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Impact of the membership in the European Union on economic growth in Poland

Unification of Europe through development and enlargement of the European Union is a great political success. As an economist I tend to think in terms of costs and benefits; in this case, however, it is worthwhile stressing a unique character of this historic process, which was unimaginable just 20 years ago.

This enlargement signifies new investment opportunities in Europe. It also signifies protection of jobs or even generation of new ones in Europe through reallocation of a part of production processes to places where costs are lower. The enlargement provides enterprises, particularly SMEs, with an opportunity to remain in Europe instead of undertaking difficult and costly decisions on reallocation to other continents. Reallocation of production activities to new member states will concern those production processes that might have been lost for Europe without EU enlargement. In this context restriction of access to labour markets for citizens of new member states seems to be a step weakening the competitive potential of European economy, particularly as Europe is ageing.

It is my conviction that economy is the greatest challenge to the uniting Europe. We need to provide European businesses with such operating conditions that might allow them to maintain and improve competitiveness but at the same time we have to solve all consequences of the ageing of European society. Europe's relations with the United States are also under a powerful adverse impact of poor business outlook, absence of economic dynamics and reluctance to effect the required reforms, both at the Community and national level.

The enlargement will create the largest internal market world-wide, a market of over 450 million consumers. Universality of Community standards will facilitate trade. Consumers will benefit because of much expanded selection options. Final barriers on the capital market will disappear.

Numerous studies show the scale of the enlargement's impact upon growth dynamics. It is larger in acceding countries, relatively smaller in economies of the present EU member states. This will mainly result from enhanced competitiveness and investment flows, both from within and without the Union.

As a new member state of the EU, Poland certainly is a place to invest. Poles constitute a half of new Union citizens and Polish economy constitutes a half of its new economic potential. Our accession to the Union signifies better protection of property rights, observance of Community rules of competition policy, opening of capital markets and more liberal and friendly environment for entrepreneurs. Most of those solutions are already in place in Poland – this ensued from implementation of Association Agreement's provisions – but the membership will definitely strengthen our institutional and legal commitment to those rules.

As a EU member state Poland will be a part of the free trade zone and customs union, which signifies a common external customs tariff and removal of technical barriers. That leads to lowering of costs pertaining to adjustments to technical standards as well as to physical and customs checks. Upgrading of transport infrastructure - accelerated through access to

structural funds - will also lead to a further decline in costs borne by entrepreneurs. Those factors will definitely influence corporate strategies.

It is doubtless that for some time Poland will maintain its comparative advantage in the form of lower labour costs and in connection with the potential inherent in improvements of labour efficiency as well as level of education. In general, acceleration of the catching-up process itself will create new investment opportunities.

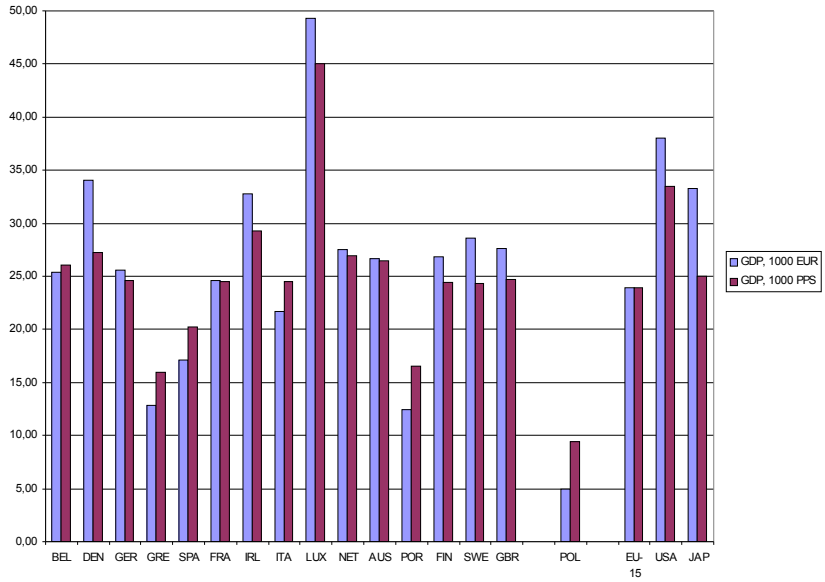
Implementation of Poland's strategic goal i.e. accession to euro zone in not too distant future, will be conducive for economic stabilisation and elimination of exchange rate risk. Hence investors can expect reasonable macroeconomic policy. A reform of public finance is not only a pre-condition for meeting all Maastricht criteria but can also generate savings in public expenditure, which – accompanied by a lowering of corporate income tax, will create opportunities for investment growth, If, however, this investment potential is to be fully utilised, completion of structural reforms and macro-economic policy conducive for investments is required. There are many areas of public activity, which are not covered by Community law and policy but are very important for entrepreneurs. Good examples are welfare state policy, labour market policy or direct taxes.

It also doubtless that Polish development capacity will be co-created by willingness of other member states, also at the Community level, to continue reforms and radical efforts for the benefit of building competitiveness and foundations for a long-term growth in Europe, and in particular to implement reforms covered by the Lisbon process.

Development gap between Poland and UE-15 countries

In 2002 Poland's GDP per capita amounted to approx. 5000 €, when converted at the then current exchange rate, or to approx. 10000 €, when expressed in purchasing power parity. This amounts respectively to approx. 20% and 40% when compared to EU average. Hence the development gap in relation to current G-15 states is very wide.

Figure 1: GDP per capita in 2002 in EU-15 countries, Poland, the USA and Japan, converted at current exchange rates (thousand €) and in purchasing power parity (thousand Purchasing Power Standards).



Source: Own elaboration based on data from AMECO DG ECFIN database

Figure 1 indicates that significant differences exist between GDP measured by current exchange rates and GDP measured by purchasing power parity. The latter indicator, which takes into account price level in a given country, is a much better measure of economic development level in international comparisons. Among countries listed in the chart, the greatest differences between nominal GDP and GDP in PPP exist in case of Poland's GDP (GDP calculated at the current exchange rate amounts approximately to mere 50% of GDP in PPP). If Polish economy develops more dynamically than economies of the current EU member states, this process will be accompanied by a faster price rise. This signifies that the so-called real convergence, which exists when economic growth rate of a country with a lower development level is higher than economic growth rate of better developed countries, is accompanied by a process of nominal convergence, manifetsed in a higher inflation level of a country trying to catch up. A commonly known attempt at explanation of this phenomenon is the hypothesis formulated by P. Samuelson in 1963 and B. Balassa in 1964.

