for the USA), and more scientific papers (37% contribution into the world total scientific publication compared with 31% for USA and 10% for Japan) (Papon, 2003, p.565).

Missing the R&D criteria, however, did not translate into better meeting other criteria related to vary cohesion dimensions. Especially, it refers to the priorities related to employment indicators. Although the Lisbon goal was to increase the participation rate in labor market up to 70%, the employment rate indicator within the EU-area improved slightly. In the EU-area the labor participation rate grew from 67.6% in 2000 up to level of 68.8% at the end of 2004. At the same time, however, the unemployment rate increased from 8.5% in 2000 to 8.9% in 2004. Furthermore, the retirement age in European Union countries is lower than in US or Japan. Large sample of employed people in EU are retiring at age when their career would start to climax in the USA or Japan (Csaba, 2005).

The main weakness of the Lisbon Strategy is that, in detail, it was not well operationalized. The Strategy contained large number of priorities, main objectives and promoted interventions that stood sometimes in contrast to each other. As a result it was difficult or impossible to transform it into action. For example, the Lisbon Strategy consisted of no less than 28 main objectives, 117 sub-objectives and 117 indicators that were to be followed and reported within some periods of time. In effect, no fewer then 16 action plans[5] were to be elaborated that engendered a risk of 'process fatigue'. Furthermore, the strategic thrust of Strategy envisaged as having become lost in the flood of targets and detailed objectives (Begg, 2005). Moreover, process of setting targets to achieve by the Strategy was carried out without previous elaborated national plans of implementation. It is worth to emphasize, however, that the EU countries while being located in the close geographical neighborhoods are much cultural, institutional and structural diversified. Thus, number of opinion-leaders rose the objections reflecting the lack of political consensus between the Member States in regards to implementation of Strategy's guidelines.

Differences among the EU-Member countries have resulted in various effects referring to achievement of Lisbon targets. France, Germany and Italy have witnessed the worst achievements of Lisbon guidelines. On other hand, the Scandinavian countries were able to achieve major target indicators. It is worth emphasizing however that these differences are not solely an outcome of lack of or inadequate commitment to the Strategy. Various countries has started from the different starting position. For example, the employment rate in Italy was at a level of app. 50%, while in Denmark and Sweden the labor participation was near the target level. Among the EU countries there are some examples for the lack of commitment in regards to implement the Lisbon. Within the group of countries that were following the Lisbon guidelines only Finland and Sweden have fulfilled the criteria referring to annual spending of 3% of GDP on the R&D. Other countries have spent no less than 1% a year (Begg, 2005).

Large number of objectives and indicators of the Strategy produced other difficulties that have been related with the monitoring of Strategy's progress. Number of main objectives and sub-objectives obligates the Commission to measure the progress of the Lisbon Strategy by many indicators, such as: GDP per capita in purchasing power parity, labor productivity per person employed, the total employment rate of elder people, gross domestic expenditure on R&D as the % of GDP, youth education attainment, comparative price levels, business investment, the poverty rate, long-term unemployment rate, total greenhouse gas emissions, the energy intensity of an economy and so on. In effect, it seams to be extremely complicated to compare the progress of various countries in achieving the Lisbon targets. Furthermore, it is very difficult to estimate the aggregative measurement that would reflect periodical progress in competitiveness improvement in various Member States and the EU as a whole. In that respect, there exists a threat of arbitrary in terms of selection of evaluation criteria that would express the aggregative measurement of competitiveness bettering. Furthermore, it seams to be totally unclear how the number of indicators contribute to the main goal of becoming more competitive (Sinn, 2005).

Poor success of the Lisbon Strategy results from the paradoxes of national social and economic policies which tend to improve the competitiveness of an economy and preserve the social economy model at the same time. On one hand the Strategy underlines the obligation to create '*the most competitive and dynamic knowledge-based economy in the word…*' through focus on increase the expenditure on R&D and more flexible internal markets of production factors (see: Table 2). On the other hand, however, some countries are trying to maintain the European model of social economy no matter the costs that seams to stay in contrary to efficiency related to global competitiveness improvement (Wildasin, 2004). There are countries among the EU-15, as like Germany, Spain or France that are still aimed at redistribution rather than incentives that promote active efforts of entities and individuals

[5] L. Saba presents that 300 annual reports are to be produced in order to monitor the progress of the Lisbon Strategy after the EU enlargement in 2004.

within an economy (Csaba, 2005).

