MASTERARBEIT

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„Competitive Advantage in Poland's Institutional Framework. Transition of the Institutional Environment after EU Entry"

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CONTENTS

Abstract

In der vorliegenden Masterarbeit wird untersucht, ob der EU Beitritt Polens im Jahr 2004 einen signifikanten Einfluss auf die Wirtschaft und den institutionellen Rahmen des Landes mit sich brachte. Zunächst wird das Hauptaugenmerk auf die Entwicklung und das institutionelle Rahmenwerk im post-kommunistischen Wirtschaftsumfeld gerichtet. Es wird herausgearbeitet, welche Wettbewerbsvorteile im Zuge der Europäisierung hervorgetreten sind. Auf der Basis von Porters Diamanten Modell und der Theorie der vier Kräfte, die die Wettbewerbsfähigkeit einer Nation beeinflussen, soll unsere Ausgangslage analysiert und reflektiert werden. Des Weiteren wird die Transformation des institutionellen und prozessualen Rahmenwerks und seiner Verbesserung durch die von der Europäischen Union gesetzten Richtlinien überarbeitet.

In der zur Verfügung gestellten wissenschaftlichen Analyse wird der historische Hintergrund des privaten und landwirtschaftlichen Sektors in Polen präzise beobachtet. Es geht um die Frage, welche Anforderungen der EU erfüllt werden mussten, um der europäischen Staatengemeinschaft beitreten zu können. Im Zuge dessen wird die polnische Wirtschaftskraft mit anderen post-kommunistischen Staaten verglichen, um den Transformationsprozess en Detail zu veranschaulichen und das hohe Tempo darzustellen, in welchem die zahlreichen Veränderungen in einem strategisch komplizierten geographischen und politischen Umfeld stattgefunden haben. Auch werden unterschiedlichen Fonds präsentiert, die Polen von der Europäischen Union zur Verfügung gestellt wurden. Diese erhöhten die Wettbewerbsfähigkeit der Wirtschaft und ermöglichten ein schnelles Wachstum. Investment-Anreize der polnischen Regierung gehören zu den weiteren Mitteln, um den Markt für ausländische Investoren attraktiver zu gestalten. Anhand einer zu Rate gezogenen Umfrage zum polnischen Investitionsklima, kann abgeleitet werden, wie ausländische Investoren tatsächlich über den Entwicklungs- und Veränderungsstand des Landes urteilen und wie die von der Regierung eingeführten neuen Richtlinien zu bewerten sind.

Ein weiterer relevanter Part dieser Masterarbeit wird es sein, die Maßnahmen zu beurteilen, die die Regierung unternommen hat, um das Land auf dem Energiesektor unabhängiger zu machen. Eine rapide wachsende Wirtschaft führt konsequenterweise zu wachsendem Konsum. Dieser Fall trifft auch auf Polen zu, das nach alternativen Energiequellen sucht, um sich von den klassischen Energiedistributoren zu lösen. Aus der Conclusio kann entnommen werden, dass Polen mit dem EU-Beitritt tatsächlich einen großen Schritt in die positive Entwicklung gemacht hat und sich fortwährend auf den mächtigen Wirtschaftsmärkten etabliert.

1. Introduction

Poland is one of the most populous countries and fastest growing economies in Europe. It is the 9th largest country in Europe and 6th most populated country in the European Union[1]. Poland became a member of Visegrad Group in 1991 in order to deepen its cooperation and integration with three other Central European countries, namely Hungary, Slovakia and Czech Republic. Eight years later, in 1999 Poland joined the North Atlantic Treaty Organization (NATO) which is an intergovernmental military alliance based on the North Atlantic Treaty signed on April 4th 1949. In 2004, Poland became a member of the European Union, which is a union of 27 European countries in regard of economy and politics and was founded in 1951. In 2007, Poland joined the Schengen Area, as a result of which Poland became a part of a group of countries, which abolished passport controls on their common boarders simultaneously enabling freedom of movement and eventually common visa policy.

Gaining the work permit in other member states like the United Kingdom, Germany, Austria or Netherlands by Polish citizens, led to one of the biggest emigration waves in the modern history of Poland[2]. The main reason for over 2 million Polish citizens to move abroad permanently was the fact that they were able to find employment and earn five or six times more than in Poland for a similar job. The emigration of such a substantial number of people resulted in a decrease of unemployment in Poland, but also an increase in GDP as emigrants send large amounts of money to Poland to support their families, which significantly increased demand for goods in Poland.