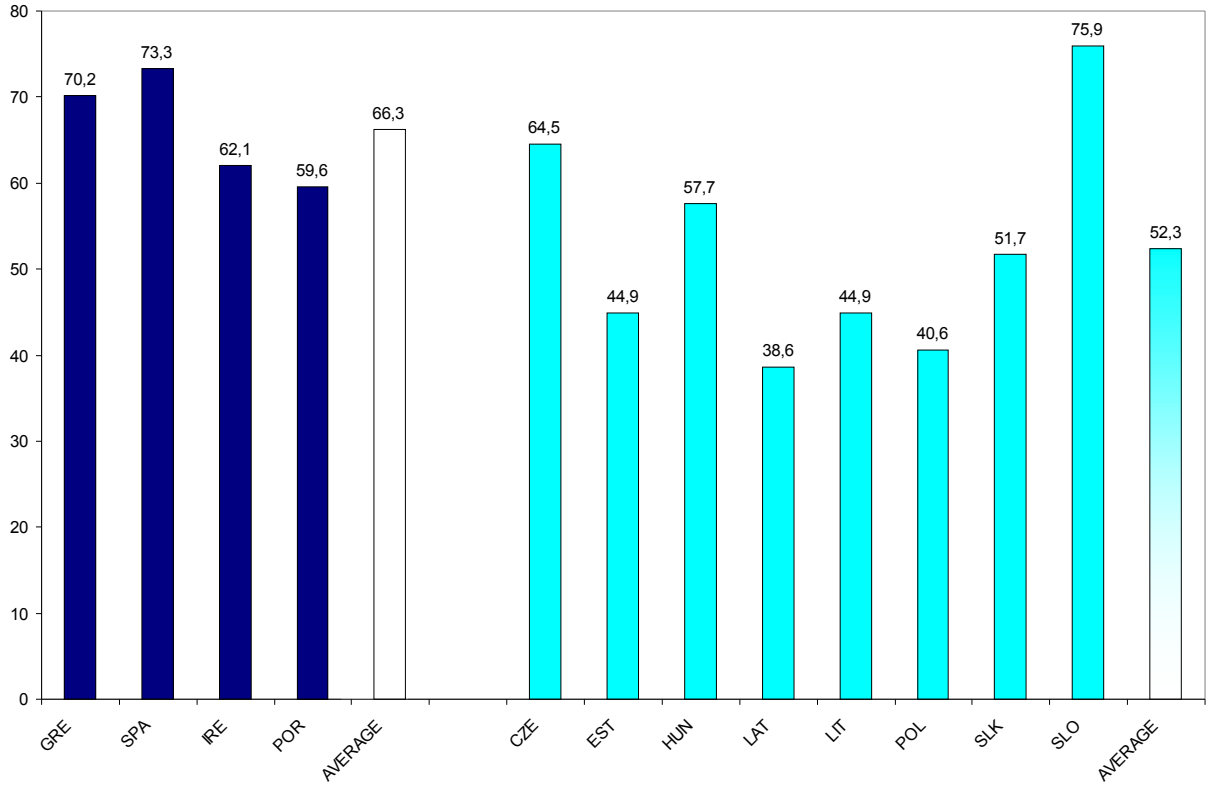
The Balassa- Samuelson effect takes place when a swift productivity growth in internationally tradable goods sector (industrial goods and agricultural produce), typical of catching-up countries, is higher than in the non-tradable sectors (most services). Higher productivity in tradable sectors results in an increase in salaries of this sector's employees. However, due to pressure to equalise salaries among sectors, the aforesaid increase will also translate into salaries rise in non-tradable sector. Since that rise is not accompanied by a productivity growth (there is no enhancement of competitiveness), an increase of salaries in that sector results in a rise of costs and prices, thus contributing to a general increase in price index.

An exceptional feature of the EU enlargement covering Poland and 9 other countries, mainly CEECs, is the scale of development gap between new and current member states. In previous years when the EU accepted poor countries, their average income per capita was at the level of 66.3%[1] of the average for current EU-15 states. In the case of the present enlargement, the level of affluence of acceding countries is much lower (arithmetic mean for 8 CEECs – 53.3%), which shall aggravate already significant disparity in the development level of EU

[1] Arithmetic mean

member states (Figure 2). Therefore it is beyond any doubt that this EU enlargement will be the most difficult one, and its final implications for processes of economic and political integration remain difficult to predict. Societies in acceding countries expect EU membership to help them swiftly reach the affluence level of the current G-15 states. Unfortunately this cannot be achieved immediately since effects of economic integration result in tangible outcome for growth only in medium- and long term time perspective. Moreover the scale of development gap requires long-term impact of those effects. Therefore the process of catching up and hence of real convergence regarding the level of affluence per capita, will be a long-term process, stretched over the period of several dozen years.

Figure 2: GDP per capita in PPP at the time of accession to the EU in relation to EU-15 average (EU-15=100). The previous and present enlargement.



Comment: Greece - 1981, Spain - 1986, Ireland - 1973, Portugal - 1986; figures for 8 acceding CEECs – forecasts for 2004.

Source: Own elaboration based on data from AMECO

Real convergence and economic outcome of accession to the EU.

According to neo-classical economics, which assume – amongst other things – existence of perfect competition, constant economies of scale and public character of knowledge, advancement of European integration should lead to real convergence. Among main effects responsible for this process one can list classical customs union effects [2] (creation effect and diversion effect), first described in 1950ties by Jacob Viner and effects pertaining to liberalisation of the movement of productive factors.

Jacob Viner analysed economic effects of the creation of customs union and proved that they can both positively and negatively affect international trade and level of welfare. Lifting of customs barriers within the integrating group can result in trade creation effect. Hardly efficient and extremely expensive domestic production is substituted by imports of more efficient producers from other states of the customs union, and the saved resources can be used in production of goods that are a given country's speciality. However this welfare-generating effect can be accompanied by trade diversion effect. It consists in discrimination against third countries, if the external customs tariff is not adequately lowered. If the common customs tariff leads to changes in existing trade streams, so that cheap products from third countries are replaced by more expensive products from another customs union country, we deal with a case of diversion effect, which can result in decline of customs union's welfare. What is more, third countries can expect that as a result of the effects of creation and diversion, their opportunities for exports expansion onto markets of customs union countries will be limited.[3]

According to classical theories, lifting of barriers in the movement of production factors should result in influx of capital from rich countries, having surplus of capital but also low return thereupon, to poorer countries, having abundance of cheap labour force, which should move in opposite direction. Such reallocation of resources leads to a general welfare growth and equalisation of development levels. It may turn out, however, that only the best educated citizens move to richer countries, which will not solve the problem of unemployment and low salaries. „Brain drainage" decreases the chance for income convergence in the two integrating economies.

New trade theories, whose forerunner was P. Krugman, assume existence of imperfect competition, increasing economies of scale and semi-public character of knowledge. They indicate that economic integration contributes to a general welfare growth. However, through effects of industries agglomeration it can lead to uneven distribution of the effects of economic efficiency growth (divergence) both on the scale of national states and regions.

A threat of restricting internal cohesion through uneven distribution of economic integration effects has forced EU member states to introduce cohesion police managed at supranational level. Aside from Common Agricultural Policy, cohesion policy is EU's most important policy of redistribution character.[4]

New trade theories constitute foundation for studies of effects of the formation of Single European Market, whose framework was established in the years 1986-1992. Single market in the area of free movement of goods signified eradication of barriers other than customs

[2] Creation of the customs union consists in lifting of customs barriers among countries of integrating group and adoption of a common external customs tariff for imports from third countries.
[3] Joergensen J.G., Luethje T., Schroeder P.J.H, Trade: The Workhorse of Integration [in:] Hansen J.D. (ed.), European Integration, An Economic Perspective, Oxford University Press, 2001, p. 121
[4] Expenditure under cohesion policy currently amounts to over 40% of the entire EU budget expenditure.

(para- and extra-tariff) in the form of different technical, physical and administrative standards for checks or absence of mutual access to national markets of public contracts. Enhancement of competition on national markets due to lifting of extra-tariff barriers forces enterprises, hitherto protected from foreign competition by physical and technical barriers, to improve effectiveness and lower price margins (price surplus over final cost).