Table 2. Public expenditure structure in the EU-15 and USA in 2000

	Public consumption	Public investment	Subsidies	Income transfers	Total
EU	19,9	2,54	1,42	20,67	47,16
USA	14,57	3,26	0,35	13,8	33,62
Difference EU-USA	5,33	-0,72	1,07	6,87	13,54

Source: M. J. Radło, 2006.

As a result, majority of EU countries still focus on preserving rather than transforming the expensive social model which seams to lay in the heart of lower competitiveness of the EU economy in comparison to the USA.

It is worth to emphasize, however, that the Lisbon Strategy operationalizes well the sources of economic growth and development increase of the EU that depends on ICTs development and diffusion. Thus, the competitiveness improvement of the EU is considered as the outcome of endogenous factors of economic growth, i.e.: productivity growth, human capital acquisition, and ICTs and high-tech contribution to the output. Considering the nowadays expansion of e-sectors, promotion of endogenous factors of growth are unquestioned. It seams to be great simplification, however, to underestimate the importance of traditional factors of an economic growth. Apart from an intangible factors of an economic growth, the traditional factors were playing important role in an economic growth of number of countries in 1990s. Number of surveys provide evidence that the difference in rates of economic growth between the EU and US economies can be explained by traditional factors of growth. It concerns especially low taxes, labor market flexibility and advanced deregulation of an economy (Radło, 2006). Other researches prove that the US GDP rate of growth in the 1990s was driven in comparable proportions by the labor productivity growth (endogenous factors) and increase number of working hours (traditional factors) (Jorgenson, 2002). Paradoxically, the EU countries advance the hypothesis that the knowledge and human capital acquisition are the key factors of an economic growth. At the same time, the real and regulatory conditions reflected by the enhancing the traditional factors sources of growth are underestimated.

Failures of actions set out in the Lisbon Strategy were the cause of re-assessment of the sources of Lisbon's failures that was carried out by the European Commission at the end of 2004. The assessment report (Wim Kok Report) encompassed the detailed diagnosis of various aspects of Lisbon document. Number of opinion-leaders underlined that the Wim Kok Report had different nature comparing to other previously produced EC reports. The language and the factual material presented went beyond the informal accepted rhetoric of self-justification[6]. The Wim Kok team presented the real background for lack of progress in closing the development and competitiveness gap to the US economy. Authors of the report

[6] Number of reports developed by the CE institutions have concluded sometimes with very general and many times abstract findings. Moreover, they avoided to indicate some concrete failures and in result to blame either Brussels' parties or some Member States. Thus, although elaborated reports produced an impressive literature, they seam to be a sort of propaganda of success. This tone of reports seams to be similar, especially for observers from the post-socialist CEEC countries, to vivid memory of the way the central planed economy operated. Then, in effect of failures of number of development programmes (5-year plans), the criticism referred to conclusion that the aims and targets are correct and only the means of achieving targets failed. This issue is discussed by Laszlo Csaba who found some resemblance between operationalization of the Lisbon Strategy and the Gorbachev's Long Term Comprehensive Programme of Technological Development. See: Csaba, 2005

stated that the main weakness of the Lisbon was too large number of, and incoherence among, the priorities and objectives. As a result, it was suggested to concentrate the EU regulatory framework on improve the economic growth and increase the number of new jobs. Consequently, the social and environmental targets were supposed to be achieved in the frames of economic growth and employment priorities being in the first place. It highlights the importance of more flexible labor markets, improvements of national economy's market competitiveness, promotion the actions that stimulate apply of knowledge, and appropriate national economic policies.

The Wim Kok Report forced to deep reflection over the future of the European Union. The nowadays EU initiatives seams to follow the path established along two main objectives, i.e. economic growth and employment increase. The reports produced afterwards are likely to support the conclusions of Wim Kok report. To achieve greater social and economic cohesion, the EU need to be re-oriented more on the economic growth and employment. And social and environmental targets should be considered as the additional and complementary to greater economic growth and more and better jobs (*Working together for growth and new jobs*, 2005).

Perspective of CEEC countries

Accession of Poland and other Central East European Countries (CEEC) into the EU in 2004 might imply that these countries have achieved the maturity of local markets that is typical for well-established market economies of the EU-15. It is worth emphasizing, however, that few decades period of central planned economy can not be wiped out within 15 years of transformation process.