There were times in the history of Poland which still make its inhabitants very pound on one hand and very disappointed on the other, which exhibits similarity between Poland and Austria. In 1569 the Union of Lublin established the Polish-Lithuanian Commonwealth. It was the period of Poland's great power, advancements in civilization and prosperity. The Polish–Lithuanian Union became a powerful actor in Europe and a vital cultural country, spreading the culture of Western countries in the Eastern parts of Europe. The Polish–Lithuanian Commonwealth was a huge unified federal state in central-eastern Europe in the second half of the 16th and the first half of the 17th century with an area approaching one

[1] http://www.nationmaster.com/country/pl-poland
[2] http://wyborcza.biz/biznes/51,100896,12549029.html?i=1 (see Table 1)

million square kilometers. Compared to around three hundred thousand square kilometers today, it can be shown how significant lost Poland experienced over the past five centuries regarding its territory and influence in Europe, whereas Poland is trying to regain the latter one[3].

Poland as we know it today, after being obliterated from maps for over 123 years, gained independency in 1918 and was overrun by Germany and the Soviet Union in September 1939. The tragic history of Poland definitely influenced today's believes and prejudices of Polish people, who oftentimes seem to be xenophobic and held back, but which is the result of betrayals by its most trusted allies during many wars which Poland fought especially against Soviet Union and Germany.

Only during the Second World War around 6 million Polish inhabitants died, which equals to around 20% of the population at the time. Before the war began, the population had totaled to around 35 million inhabitants in 1939[4]. After the war, there were only around 23 million inhabitants living within the Polish territory. Some people were deported to the Soviet Union, others decided to settle in the territories which belonged to their families for ages but were now a part of different countries, like Ukraine, Belarus or Lithuania. Some other people emigrated to the West, mostly to the United States of America, but remained Polish, meaning they speak Polish language and preserve Polish traditions until today. "There are roughly 20 million people of Polish ancestry living outside Poland, making the Polish diaspora one of the largest in the world"[5]. Only in the United States of America, there are almost 11 million people of Polish descendant, who speak Polish. Chicago in Illinois is the second biggest Polish city in the world with over 1.1 million people of Polish ethnicity[6], after the capital of Poland – Warsaw - with roughly over 1.7 million inhabitants[7]. Moreover, there are also a few million people speaking Polish who are not of polish descendant. They are mostly Jewish people who once lived in Poland. Another interesting fact about Poland is that the Polish language is the second most spoken language in England.[8] These numbers exhibit the significant influence the polish society has in the world and thus encouraging foreign investments, which stimulate the growing economy in Poland.

[3] Davies, N. (1998) p. 555,
[4] Piesowicz, K. (1987) p. 103-36,
[5] http://www.nasza-gazetka.com/Menu_Polonia/DIASPORA/DIASPORA.HTM
[6] Paral, R. (2004) p. 18,
[7] http://www.staypoland.com/miasta.htm
[8] http://www.guardian.co.uk/uk/2013/jan/30/polish-becomes-englands-second-language

After the Second World War, Poland became Soviet satellite for over 40 years. The repressive communist authoritarian regime in Warsaw instituted by the Soviet Union was prosecuting any anti-communist opposition groups with help of the Red Army units garrisoning permanently in Poland at the time. The Polish economy was struggling from corruption and mismanagement. In 1978 John Paul II was elected as the Pope, which had a significant influence on the Polish citizens, who were fighting the communist regime, as it increased their aspirations for freedom. In 1979 the Pope visited Poland and called the Polish people to change "the visage of this ground", which eventually led in 1980 to a series of strikes, which paralyzed the country and the government was forced to negotiate with the workers, who gained the legal right to strike and form workers' unions. Eventually that led to creation of Solidarnosc movement. The Catholic Church has remained very powerful in Polish life until today. Further strikes in 1980s completely paralyzed the Polish economy, which eventually made the government agree to hold free elections. "The election of June 4, 1989 (and the second round of June 18) brought a landslide victory to Solidarnosc: 99% of all the seats in the Senate[9] and all of the possible seats in the Sejm"[10]. The following year Lech Walesa, who was one of the founders of Solidarnosc, was elected as president.