Excessive price margins are bad for economy for several reasons. Low level of competition and the accompanying high price margins result in a decrease of consumer surplus. An increase of competition in sectors with producers of large market power (monopolies, oligopolies, monopolistic competition) leads to a decline in prices and increase of production output, to the advantage of consumers and businesses in other sectors. Since models of imperfect competition most frequently exist in sectors providing intermediate goods (e.g. energy) and investment goods (machinery and devices, transport equipment), lifting of technical and physical barriers results in lowering of production costs for producers from other sectors (particularly in sectors dominated by SMEs). Moreover high price margins allow inefficient enterprises to operate in the marketplace. Enhanced competition forces them to improve their competitiveness e.g. through implementation of new technologies and increase in outlays for research and development, or to leave the market. The latter outcome enhances level of concentration in sectors on domestic market, which translates into enhanced specialisation and distribution of fixed costs of businesses across a larger number of production units (economies of scale). Simultaneously an increase in concentration level does not signify re-monopolisation, since geographic scope of businesses' activities changes. They no longer operate on domestic market only but also on European one, where they have to face competition from former monopolies and oligopolies similar to them. Businesses compensate for a decline in their share in domestic market through increased share in export markets within the European Single Market.[5]

Economic outcome of Poland's integration with the EU - ex ante estimates

A popular method of estimating effects of integration with the EU is the method of simulation with the use of econometric models. Algorithm of such study is not complex – only a three-tier one – but its actual performance is very troublesome. Firstly, a researcher must design the so-called baseline scenario, which assumes continuation of hitherto development trends and absence of additional interference with the shaping of economic processes. Secondly, one needs to design a membership scenario, containing guidelines concerning basic macro-economic effects of integration. The third step is to compare results acquired from the model as a result of simulation with results acquired in baseline scenario. Thus acquired differences in economic values (e.g. GDP rate growth, inflation, unemployment) can be ascribed to results of integration with the EU[6].

Table 1 contains a short listing of the simulation of integration's macroeconomic outcomes, which appeared in recent years in economics literature world-wide. Baseline scenarios (forecasts of the development if there is no enlargement (not only to cover Poland but also other countries of the region)), are based on extrapolation of existing trends in Polish economy and other economies of the region. Estimates of the effects of Poland's integration with the EU indicate that our country will be more affluent if it accedes to the EU than if it stays outside this organisation.

[5] UKIE, Balance of costs and benefits of Poland's accession to the European Union, April 2003, p. 58
[6] Orłowski W.M., Costs and benefits from membership in the European Union, Methods, Models, Estimates, Warsaw: CASE, 2000, p. 22

According to studies by A.M. Lejour, R.A. de Mooj and R. Nahuis, Poland's GDP in 2020 will be higher by 8.7% under membership scenario than under baseline scenario (the greatest deviation from baseline scenario in the first decade of membership; later the difference disappears)[7]. Dutch economists studied only trade effects of the creation of customs union and single market. Regarding free movement of productive factors, the analysis is limited to forecast effects of the liberalisation of labour force movement. It does not cover effects relating to transfers from the EU budget.

F. Breuss arrives at a similar conclusion, claiming on the basis of his own simulation that the level of affluence in Poland in 2010 will be higher by 8.02% in case of a accession to the EU of Poland, Czech Republic and Hungary in 2005 than under baseline scenario without enlargement[8]. What is interesting, the Austrian economist perceives transfers from EU budget as a source of largest benefits. The significance of effects relating to liberalisation of productive factors markets was surprisingly low in F. Breuss' estimates.

Table 1

Authors	**Model type**	**Time horizon of the simulation and baseline scenario**	**Main assumptions concerning benefits and costs**	**Outcome for Poland – GDP growth (deviation from baseline scenario at the end of simulation period)**
Lejour, de Mooij and Nahius (2001)	Model of general equilibrium - Worldscan	Until 2020, Baseline scenario based on World Bank forecasts until 2010, extrapolated until 2020, assumed annual average GDP growth in Poland: 4.6%	Trade effects ensuing from accession to customs union and a lower common customs tariff Trade effects relating to accession to single market – lifting of extra-tariff barriers in trade, particularly of technical barriers Effects relating to movement of labour force	+4.3% +5.8% -1.4% Total: +8.7%

[7] Lejour A.M., de Mooij R.A., Nahuis R., *EU Enlargement: Economic Implications for Countries and Industries*, an article presented at the third annual conference European Trade Study Group, Brussels, 14-16 September 2001

[8] Breuss F., *Consequences of EU Enlargement for Macroeconomic Stability in Euroland*, an article presented at the International Conference on Policy Modelling „EcoMod2002", Universitę Libre de Bruxelles, 4-6 July 2002

Breuss (2002)	Oxford Economic Forecasting- A macroeconomic model for world economy	2001-2010, Baseline scenario based on Oxford Economic Forecasting, assuming absence of enlargement and adaptive economic policy targeted at price stability in Euroland and fiscal discipline accordant with the Stability and Growth Pact	Poland, the Czech Republic and Hungary accede in 2005	(all effects, average for the years 2008-2010)
			Trade effects ensuing from lifting of the existing customs barriers and commercial costs	+2.47%
			Effects of the single market: Enhanced effectiveness (economies of scale) and a greater price competition	+2.07%
			Effects pertaining to free movement of productive factors:	
			Influx of FDIs	+0.45%
			Migrations of labour force	
			Transfers from EU budget	-0.12%
				+3.15%
				Total: +8.02%

Real convergence in the EU

Empirical methods studying convergence of income levels cover an analysis of beta (β) and sigma (σ) convergence. Beta convergence takes place when poorer countries in *t-n* period display higher economic growth rates than richer countries. Beta coefficient is an estimated directional coefficient of a straight line with the following equation:

[PKBt/PKBt-n]=constant+β(PKBt-n)

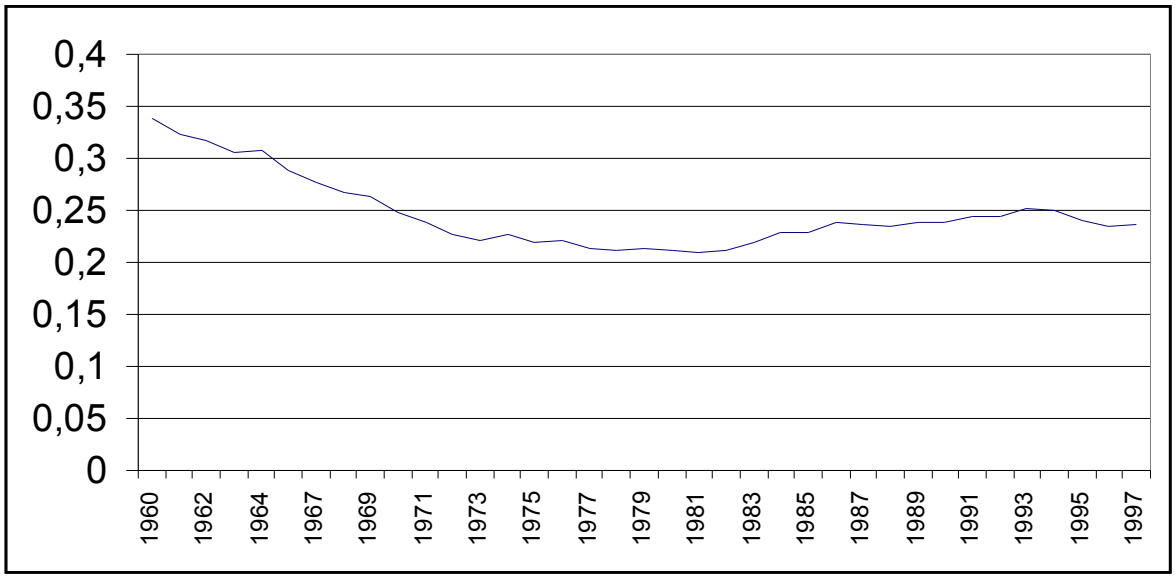
Figure 3: Beta convergence in Europe in the years 1960-2002