The main feature of central planned economy was that there was lack of functional relations between number of economic categories, such as: consumer preferences, efficient demand and efficient supply of an economy (Lipowski, 1999, p. 567). In effect, the allocation of resources was not efficient enough. The economies were unable to absorb the innovation in result of passive individual and collective creativity, and bureaucratic boundaries within public (governmental) bodies (Jakubowski, 1997, p.17). Furthermore, hegemonic introduced management in the state-owned business entities enforced the decision-making process that was based on political criteria. Thus, the economic priorities were set out very often according to non-efficiency criteria.

At the beginning of transition, the post-socialist countries, including Poland, were burdened by features which they inherited from the era of central planned economy. Among others it concerns for example: (a) undeveloped structure of an economy that was unadjusted to the free market conditions (artificial economic specialization, mono-industrialism), (b) extremely low ability to absorb innovations by the national economy and business entities, (c) shortages of financial capital, low institutional preparation and awareness of the society, politicians and business sector to face the KBE challenges, (d) low knowledge of foreign languages and (e) large burdens on salary connected with obligatory labor costs. Under these circumstances, the expansion of information and telecommunication revolution and in consequence increase of innovation diffusion speeding up the KBE development at the beginning of 1990s created large difficulties for developing and under transition countries.

To face these challenges, the doctrine of the Washington consensus was introduced. This ideology assumed that privatization, liberalization and macroeconomic stabilization would create the favorable environment for in-flow of foreign investment which fosters the absorption of advanced technologies, access to foreign sales markets and financial sources, and create new jobs. The post-1989 transformation policies stressed that free market mechanism would replace the central command system for the allocation of resources and that market forces can be core principle for regulation of the economic system. This doctrine was based, however, on the simplified model of efficient markets. Thus, 'fast' rationalization of national markets was impossible from the perspective of post-socialist economies. It is generally known that efficient markets can not be established within short period of time. Furthermore, shock therapies and dynamic liberalization of an economy that introduce number of market institutions typical for well-developed markets do not mean that individuals with any specific experience, being get used to state paternalism and to benefit from the passive attitudes can identify correctly the best choice options. Moreover, the individuals seamed to be unprepared to take risk and responsibility for operating within new and changing economic environment. The recent experience of number of transition countries makes wonder that the Washington consensus did not consider the fact that pre-condition of an economic development is the transformation of a society. Too sudden changes of a whole economy, however, result in decrease of a social capital input that according to number of surveys is a crucial factor of economic growth and economic development (Woźniak, 1993).

However, relative low level of economic development and the technological gap provide paradoxically the chance for catching-up by the CEEC countries[7]. In regards to 'benefit' from underdevelopment, the developing economy should be open for taking advantages of absorption, imitation and usage of the knowledge, know-how, ideas, management tools and advanced technologies that have been previously developed in high income countries. The KBE expansion is driven mainly by the development of service sectors within an economy. Thus, the greater share of services in GDP that are non-material and perceived by many as modern economy's sectors might contribute to the catching-up process more essentially than traditional sectors of an economy. The KBE development requires, however, the acquisition of human capital that is able to face the challenges of the information and telecommunication revolution. In that respect, the human capital shortage might hamper the absorption process of an knowledge-based economy within CEEC countries.

The catching-up process of developing countries is to take under consideration the transformation of traditional sectors of an economy as well. The traditional ones should become similar to traditional sectors in highly developed countries. Thus, the efficiency increase of physical capital investment is necessary. It will stimulate, in effect, speeding up the growth of sectors driven by the ICTs development and greater employment of labor force. The employment rate increase might occur despite of labor and production productivity growth in ITC sectors.

It is worth emphasizing, however, that catching up of Polish economy is challenging. Total factor productivity generates app. 60% of GDP growth in the majority of EU-15 and about 78% in the US economy. At the same time, the total factor productivity in Poland is triple-fold lower than in high and middle income member states of the EU-15. Moreover, the share of ICTs investment in the GDP in 1999 was at the level of 10% in the USA, Finland, Canada, Sweden and the UK. Meanwhile, the ICTs investment share indicator was five-fold lower in Poland. The data shows that even if ICTs sector develops very dynamic, its contribution into the annual rate of economic growth in Poland will not be very vast within next years.