After years of dramatic mismanagement and corruption in the Polish government and economy, newly elected finance minister Leszek Balcerowicz faced a necessity of difficult reforms in order to revive the economy. Most importantly the traditionally large and inefficient industries as coal, steel, rail transport and energy had to be restructured. The government decided to reorganize the economy in order to move away from the inefficient state-controlled system of economic planning. "Privatization of many state-owned companies encouraged an influx of foreign capital into the country, which made up for shortfalls in domestic capital. […] Poland was the first country in the former Eastern Bloc to undertake such a radical economic transformation."[11] Poland was slowly transforming into an investment-friendly, market driven economy despite of the fact the unemployment was increasing and infrastructure was impoverished. The government restructured the banking system and modernized the lending policies. Newly founded domestic enterprises gained strength and domestic competition arose. Poland also modernized its international trade during that time. The country, which was plagued by hyperinflation of over 500% in 1990[12],

[9] The remaining seat was won by an independent candidate – a rich businessman
[10] Pula J., Wrobel P. (2010) p. 273,
[11] http://www.msz.gov.pl/en/p/msz_en/foreign_policy/europe/european_union/poland_ineu/tiger_turned_eagle/
[12] http://en.poland.gov.pl/The,Economy,,7313.html

liberated its national currency, namely the Zloty, which became convertible to other currencies exhibiting further stage of dynamic economic growth.

Unfortunately the rapid restructuring of the Polish economy had some significant negative impact on smaller towns, which were often dependent on either one company or single industry, which in many cases were inefficient and once they lost subsidies from the state, went bankrupt. That oftentimes led to people losing employment in entire towns or even regions and resulted in rapidly growing unemployment. That “shock therapy”, as it is commonly described, led Poland in a relatively short period of time to where it is today. Poland has become one of the fastest developing economies in the world for two consecutive decades and is often called the "Tiger of Europe”. Today most of international investors target “Central and Eastern Europe” as the most important asset in their portfolios, in most cases undoubtedly meaning Poland[13].

In this master thesis we want to examine whether the accession of the European Union by Poland on May 1st 2004 had a significant impact on the Polish economy and its institutional framework. First of all we will examine our hypothesis whether Poland’s accession to the European Union had an impact on the entire economy and competitive advantage in Poland’s institutional framework in this post-communist country. For this purpose we will test our hypothesis using the Porter’s Competitive Advantage of Nation theorem, along with its four forces influencing the competitiveness of a country. Furthermore, we will revise the transition of the institutional and procedural framework and its improvement by the regulations set out by the European Union.

In the following part of our master thesis, we will study the historical shape of the private and agricultural sectors in Poland and the changes influenced by the new regulations implemented by Poland in order to become a European Union’s member. Furthermore, we will compare Polish economy with other post-communist countries, in order to present the transition of Poland and the pace at which these changes took place taking into consideration the geographical and political environment, which should exhibit clearer the huge progress made by Poland. Moreover, we will present number of various funds granted to Poland by the European Union, which increased the competitiveness of the Polish economy and enabled its rapid growth. Also we will present various investment incentives introduced directly by the Polish government in order to attract foreign investors. Additionally we will outline surveys

[13] Around 30% of the biggest Central and Eastern European mutual fund by Pioneer Investment Austria invests in Polish bonds: http://www.pioneerinvestments.at/jsp/xslt.jsp?ctrl=fonds/all/fonds&fonds=AS327

conducted in previous years in order to exhibit what businessmen who invest Poland really think about the country and the changes in the regulations introduced by the government, but also how, from their perspective, the shape of the economy is.

An important part of our master thesis will be introducing changes undertaken by the government in order to increase the energetic independence of the country. A rapidly growing economy leads to enormously growing energy consumption, so it is significant for Poland to find various energy sources in order to not to be dependent on energy imports from other countries. In our conclusion we will present our findings regarding our hypothesis whether Poland's accession to the European Union had an impact on the entire economy and competitive advantage in Poland's institutional framework.