Source: Own elaboration based on data from AMECO

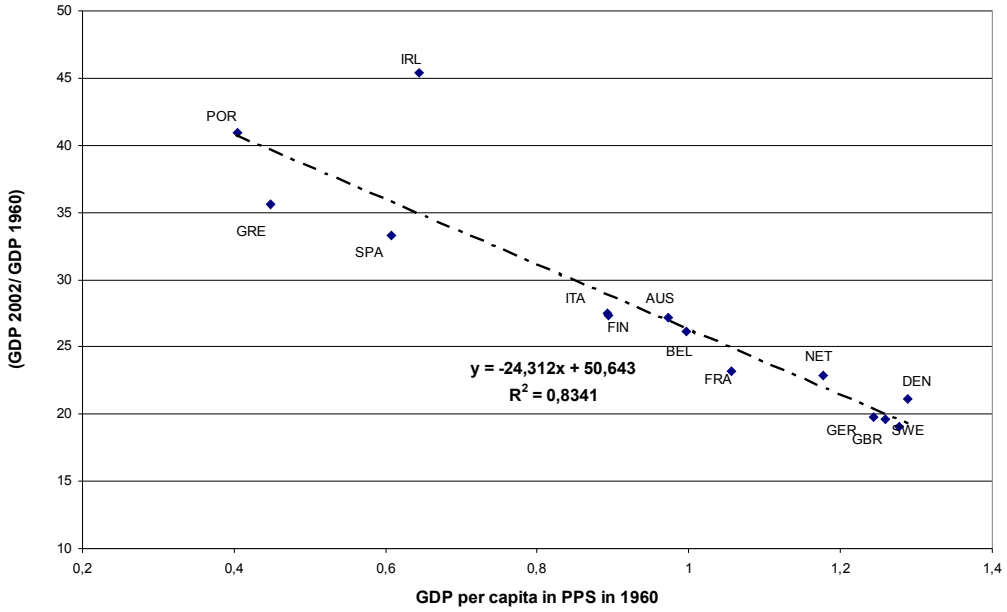
Figures on GDP per capita in PPS in the years 1960-2002[9] presented for 14 UE states (without Luxembourg) indicate a real beta convergence taking place. Countries that were poorer in 1960 – Portugal, Greece, Spain, Ireland – displayed in the period until 2002 much higher growth rates than such countries as Sweden, Denmark and Great Britain, which were the richest states in 1960. It is an open issue, still under empirical studies, how significant is the contribution of economic integration effects into real convergence.

The notion of sigma convergence comes from the symbol which usually denotes the most popular measure of variability – standard deviation. Convergence of income per capita should manifest itself by a decreasing standard deviation of this variable in the population of EU member states. The best way to show sigma convergence is to present in time the so-called coefficient of variation, which is calculated by dividing standard deviation by feature's average value in the population.

Figure 4: Sigma convergence in EU-15 states in the years 1960-1997 (value of variation coefficient for GDP per capita in PPS)



[9] Among the current G-15 states only 6 states – EEC founders – fully participated in the process of European integration in the years 1960-2002. One must not, however, forget the fact that a majority of today's EU member states were members of EFTA before. EEC and EFTA were bound by a free trade zone agreement.

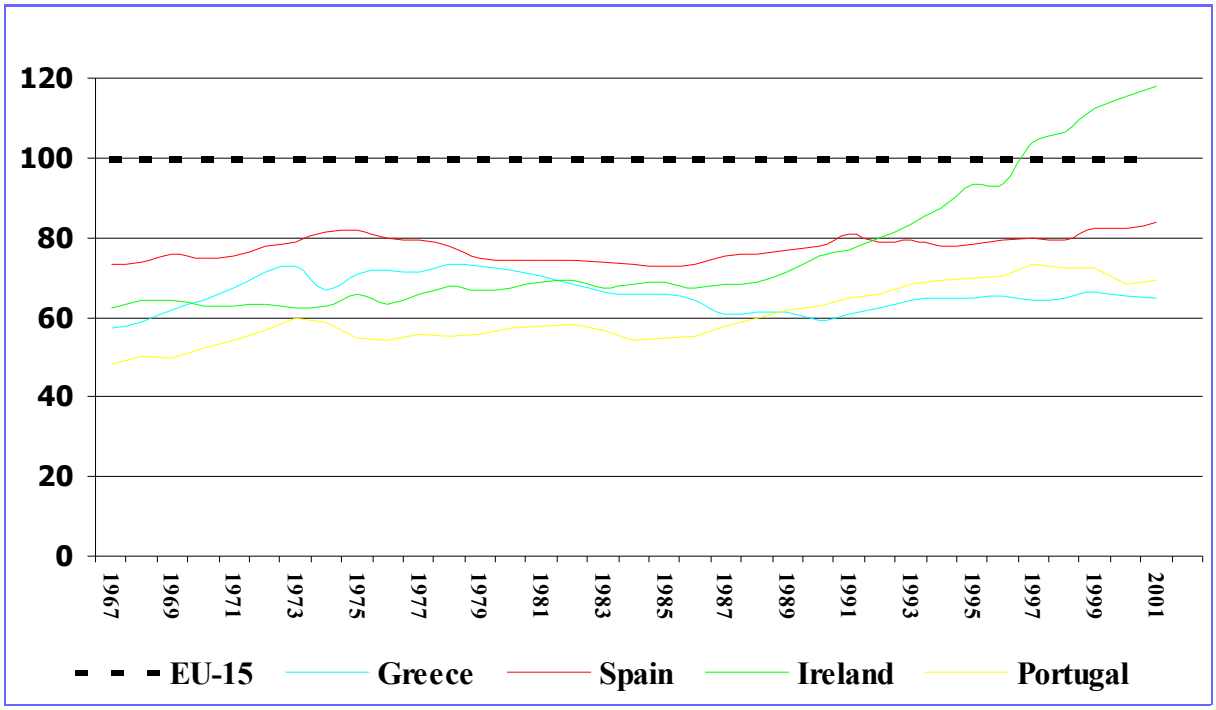


Figures for the years 1960-1997 concerning coefficient of variation for GDP per capita in today's EU-15 states are more difficult to analyse. At the end of the studied period, i.e. in 1997, variation coefficient was lower than at the beginning in 1960, i.e. advances were made in sigma convergence, and a part of this phenomenon is certainly explained by effects known from neo-classical theories. One can notice, however, that more or less in the period between early 1990ties and mid 1990ties, there was a temporary reversal of the down-trend. In those figures one can discern results of the implementation of Single European Market programme, whose effects - as indicated above – can lead to agglomeration and uneven distribution of the effects of economic effectiveness growth.

Factors determining the speed of real convergence in EU-15 cohesion countries

Data on beta convergence in the years 1960-2002 presented in Figure 3 showed that in terms of the level of income the poorest EU states approximated their richest EU partners. Results for individual countries are much differentiated. Greece attained the least success in replenishment of its 1960 income (actual value is much below the theoretical one ensuing from regression) while Ireland is an indisputable leader of real convergence. Figure 4 allows one to follow in more detail the real convergence process in the so-called cohesion countries.