While the indicators of the TFP contribution into the GDP growth in the CEEC economies remain lower than in higher developed countries, the increase number of new jobs and reduction of unemployment in traditional sectors able to absorb advanced ICTs will be the main sources of catching-up process. It is worth stressing, however, that productivity of traditional sectors is much lower than the ICT sectors of an economy. Enhancing the

[7] According to the trickle-down effect theories, the convergence of lower developed country depends on the inexpensive opportunity to utilize of advanced technologies developed in rich countries. See: Keefer et al., 1997; Siwicki, 2005, pp. 738-739.

traditional sectors development through ICTs diffusion increases the TFP contribution into the GDP. While the catching-up countries increase ICTs input into the annual rate of GDP growth, the countries, which develop advanced ICTs, will still experience better indicators of TFP share in the GDP as the result of greater investment in ICTs as the % of GDP. So in that respect, if the development level of catching-up countries is to converge to the frontier economies within one Kondratiev-cycle period, the developing country will have to achieve the levels of indicators of share of KBE-sectors in GDP that are comparable with high developed countries. Otherwise, the convergence process of catching-up countries will become a *mirage*.

Human capital development and its paradoxes in Poland

The endogenous growth theory emphasizes that human capital is a crucial factor of long-term GDP per capita growth. The human capital issues are perceived as essentially important under the conditions of expansion of KBE-sectors, where the embodied knowledge is a key source of economic wealth and development in micro- and macro-perspectives (Woźniak, 2004b; Czekaj et al., 2004; Michelacci, 2003, pp.207-225; Katz et al., 1999, pp.1463-1555; Maddison, 1991; Uzawa, 1965, pp.18-31). The theoretical and empirical surveys proves that human capital acquisition affects: (a) accessible scope of choices and self-development of individuals, (b) innovation within an economy, (c) productivity and competitiveness improvement, (d) development of KBE and (e) limitation of inequality[8]. Because of its importance, the process of human capital acquisition can not be regulated solely by the free market forces.

Human capital input in Poland has faced some barriers of accumulation. It concerns especially, the last 15 years period, when number of obstacles to improve the quality of human capital input was identified. Consequently, its stock has depreciated. Thus, many paradoxes related to the human capital development in Poland has emerged recently. These paradoxes have effected the prospects of economic growth and development of Polish economy.

The human capital acquisition in Poland is driven by two forces:

- the human capital is formed consciously in the frames of implemented systems of education, health care and recreation, and systems that support cultural development.
- the human capital acquisition is an effect of autonomous decisions taken by the participants of socio-economic processes. The individual decisions are stimulated by incentives from the market and social environment where the individuals operate.

These two forces are affected by the specific and typical for Polish society tradition. This tradition-based action is aimed to achieve targets without taking care for the costs.

This type of action stands in contrast to the conditions of capitalism. It refers especially to the nowadays global capitalism which eliminates all kinds of national markets protections and promotes, simultaneously, the openness of local markets to the competition of transnational corporations. The global capitalism, however, is based not only on the KBE-sectors but traditional sectors as well. Nevertheless, the appropriate symptoms of transformation of quality and structure criteria of human capital development has not been observed although the economic transition has been introduced over almost one-generation period.

As a result, the paradoxes of the human capital development has emerged. The essence of these paradoxes reflects in too intensive improvement of labor work-force that has been

[8] There is number of literature discussing this topic. See e.g.: Barro et al., 2004; Barro, 1999; Banerjee et al., 2000; Grossman et al., 1991; Young, 1995.

educated in secondary and higher educational institutions. The structure and quality of embodied knowledge, however, seam to be unadjusted to the demand of the private and public sector of Polish economy. In consequence, (a) the costs of economic development increase, (b) it is challenging to harmonize the development of KBE-sectors and traditional sectors of an economy, (c) it is difficult to provide the institutional adjustment of an economy to the global capitalism, (d) the human capital depreciates as a result of high-educated labor surplus and high unemployment among the high-qualified staff that emerges the new sphere of the frustrating inequality.

It is generally estimated that the productivity per worker in Poland is three-fold lower than average in the EU-15 countries. Thus, it becomes clear that if the decisive improvement of staff qualification in private and public sectors does not occur, the productivity gap to high income countries will not be closed. The productivity of advanced technologies use, management methods and creation of innovation are determined by the appropriate human resources. It refers to a structure and quality of human capital.