The fact that Poland, regardless of the financial crisis, reached very sustainable and rapid economic growth exhibits how well its economy is stimulated. Currently Poland with its strong domestic market is not dependent on single export sector, which makes its economy more resistant against changing market tendencies. "Poland is the only European economy to have avoided the late-2000s recession."[14] In 2009 Poland had the highest GDP growth in the European Union[15] regardless of the fact that its neighbors' economies were struggling with recession. Poland is undoubtedly the most powerful country in the Central and Eastern Europe, with nearly 40 percent of the 500 biggest companies in the region located within its borders.[16] Poland with its prudent economic policies has grown over ten times its former size within the past 20 years mostly due to foreign investments, which equaled 13.6 billion Euros in 2011 and increasing by around 30% compared to a year before.[17] In Poland the labor costs are still relatively low and this is one of the most significant parameters when measuring investment attractiveness.[18] Poland having low private debt is often styled as "a modern-day economic miracle".[19]

[14] http://edition.cnn.com/2010/WORLD/europe/06/29/poland.economy.recession/index.html?_s=PM:WORLD
[15] http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tec00115&language=en
[16] http://www.wbj.pl/article-51029-polish-economy-seen-as-stable-and-competitive.html
[17] http://inwestor.msp.gov.pl/portal/si/338/24597/Inwestycje_zagraniczne_w_Polsce_w_2012_roku__przyblizenie_najwazniejszych_inwest.html (see also Table 2)
[18] See Table 3
[19] http://www.msz.gov.pl/en/p/msz_en/foreign_policy/europe/european_union/poland_ineu/tiger_turned_eagle/

2. Theory

The national competitiveness of Poland can be examined by looking exactly at the transition of the competitive advantage of the institutional framework before and after the European Union accession. The theoretical part of the analysis is based on the theory of competitiveness, competitive advantage and upgrading of the competitive advantage. One source will be the European Union's regional competitiveness measurement, then Porter's diamond and finally the connection between the institutional framework and the competitiveness by Wosiek.

2.1 Competitiveness

Competitiveness is a concept interpreted by the European Commission as:

"(...) the ability to produce goods and services which meet the test of international markets, while at the same time maintaining high and sustainable levels of income or, more generally, the ability of (regions) to generate, while being exposed to external competition, relatively high income and employment levels."[20]

In the macro-economic context it can be derived from the European Commission's definition, that the competitiveness of a nation is actually the productivity of a nation. Porter likewise agrees with the statement:

"True competitiveness, then, is measured by productivity. Productivity allows a nation to support high wages, a strong currency and attractive returns to capital and with them a high standard of living."[21]

Corresponding conclusion was delivered also by Tyson (1992) and Rowthhorn (1999). Concluding, competitiveness can be defined as the ability of reaching own goals on the

[20] European Commission (1999) [in:] Gardiner B., Martin R,. Tyler P. (2004) p. 4.
[21] Porter, M. E., Ketels C. H.M. (2003) [in:] Gardiner B., Martin R,. Tyler P. (2004) p. 4.

national and regional level at the present as well as in the future.[22] Competitiveness is mostly measured by the ability to balanced long term economic growth, improving the live standards and wages of the inhabitants, or attractiveness for external investment purpose.[23] This statement can be visualized by the competitiveness pyramid concept (Table 7).[24] From this figure it can be concluded that at the base for the differences in the competitiveness of regions and countries are: the level of current technical development, abilities and skills of the workforce or general infrastructural, social and cultural environment.[25]

The actual precursor of the theory was Adam Smith in his work "Wealth of nations" in 1776 described the wealth of a nation as productivity, consumption and trade – nowadays it can be termed as gross domestic product. Looking at the Tables 8a and 8b, which show the regional productivity growth across European Union and the Real GDP per Capita Growth across the European Union's regions in the years 1993-2001, it can be concluded that Poland is one of the countries with the fastest regional productivity increase: higher than 3.6 growth measured in worked hours and more than 3.5 GDP growth.[26] Assuming, that according to the mentioned theories the competitiveness is showed by the productivity of a country, we can state that the competitiveness of Poland rose in the time between 1993 and 2001 significantly. This can be a relevant incentive for potential foreign investors, searching for a fast developing country to invest in. After the European Union accession in 2004, there can be observed a constant GDP growth in Poland, with one year exception: financial crisis in 2008 brought a drastic fall in all GDPs of EU members (Table 9). On the base of different surveys and market analysis, it will be examined if this situation has been influenced by the European Union institutional framework.