Figure 5: GDP per capita in PPP in Spain, Greece, Portugal and Ireland in the years 1967-2002 in relation to Union's average (EU-15=100)



Comment: Bold line indicates period of membership in the EU/EEC

Source: Own elaboration based on data from the database AMECO DG ECFIN and Czyżewski A.B., Orłowski W.M., Zienkowski L., Macroeconomic Costs and Benefits of Poland's Membership in the EU: Analysis and Evaluation [in:] Costs and Benefits of Poland's Membership in the European Union, Centrum Europejskie Natolin, Warsaw, 2003

In the period of membership in the EU:

- GDP per capita in PPP in relation to average for current EU-15 states rose in case of Ireland after accession to the EU in 1973 from the level of 62.1% up to 117.8% in 2001.
- The very same indicator for Greece went down since accession to the EU from the level of 70.2% down to 64.7% in 2001, so in fact Greece made no progress in terms of real convergence.
- In Portugal GDP per capita in PPP rose from the level of 55.4% in 1986 up to 69.1% of the average for current EU member states in 2001.
- Spain narrowed development gap by over ten percent points, since in 2001 its average citizen produced goods and services worth 84% of the output of a hypothetical average EU-15 citizen, while in 1986 – on Spain's accession to the EU – that value amounted to mere 73.3%.

A good explanation of disparities in real convergence results is provided in works of W.M. Orłowski. In his opinion, membership in the EU results in fundamental changes of macro-proportions in development of poorer countries within the group, mainly due to free movement of productive factors. First of all, changes are visible in the structure of the balance of payments. The scale of foreign savings' imports increases in the form of private capital and official transfers from EU budget due to participation in EU policies. Thus the credit balance of capital transfers and currency reserves increases, which is accompanied by strengthening of currency, decline in exports' competitiveness, increase of imports and as a result - by

worsening of balance of payments on current account. Enhanced influx of private and public foreign capital results in an increase in domestic demand.[10]

The growing surplus in capital turnover balance results in appreciation of real foreign exchange rate.[11] The incoming capital on the one hand increases supply of domestic currency and this brings pressure on an increase in price level (and as a result in the level of salaries and production costs), and on the other – by flowing through currency market – it slows down devaluation rate or results in appreciation of nominal rate. If this process is accompanied by erroneous domestic policy, particularly regarding fiscal and budgetary policy, the country can become a victim of the so-called „Dutch disease", whose symptoms encompass a long-term loss of external competitiveness (as a result of real exchange rate appreciation) and growth slowdown.

Certainly exchange rate appreciation and structural trade deficit are not bad in themselves. The most important thing is how the incoming private and public capital is used. If it is allocated mainly to investment growth in the economy, inluding imports of machinery and devices allowing for a sustainable growth of labour efficiency eradiacting adverse effect of exchange rate appreciation, it becomes a factor accelerating real convergence.

Accession to the EU and the accompanying increase in the influx of private capital and official transfers from EU budget create enormous temptation to use those savings to replace - instead of topping up - domestic savings. In such situation domestic entities can allocate more to consumption. Through enhanced consumption – chiefly of imported goods - such behaviour will bring a short-term rise in level of living but will eventually lead to „Dutch disease", which shall limit long-term prospects for economic growth.

Whether foreign capital influx becomes a factor accelerating growth or whether it becomes a burden for economy, depends mainly on state policies. The most important policies in this respect are state fiscal and budgetary policy and policies targeted at attracting FDIs.

Investment-related needs of businesses operating in „emerging markets" usually exceed level of savings being at the disposal of households, which becomes the source of imbalance on the capital market and high price of capital. High real interest rate attracts foreign capital, mainly in the form of portfolio investments. Imbalance on the capital market can be smaller if – apart from households – also public finance sector generates additional savings (budget surplus). Loose budgetary policy results in enhanced imbalance on this market (capital's price increases). An increase in budget deficit mainly results in growth of collective and individual consumption (investment outlays usually constitute a tiny fraction of the budget expenditure structure), which takes place at the expense of crowding-out private investments, which are incapable of competing with regard to capital return and risk level against state budget. Moreover, foreign savings coming into economy, which serve the purpose of covering the

[10] Czyżewski A.B., Orłowski W.M., Zienkowski L., Macroeconomic Costs and Benefits of Poland's Membership in the EU: Analysis and Evaluation [in:] Costs and Benefits of Poland's Membership in the European Union, Centrum Europejskie Natolin, Warsaw, 2003, p. 15

[11] Level of real foreign exchange rate = [(level of domestic prices in the period 2 / level of domestic prices in the period 1) : (level of prices of trade partners in the period 2 / level of prices of trade partners in the period 1)] : (nominal foreign exchange rate in the period 2 / nominal foreign exchange rate in the period 1).

Real appreciation (calculated from the formula value greater than one) signifies that relation of domestic prices to foreign prices grows faster than nominal exchange rate (i.e. faster than its nominal depreciation). A change in real exchange rate is a measure of changes in competitiveness of domestic versus foreign production. Appreciation means a decrease in competitiveness; depreciation works the other way round.

budget deficit, give a side effect in the form of nominal and real appreciation of foreign exchange rate. Therefore a loose budgetary policy contributes to „Dutch disease".

A factor conducive to emergence of the „Dutch disease" is low effectiveness in the utilisation of incoming private and public capital. A universally observed phenomenon is that public investments are less effective than private ones. Therefore the structure of the balance of payments, where share of public investment is much higher than official transfers, is more beneficial that one, where a majority if capital and current flows is constituted solely by transfers from the EU budget. Moreover, experiences of financial crises of the 1990ties show that the FDIs are the most advantageous and secure form of capital flow for the countries-beneficiaries. As opposed to portfolio investments, their transfer entails not only capital flow but also transfer of technologies, management skills, know- how, etc. In a long run, influx of FDIs results in modernisation of economic structures, thus contributing to improved efficiency and decreased price elasticity of foreign demand, which more than compensates for costs in the form of real appreciation of foreign exchange rate. Portfolio investors are less interested in long-lasting foundations of the growth of the country where they located their savings. A short-term return rate is for them the most important factor of investment-related decisions. Therefore very frequently a majority of portfolio investments are located in debt instruments of the public sector, which serve the purpose of financing budget deficits. Limitation of the probability of emergence of the "Dutch disease" can be attained through balanced fiscal policy, restricting supply of public debt instruments, changes within the structure of public spending along pro-growth lines (investments in physical and human capital) and by securing proper economic effectiveness of public investments financed from EU funds and policy targeted at attracting FDIs.

In order to explain differences among cohesion countries as regards advantages of real convergence, it is worthwhile quoting here a statistical verification performed by W.M. Orłowski. He selected variables that might affect the differences in economic growth rate of Greece, Spain and Portugal in relation to EU largest economies. Table 2 contains correlation coefficients between variables.