As for now the results of educational system reform in Poland refers only to the criteria that can be measured according quantitative indicators. Consequently to the quantitative criteria, the target indicator of educated people share in total population was set. The number of students is to increase five-fold till 2010 compared with 1990. In effect, the higher educational institutions enrollment is to grow up to 65% in 2010 from the level of 50% in 1990. Moreover, the reform of the educational system assumes the limitation of the vocational education. It was agreed that share of secondary vocational school graduates in all secondary school is supposed to decrease down to 20% compared with 52% in 2004/2005 academic year). Marginalization of the vocational education will be enhanced by the introduction of, so called, wide educational profile. It is about to provide the general education without any specific professional job skills on secondary level of education. The wide educational profile is expect to cover the rest of secondary school graduates – 80% of all secondary school graduates (Strategia rozwoju szkolnictwa …, 2003, p.6).

The reform's architects intended to give a way for transition from vocational education, and specialized training in educational system into live-long education through promoting the individual path of vocational education and shortening the educational cycle down to few months.

However, there is a question whether the Polish business entities will have an sufficient access to high-qualified labor force if Poland introduces the 4-year-vocational education that exists in the majority of the EU-Member States and covers app. 40-80% of secondary school graduates (Kabaj, 2005, p.285). The Polish Central Statistical Office provides data indicating that Polish companies experienced difficulties in recruitment of workers with lower vocational education in 2002 (Kabaj, 2003, p.16).

It is obvious, however, that narrow vocational specialization that was inherited from the central planned economy has become an obstacle in adjustment of the labor market to rapid technological change in an open economy. The rapid technological change occurs as a result of ICT revolution, global competition, new management methods and conjuncture fluctuation. However, the introduced educational reform in Poland seams to ignore the conditions of domestic labor market and experience of number of EU-countries. Opinion-leaders and economic literature call for example of Ireland that has achieved a great success in building the KBE. It is sometimes missed, however, that the process of human capital development in Ireland was based on reconstruction and improvement of vocational secondary schools (Kukliński, 2003, p.17).

It is worth highlighting, however, that expansion of the KBE sectors is important for improvement of Polish companies competitiveness. It should to expect that this process will accompanied the increase in stimulating inequality. The stimulating inequality arise from the various marginal productivity of agent's human capital input. Thus, it fosters the economic growth. in regards to benefit from stimulating inequality, the increase in frustrating inequality should be hampered. The frustrating inequality results from expansion of poverty and social exclusion that arise from high unemployment rate. Unemployment rate is driven by imbalance between development of production sectors of high and low labor intensity. This imbalance, in effect, limits the rate of economic growth and adjustments of the labor market. However, the structural adjustment should be monitored in regards to avoid the negative impact of the frustrating inequality increase on economic development. Existing an optimal proportions within an economy as in other areas of human activities establish a framework for an individual and collective development. In an economy as ell as in other areas of human activity there are optimal proportions for individual and social development. Disturbance of these proportions results in lack of equilibriums reflected by human's frustrations, disappointments and initiating the barriers for human activity aimed at solving individual problems. M. Kabaj emphasizes that achievement of strategic targets assumed in the education system reform might produce massive, exceeding over 1 million unemployment among graduates of higher educational institutions. This conclusion comes from the fact that only 10% of all job recruitments relates to the graduates of secondary schools and higher educational institutions while 90% of job recruitments relates to graduates of vocational secondary schools and lower vocational secondary schools (Kabaj, 2005, pp. 272-273).

It is obvious that lack of opportunities to find job positions by the young graduates according to their qualification profile disable them to transform the possessed knowledge during the education into human capital input. As a result, the frustrations and unjustified social costs and social loses appear. The costs and loses come from unproductive public spending on education and in effect the depreciation of accumulated human capital. Moreover, the additional costs of these disproportions relate to the companies' burdening resulting from obligatory social services that are further transformed into initiatives combating unemployment expansion.

Ignoring of the circumstances of the Polish labor market and experiences of higher developed countries shed a new light on results of the development of human capital in Poland throughout the past 15 years.

Extensive development of human resources on secondary and higher level of education decreased the quality of human capital embodied in labor forces. Shortage of human capital quality among the youth is reflected by share of youth facing some difficulties with perception of general, abstractive, specific or professional knowledge. The share of young labor market entrees that are unable to apply the possessed knowledge is growing. This phenomena stresses that the intensity of general secondary and higher education has achieved its borderline. This negative feature of education in Poland is easily to observe within the formal education. The business sector employers indicate the same challenges.