[22] Cf. Bossak J.W., Bieńkowski W. (2004) [in:] Wosiek M. (2009) p. 173.
[23] Cf. Garelli S. (2006) [in:] Wosiek M. (2009) p.173.
[24] Cf. Gardiner B., Martin R,. Tyler P. (2004) p. 7.
[25] Cf. Wosiek M. (2009) p. 174.
[26] Cf. Gardiner B., Martin R,. Tyler P. (2004) p. 18-24.

2.2 Competitive Advantage

Competitive advantage is a sort of value added and is often called in the theory as the "*superior creation of a value*"[27]. In many aspects of the competitive advantage of a firm theory, Hafer lists few factors potentially creating the value quoted by Gorynia: quality of a product, price level, product specialization and flexibility, accessibility, brand etc.[28] Assuming that the accumulation of national firms create the competitive advantage of a nation, same factors can be served in examining the national competitive advantage. Furthermore, competitive advantage can be distinguished into competitive potential and competitive position, also called as competitiveness ex post and ex ante.[29] This concept can be easily confronted with Porter's concept of upgrading of the competitive advantage.

2.3 Porter's Competitive Advantage of Nations

The diamond model of Porter indicates the microeconomic environment of a business, showing which national internal factors influence the competitiveness. In the research about the international competitive performance, Porter analyses ten countries and their performance based on strategically management: America: USA and Europe: UK, Western part of Germany, Switzerland, Italy, Denmark, Sweden and the Asian countries: Korea, Japan and Singapore. Porter states that a nation, as a "set of contextual variables"[30] is determining the advantage, and this set builds the "national diamond"[31]. This theory implies four forces influencing the competitiveness of a nation: "factor conditions", "demand conditions", "related and supporting industries and the strategy of the firm"," structure and rivalry"[32].

[27] Porter M. E. (1985) [in:] Korsaa C., Jensen L. (2010).
[28] Cf. Gorynia M. (2004) p. 2.
[29] Cf. Gorynia M. (2004) p. 2.
[30] Grant R., M. (1991) p. 535-537.
[31] Cf. Grant R., M. (1991) p. 535, p. 537.
[32] Grant R., M. (1991) p. 535, p. 537.

Under factor conditions are meant all the resources available for the production process. These factors are divided into two types: basic and advanced. Basic are generally speaking, the factors which are given by the nature for example natural resources, geographical conditions as location, weather etc. Advanced factors are those created by humans: infrastructure, labor skills and technology. Next attribute of the diamond is the home demand. The demand of domestic customers shapes the services provided by national suppliers, which determine, that the more demanding are the buyers, the more developed and innovative has to be the supply.[33] All related and supporting industries have been recognized as next factor contributing to the competitiveness. Those create the competition on the market and with the volume of investment make accordingly pressure or support on the competitive strategy. In this point Porter describes the role of "geographic concentrations of interconnected companies, specialized suppliers and service providers"[34] so called clusters, which functions as a support and linkage for firms, ensuring information flow and complementarities among industries.[35] The last factor influencing the competitive advantage is the strategy and structure of a firm and its competitors. The more intensive and persistent the rivalry, the stronger is the resistance of own strategy and structure. For a country what can be meant here, is the strategy it maintains and the internal structure and institutional framework.

Another aspect of the Porter's research is the dynamic concept of upgrading of the competitive advantage.[36] The competitive advantage of a nation can be increased by improving of the components of the diamond. Naturally not every factor can be influenced as for example the basic conditions: weather, location etc., but mostly there is a plenty space for progress. Porter emphasizes that especially the advanced factors of production, as investment into technology, innovation and also service level have a strong influence on the source of competitive advantage.[37] The starting point is the real competitiveness as a result of maintained strategy called by Gorynia as a competitiveness ex-post. However the process of upgrading of the competitive advantage should transform the actual situation into the competitiveness ex-ante and is called also as national or firm strategy.