Table 2: Factors affecting benefits from integration with the EU: table of correlation coefficients (correlation coefficients calculated for time cross-section sample, Spain, Portugal, Greece 1981-93, moving 3-period average values)

	Surplus of GDP growth rate over EU4	*Membership in the EU*	*Transfers of official GDP*	*Foreign investments in % GDP*	*Deficit of balance of payments on current account without official transfers*	*Trade balance deficit in % GDP*	*Increase in exports volume*	*Budget deficit in % GDP*	*Difference in inflation rate in relation to EU4**	*Consolidated budget growth-expenditure in EU-4**	*Economic growth in %GDP*	*Investments to GDP ratio*	*Consumption to-GDP ratio*
*Surplus of GDP growth rate over EU4**	***1.00***												
Membership in the EU (dummy variable.)	*0.08*	***1.00***											
Official transfers in % GDP	*-0,24*	***0.49***	***1.00***										
Foreign investments in % GDP	***0.40***	***0.48***	*0.00*	***1.00***									
Deficit of balance of payments on current account without official transfers in % GDP	*-0,23*	*-0.11*	***0.43***	*-0.36*	***1.00***								
Trade balance deficit in % GDP	*-0.09*	*-0.06*	*0.39*	*-0.08*	***0.78***	***1.00***							
Increase in exports volume	*0.09*	*-0.13*	*-0.10*	*0.33*	*-0.07*	*0.08*	***1.00***						
Budget deficit in % GDP	***-0,58***	*0.29*	***0.83***	*-0.29*	***0.58***	***0.44***	*-0.08*	***1.00***					
*Difference in inflation rate in relation to EU4**	***-0.63***	*0.06*	***0.49***	*-0.30*	***0.57***	***0.70***	*0.05*	***0.73***	***1.00***				
Economic growth in EU4	*-0.09*	*0.36*	*0.06*	*0.37*	*-0.31*	*-0.16*	*0.24*	*0.10*	*0.04*	***1.00***			
Consolidate budget expenditure in % GDP	*-0.25*	***0.49***	***0.82***	*0.16*	*0.32*	*0.38*	*0.04*	***0.74***	***0.51***	*0.10*	***1.00***		
Investments to GDP ratio	***0.48***	*-0.34*	*-0.39*	*0.25*	*0.22*	***0.53***	*0.15*	***-0.45***	*-0.07*	*-0.21*	*-0.24*	***1.00***	
Consumption to GDP ratio	***-0.53***	*0.30*	***0.85***	*-0.35*	***0.63***	***0.45***	*-0.09*	***0.92***	***0.70***	*-0.04*	***0.65***	***-0.50***	***1.00***

** EU-4 arithmetic mean for Germany, France, Italy and Great Britain*
Comment: The first (shaded) column contains correlation coefficients between benefits from integration (surplus of growth rate over EU-4, i.e. difference between GDP growth rate of an acceding country and average growth rate in EI-4), and clarifying variables. Further columns contain correlation coefficient between relevant pairs of clarifying variables. Statistically relevant correlation coefficients were bolded (relevance was defined on the basis of Student distribution tables, assuming that distribution of variations in a sample approximates normal one; test's critical value at relevance level of 0.01 amounts to 0.4). Source: Orłowski W.M, Road to Europe, Macroeconomics for accession to Europe, Łódź: Instytut Europejski, 1998, p. 144

The first, shaded column shows correlation between differences in growth rate ("surplus") of countries acceding to the EU and growth rate of EU's largest economies (EU-4) on the one hand, and individual clarifying variables on the other. Statistically relevant correlation coefficients should exceed the level of 0.4.

Statistically relevant positive relationship between growth rate surplus and share of investments in GDP and negative relationship with consumption relation to GDP confirms conclusions on necessity of utilising capital transfers for an increase in investments. Absence of statistically relevant relationship between surplus and dummy variable of membership in the EU testified to the fact that there is no automatism in catching up with richer member states through membership in the EU on its own. Similarly no significant impact of transfers from the EU budget on real convergence rate was discovered. The analysis performed by W.M. Orłowski also indicates that the deficit in balance of payment on current account, trade balance and exports volume growth were of no significance for real convergence rate.

Growth rate reducing GDP in relation to EU-4, an increase in consumption to GDP ratio was related to loose fiscal policy (correlation coefficient for consumption share in GDP and budget deficit as a percentage of GDP reached as much as 0.92). In case of budget countries an increase of budget deficit resulted in a decrease of investment to GDP ratio, which confirms the thesis that private investments are crowded-out by stronger pro-consumption public spending. What is interesting, there is also a strong positive relationship between the volume of transfers from the EU budget and an increase in consumption and budget deficit. This confirms suspicions that excessive scale of transfers constitutes a great temptation in support of an increase in budget deficit. W.M. Orłowski comes to a conclusions that in the absence of proved positive relationship between real convergence rate and transfers, forces one to think that when a reasonable scale of transfers is exceeded - resulting in an increase of deficit - this can have adverse effect on GDP growth.[12]

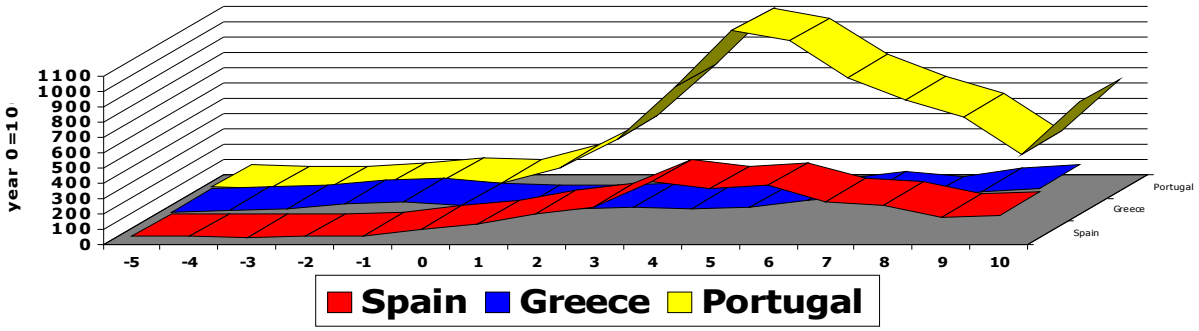
Greece, which recorded the poorest progress in terms of real convergence, fell victim of its own erroneous internal policy. After taking over the power immediately after accession to the EU, the new Greek government decided to nationalise a large portion of economy, which did not encourage foreign investors to choose Greece as a location for investments. What is more, foreign and domestic investors were scared away by unstable macro-economic environment (see Figure 6) - the two-digit inflation rate strictly related to aforementioned fiscal expansion. Transfers from the EU budget for implementation of agricultural policy and infrastructural investments substituted spending done by Greek budget before 1981. As Greece acceded to the EU, its credibility on international financial markets improved and thus the authorities gained easier access to foreign savings, which helped cover growing budget deficits (on the average budget deficit constituted 8.8% GDP in the years 1981-83 and 12.2% GDP in the years 1984-1986). Funds liberated through substitution of domestic spending with funds from the EU budget and foreign portfolio capital were allocated to ambitious programmes of social assistance, increase in pensions and unemployment benefits, which decisively increased the scale of consumption. Those measures relatively decreased the scale of investments and thus reduced chances for dynamic development in the future. Another factor working to detriment of Greece was the structure of EU budget in 1980ties, dominated by CAP instruments excessively raising prices of agricultural products and farming incomes. Greek farmers used funds from the EU budget to satisfy consumption needs instead of using CAP support to modernise their farms or develop extra-farming activity. Projects relating to implementation of UE regional policy were implemented incompetently by public administration and the level

[12] Orłowski W.M., op.cit., p. 145

of their effective effectiveness left much to be desired. According to W.M. Orłowski, Greece is an example of a country that contradicts the common conviction that gaining maximum volume of support from structural funds is the best way to turn membership in the EU into profit.[13]

Figure 6: A change in annual influx of Foreign Direct Investments, centred around the accession date (accession year =100)

Source: own elaboration based on UNCTAD data



Guidelines for Polish economic policy ensuing from experiences of cohesion countries

In the first years of membership, Polish economy will not be threatened with loss of competitiveness related to public transfers from the EU budget, similar to the one experienced by Greece in 1980ties. This ensues from the following assumptions:

Firstly, an analysis of the financial package agreed upon in Copenhagen in December 2002 suggests that the scale of net transfers in the first years of membership in settlements with the EU budget will be relatively small. It will rise from the level of approx. 0.5% GDP in 2004 up to 1% GDP in 2006. Therefore pressure in favour of real appreciation of Polish zloty (and inflation pressure after Poland's accession to euro zone) due to influx of funds from EU budget will be quite limited. However the volume of transfers will gradually rise with time. The Communication of the European Commission „Building our common Future" of 10 February 2004, constituting a proposal for EU financial framework for the years 2007-2013, indicates that Poland can be the greatest beneficiary from the common budget even despite suggestions to maintain the ceiling of commitments for a given member state under cohesion policy at the level of 4% GDP annually.