The background for these phenomena is multifaceted. Lowering the educational standards on higher level of education indicates the growing number of students that are not prepared for absorption of general and abstractive knowledge. The improvement of variety and opportunity of education should be implemented in regards to limit this destructive process of human capital development. The World Bank emphasizes that the main priority of system of education is to promote various educational modules and implement flexible educational standards being aimed mainly at the results. Thus, the system of education might foster the development of the KBE. These educational modules should provide for instance public and private education, formal or informal education, education at higher educational institutions or on job placements, distance learning, and so on. Moreover, modules should enable the graduates to adjust their educational expectations to level of their professional life (Gospodarka oparta na wiedzy …, 2003, p. 22).

The further examples for paradoxes associated with human capital development in Poland are as follows. Firstly, among others, the advanced technology industries contribute at the lowest level into the creation of total added value. Secondly, the R&D activity in Poland brings the loses at a level of 0,35% of GDP annually (*Main science and technology* ..., 2001, p.46). The cause of this phenomena lays in methods of R&D financing, i.e.: 71% public funding; 24% companies' own financial resources (*Rocznik Statystyczny*, 2004, Table 5(336), p. 419). Thirdly, well educated graduates emigrate onto foreign labor markets as a result of greater labor supply compared with labor demand. Currently, the industry calls for demand for high educated labor at a level of 10%. It means that nowadays labor demand exceeds the supply in absolute number. This paradox, however, provide a evidence for lack of adjustment between the educational profile and the qualifications searched by the companies.

Recommendations for Poland and other CEEC countries

The US economy has increased the rate of economic growth since the 1990s compared with the EU-area. Furthermore, China, India and South-East Asian countries have experienced an extreme economic expansion for the last 20 years. In these circumstances, the catching-up of number of CEEC countries to high income countries might be undermined. At the adoption, the Lisbon Strategy was expected to speed-up the innovation diffusion as the result of ICT revolution. However, the Lisbon has not met the set out quantitative targets. Only few countries succeeded the criteria of greater socio-economic cohesion. It is evidenced that the Single European Market is characterized by very slow although stable economic growth. Growing development gap in disadvantage of the EU to the USA might bring negative results not only for the new EU-Member States but for the neighboring countries as well.

The EU-countries operate within the Communitarian regulatory framework. The EU has experienced many setbacks from the restrictions imposed by the strict Maastricht criteria and the 5th paragraph of the Rome's Treaty. As a result, the EU regulations provide a framework for slow although stable economic growth which is hampered by the bureaucracy and red tape burdens. In light of these facts, there is a questions about the appropriate development strategy that could discount the benefit of the new EU member states and countries willing to establish closer cooperation with the EU.

Poland, as new EU Member State since 2004, did not have the benefit of decades of progressive transformation that western economies had experienced since the 1950s. In addition, the specific economic, institutional and social situation of the post-socialist countries casts doubt on the priorities which must be chosen to reach the current EU socio-economic dynamism (Mercie, 2005).

Thus, it is crucial to ask the question about the appropriate policy, which would consider the specific development conditions of CEEC countries, including Poland, and produce the greater socio-economic cohesion.

For these reasons, there is a question whether the Lisbon Strategy can be copied by the national policies of the CEEC countries and how to avoid the its failures that were evidenced 5 years after its adoption. The reflection over this dilemma has great importance for investigating better perspective for future economic growth and economic stability of the state and companies than arising from economic globalization and EU regulatory framework.

The evidence shows that the catching-up of economic development was successful in few countries only. It concerns the economies where governmental initiatives were focused strictly on the catch-up (Frejman, 1989, pp.85–99). In general it related to institutional innovations and investment in technical infrastructure, education, knowledge and technology development. Unfortunately, on other hand, experiences of number of countries provide evidence for inefficiency of state regulatory interventions[9]. Furthermore, The CEEC countries while joining the EU have lost command of demand side policies through which they could deal with unfavorable economic circumstances. First, the budgetary restrictions imposed by the convergence criteria of the Stability and Growth Pact do not allow for any systematic policy of public investment. Secondly, the perspective of joining the EU Monetary Union excludes any form of monetary and interest rate policies aiming at reinforcement of national competitiveness.

Consequently, the only way to increase the national competitiveness is to introduce the supply side economic policies that focus on productivity growth through stimulating the favorable business environment and cutting down the red tape and corruption. The reduction of unit labor costs (reduction of welfare costs and/or the protection of workers) could be the part of such policy (Hatzopoulos, 2005, pp.1599-1635).