Secondly, Greek experiences should be analysed from the point of view of provisions concerning utilisation of EU funds currently in force. Since 1988 the rule of additionality is in place, which prohibits substitution of national spending with EU budget funds under cohesion policy. Utilisation of cohesion policy funding is subject to detailed monitoring and evaluation. CAP instruments have also evolved. There has been a gradual departure from market

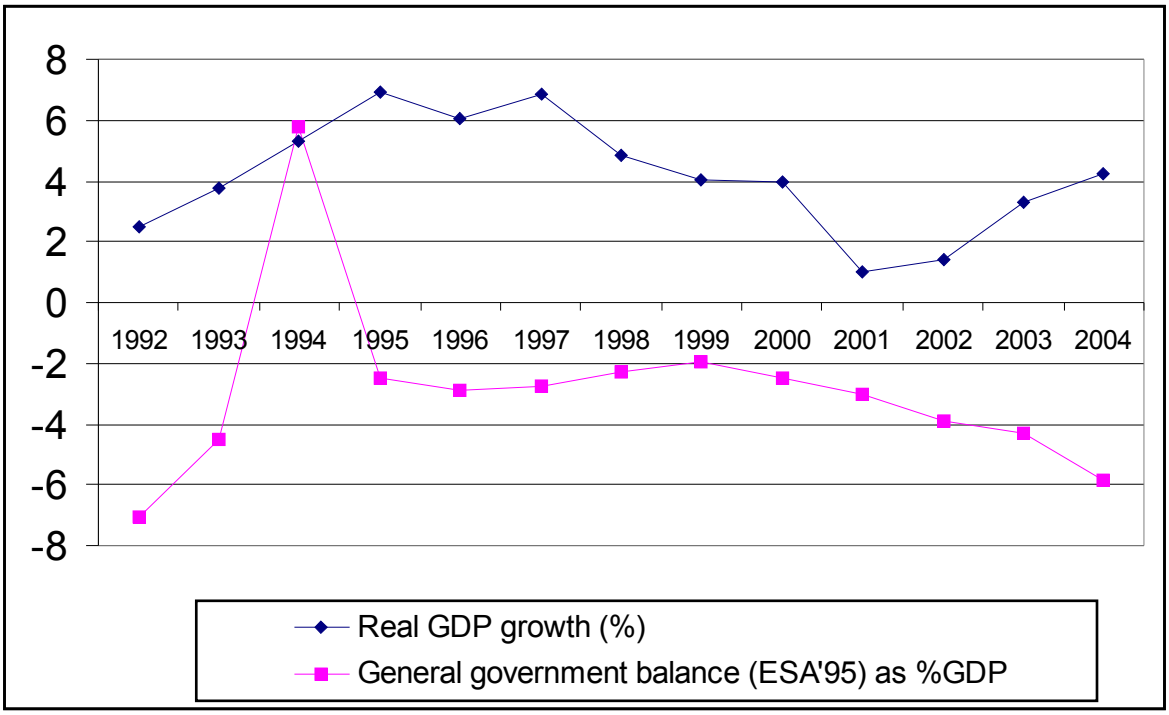
[13] Orłowski W.M., op. cit., p.141

interventions and direct payments in favour of increasing funding for structural development of rural areas.

Despite the aforesaid, it will remain a responsibility of Polish authorities in the future to continue measures serving the purpose of ensuring maximum economic effectiveness of public investments financed from EU funds. Of key significance in this respect will be efficiency of public administration as well as social control over utilisation of the funds. Weakness of political processes, poor level of social dialogue, particularly at the grass-root level of authority, can adversely affect economic effectiveness of investments from cohesion policy funds.

Excessive currency appreciation can become a real threat in Poland, if in the future we fail to limit the growing imbalance of public finance and Polish securities enjoy great interest from foreign portfolio investors encouraged by reduced risk due to Poland's accession to the EU. Estimates of 2003 results and forecasts for 2004 indicate that we will face a paradoxical situation where economic upturn will be accompanied by increased deficit in public finance sector. In the last two years, the worsening fiscal situation has been accompanied by nominal and real depreciation of currency exchange rate. It is difficult to predict how long such trend will persist.

Figure 7: GDP growth in Poland and position of the public finance sector according to ESA'95



Comments: Forecast for the years 2003-2004
Source: own elaboration based on AMECO data

Acceding to the EU, Poland will also become a member of the Economic and Monetary Union with a derogation. Although we will not adopt the single currency, we will be nevertheless obliged to undertake actions bringing our country closer to fulfilment of fiscal and monetary criteria of Maastricht. As a consequence of membership in the EMU with derogation we will be covered by provisions of the Stability and Growth Pact, except sanctions for failure to observe fiscal discipline. In practice this will signify participation in

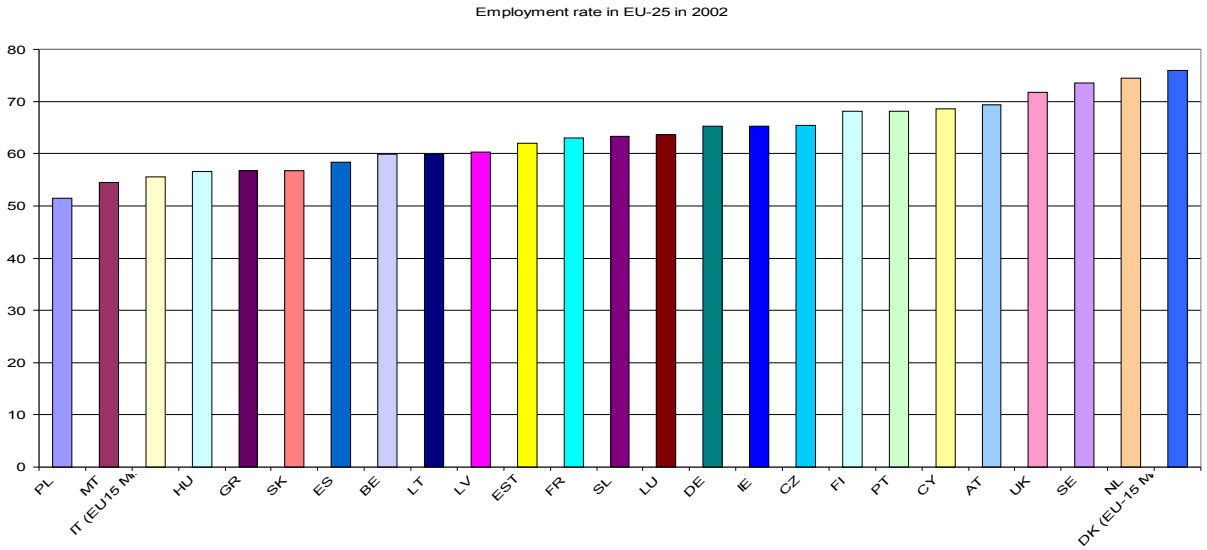
the mechanism of the co-ordination of economic policies, i.e. the obligation to submit fiscal notifications and convergence programmes.

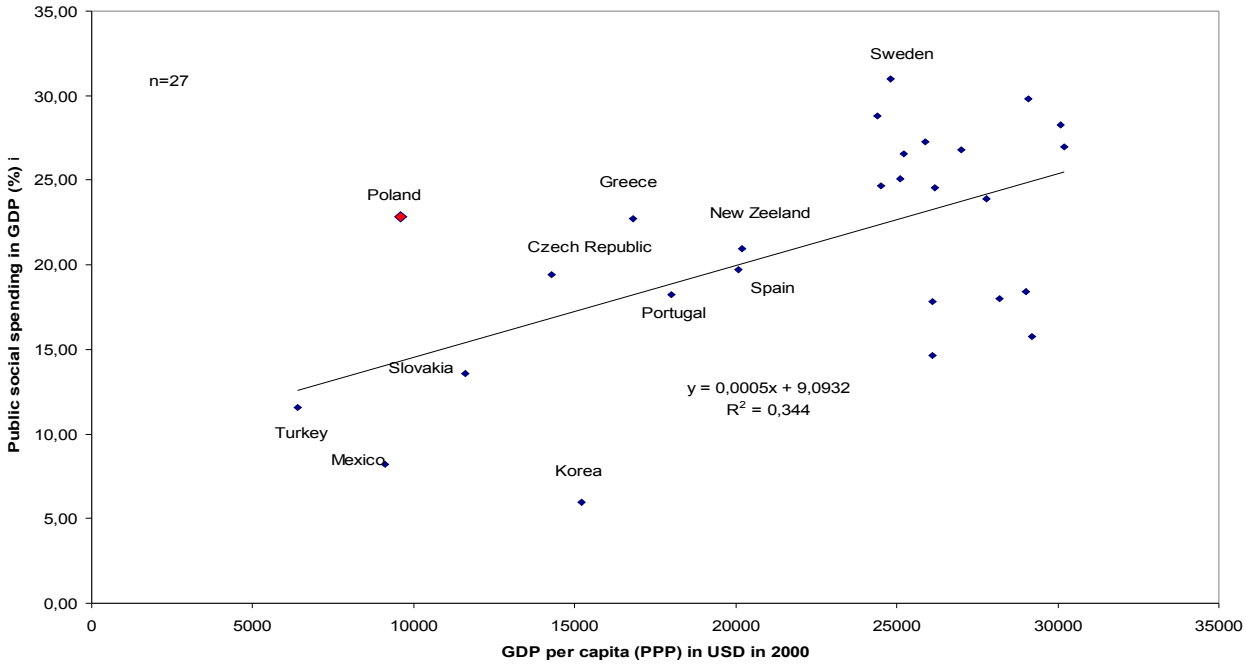
In the light of the above statements concerning convergence factors in cohesion countries, one can assume that there is no contradiction between fiscal consolidation and maintenance of balanced or surplus budget position and swift economic growth. On the contrary, a reasonable fiscal policy can help maximise benefits from membership, which will manifest themselves as increased influx of private capital and transfers from the EU budget. A reform of public finance will be conducive to a rise of investment rate in the economy.

Fiscal consolidation has to be based upon modification of microeconomic mechanisms. A rise in employment is a key to its success. Currently employment rate defined as a percentage of employed population in production age barely exceeds 50%. In this respect Poland fares worst among all 25 states of an enlarged EU (Figure 8). A rise in employment will be impossible unless we weaken mechanisms of social policy discouraging people to undertake legal employment (easy access to pension benefits, pre-retirement benefits etc.) and of labour market (flat level of minimum salary across the country). Moreover we need to decrease extra-salary costs of labour, which entails the necessity to decrease social transfers. International comparisons show that Poland allocates to social policy much more than countries with similar level of affluence (Figure 9). An exceptionally pertinent diagnosis of the pathology of the current social policy and proposals for reforms were presented by the Ministry of Economy, Labour and Social Policy in the report „Rationalising public spending in Poland through improvements in selected social transfers" of September 2003. Reforms comprising the package known as „Hausner plan" are a form of implementation of the Lisbon Strategy in Poland. Poland's participation in implementation of the Lisbon Strategy will help us draw model examples from solutions in place in other EU countries. Paradoxically, despite significant differences in development level, present and new EU member states will have to solve very similar problems – such as low employment rate or inefficiency of the social security system in the face of the ageing of societies.

Figure 8: Employment rate in EU-25 countries in 2002.

Source: Eurostat, Structural Indices of the Lisbon Strategy





Source: own elaboration based on OECD data

Conclusions

Poland's accession to the EU will entail eradication of the remaining trade barriers, creation of customs union. This will be accompanied by effects known from neo-classical theories – welfare-generating effect of trade creation and - working in the opposite direction - effect of trade diversion. Poland and other acceding countries hope that effects pertaining to liberalisation of productive factors movement will exert more influence than before. Those effects can lead to reallocation of resources, which will generate welfare and equalise development level. While contributing to general improvement of welfare, economic integration can result in uneven distribution of effectiveness growth effect through agglomeration effects. If Poland fails to become an attractive place for concentration of industries with high added value, effects of the creation of the Single European Market can slow down the real convergence pace.

Verification of empirical data on the so-called beta and sigma convergence indicates that real convergence takes place in Europe. An analysis of convergence pace in individual, poorer EU countries indicates significant differentiation of advances in this area. Ireland is an indisputable leader in this respect. The worst progress was made by Greece. Due to erroneous internal – mainly fiscal - policy in 1980ties, Greece failed to utilise potential benefits relating to influx of private foreign capital and transfers from the EU budget. Unfortunately those funds did not lead to an improvement in productivity, since actually they were allocated to short-sighted consumption growth instead of investment purposes. Real appreciation of currency, ensuing from credit balance of capital flows of the balance of payments resulted in loss of competitiveness by enterprises that would otherwise be economically viable and sound. Attainment of maximum level of transfers from the EU budget does not guarantee full utilisation of opportunities pertaining to membership.

Many Union rules were developed that protect against wasting opportunities pertaining to membership for the sake of satisfying short-term interests in internal policy. Fiscal criteria of convergence, needed for accession to euro zone, and Stability and Growth Pact protect against extravagant spending by governments, which will gain facilitated access to foreign savings. A protective clause against substitution of domestic investment outlays by funds from EU budget is constituted by the so-called rule of additionality. Subsequent reforms of the Common Agricultural Policy depart from support to prices and farmers' incomes, which in many cases results in increased consumption spending, in favour of development of rural areas, which is conducive to generation of investments – mainly in organic farming and development of services sector in farming areas. With a view to maximising benefits from membership in the EU, one needs to carry out a reform of public finance. Such a reform is impossible without significant changes in social policy and labour market policy. Goals of the Lisbon Strategy will be a beacon in this respect. Another government's task will comprise care for adequate economic effectiveness of new, public investments.

Membership in the EU does not automatically accelerate real convergence, but in combination with proper internal policy it can help close the development gap separating Poland from richer EU countries.

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