Thus, the suggested economic policy for Poland and other CEEC countries should not be identified with greater state interventions. On the contrary, it concerns the limitation of the state regulatory framework that is coherent with logic of efficient markets. Otherwise, the competitiveness of whole economy and its particular markets could decrease. In effect, the opportunities of this policy could be threatened. The only acceptable solution seams to be the introduction of social policy that would promote the inequality which are economic justified and socially accepted.

Displacement of some governmental tasks and transferring some budgetary financial means towards private or non-governmental entities could stimulate the limitation of state contribution into an economy. In that respect, the governmental tasks (responsibility) could be delegated to the agents that would compete to provide higher quality public goods and services, e.g.: public health care.

Moreover, it is worth emphasizing that the market stimulating state-interventions are the key components of economic policy that considers the challenge of global capitalism. These interventions are introduced in the areas, where the implemented regulatory framework are not efficient enough. It concerns, for instance, the institutional and market-infrastructural state-regulations that enhance the competition, cut down the information asymmetries, promote the entrepreneurship attitudes, develop financial markets, deepen the elasticity of labor markets, increase the openness to international trade in goods and services, and promote human capital acquisition. The human capital acquisition, however, should enable the national economy to converge to the KBE. Another crucial issue is the creation of the investment friendly climate for ICT undertakings and stimulus of institutional framework development that increases the innovation speeding-up the domestic ICT-sector development. The highlighted initiatives are to be systemic and holistic. Thus, it is necessary to combine them into the entire vision of the socio-economic development that can be achieved as a result of the introduction of three-element strategy. The three-element strategy should be focused on: productivity growth (P); fair inequality[10], i.e. economic justified and socially accepted inequality (FI) and human capital acquisition (HCA) (Woźniak, 2004a). The suggested strategy (P + FI + HCA) is to consider the dual attribute of an economy which are reflected by the dualism of real economic and regulatory area of an economy[11]. The double dualism seams

[9] For more detailed description of theses issues, see: Woźniak, 1993.

[10] It is difficult to compromise the economic growth with *fair* income and property inequality. It requires to fulfill the conditions that have not been explained by the economic theory. This theory *failure* might disturb the process of designing the economic strategy which would assume to eliminate the inequality that is economically unjustified and socially unaccepted. It is worth remembering that fair inequality makes the economic growth the aim and essence of individual efforts because it refers to the individual welfare improvement. The fair inequality supports the creation of social capital and human capital in an economy and thus, limits the unproductive populistic efforts and waste of the intellectual capital.

[11] The dualism of the real economic area in an economy is characterized by the co-existence of an economy

to be typical for the post-socialist countries.

The dualism of the nowadays post-socialist economies will have to be reflected in the path of economic development. Thus, the strategic priorities are to be addressed to both types of sectors in an economy. It concerns the sectors of new economy which take advantages from development of knowledge, and advanced technologies (ICTs), and traditional sectors of an economy that use the available resource of knowledge.

The development of traditional sectors is essential for improvement of economy's ability to absorb the labor force and, in effect, reduce number of unemployed people. This priority could result in elimination the poverty, limitation the income inequality between the individuals, regions, farms, employees on urban and rural areas. It could stimulate the better use of local human capital and physical capital resources. Considering the new economy development, it is important to expand the sectors of an economy that bring the biggest external benefit and global productivity growth. In effect, it concerns: (a) the improvement of ICT sectors contribution into the GDP growth; (b) greater investment in education, knowledge development and any other key elements that stimulate the human capital acquisition, foreign direct investment located mainly by the transnational corporations.

Summing up, the proposed development strategy seams to be perfectly adjusted to the conditions of post-socialist economies that joined the EU in May 2004. Moreover, the guidelines for CEEC national economic policies are coherent with conclusions of the reassessment of Lisbon Strategy that was conducted by the Wim Kok's team in 2004/5. Considering the great pressure for catching-up to highly developed economies, the CEEC countries, including Poland, should re-orient the national policies towards the action plan that enables to achieve benefits from advanced technologies development and, in result, increase the rate of annual rate of economic growth.

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based on the traditional technologies and management and the new economy based on the information technologies, Internet and the intellectual capital. The dualism of the regulatory area in an economy corresponds with co-existence of the liberal market economy and macroeconomic management (from the national level, global and for instance in Poland from the level of the EU).

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