According to the findings of Porter, we will examine the competitive advantage of Poland looking at the national level: industrial performance as well as on the firm level:

[33] Cf. Grant R., M. (1991) p. 535.
[34] Porter, Michael E. (2000) p. 15–34.
[35] Porter, Michael E. (2000) p. 15–34.
[36] Porter, Michael E. (2000) p. 15–34.
[37] Cf. Grant R., M. (1991) p. 535, p. 537-541.

performance of the firms regarding the product and management policy. For the first one we will look at the institutional framework, the role of government and European Union, export, import and also innovation.

2.4 Institutions and Competitiveness

In the theory of the economy institutions play a directive role, generally they describe certain formal and informal behavior rules in the economic process, forming the business environment.[38][39] Moreover institutions consist of written legal rules but also of non -written social norms, where the non-formal create a base for the formal norms, giving an end of any uncertainty in economic behavior and preventing from ethical dysfunctions such as corruption or egoism. Institutions regulate the decision making about all the economical, ecological and social spheres of business: choice of resources, R&D, efficiency and technology, giving also the conditions for the production growth.[40] As it can be seen in the Table 7, institutions are placed in all factors influencing the productivity. [41] [42]

The influence channels of institutions on competitiveness are illustrated in a graphic (Table 10.) made by Wosiek. She derives it from the Yeager "dependency between institutions and competitiveness" model which gives two dependencies structures: static and dynamic. The first one leads from institutions through transaction cost, creating of new work places and work specialization and division to the productivity, however the other one (dynamic) through organization behavior, creative destruction process and technical progress to wealth. Wosiek identifies that the two models can be put in one, so that the relationship between institutions and competitiveness is clearly linked by transaction cost and human capital.

[38] Cf. Chmielak A. (2002) [in:] Wosiek M. (2009) p.172.
[39] Cf. North D.C. (1997) [in:] Wosiek M. (2009) p.172.
[40] Cf. Wosiek M. (2009). p.175.
[41] Cf. Jewtuchowicz A. (2005) [in:] Wosiek M. (2009) p. 173.
[42] Cf. Bieńkowski W. (2006) [in:] Wosiek M. (2009) p. 175.

2.4.1 Transaction Costs

Transaction cost can be divided into ex-ante- preparation of a contract and ex-post- realization and maintaining cost.[43] Nowadays the concept has been adapted to the circumstances. Bieńkowski for example defines the transaction cost as cost of market entry, settlement, maintaining and market exit cost.[44]

The level of the transaction cost can be determined by the scope of the institutional regulations. If those are favorable for the realization of the business, the transaction costs are low and if not, the costs are much higher. This concerns the national player but also foreign investor. Institutions can regulate the competitiveness and secure the business but can be also a barrier putting a drag on economic growth. For example the transaction cost of starting a business depends on the administrative work an entrepreneur needs to deal with. Also the maintaining cost can vary, if the institutional framework does not regulate the competition, ownership and contract enforcement, the entrepreneur has to reduce the risk on his own. The lower the transaction costs, the more attractive it is for an agent to invest and this is how the productivity can be indirectly positively or negatively influenced.[45]

2.4.2 Intellectual Capital

Intellectual capital can be defined as "intellectual material – knowledge, information, intellectual property, experience – that can be put to use to create wealth"[46] and belongs to the set of intangible assets of a company and that is why, it is not easy to value it.[47] The main components of the intellectual capital are: human, social, structural and relation capital.[48] As previously mentioned, the there is a strong connection between institutions and competitiveness linked by the intellectual capital. Institutions should create and source the

[43] Cf. Wosiek M. (2009) p.178.
[44] Cf. Bieńkowski W. (2006) [in:] Wosiek M. (2009) p. 178.
[45] Cf. Wosiek M. (2009) p. 179.
[46] Cf. Stewart, T.A. (1997) [in:] Lin,C. Y., Edvinsson, L. (2008) p. 525-545, p. 526.
[47] Cf. Wodecki, A. (2006).
[48] Cf. Wosiek M. (2009) p. 181.

intellectual capital. Wosiek stresses three main aspects of the intellectual capital in context of the institutional framework. The first are non-written norms: culture, religion and the attitude towards work, which determine the investment environment, innovation incentives and business culture. Society with conservative rules will not appreciate and accept too much innovation and in this way block the further development.[49] The business culture creates a specific attitude towards work. A weak motivation might cause slowing down of the productivity and lacks in exploitation of the firm specific knowledge. Moreover the moral resistance on the temptations and social trust can influence the business negotiations and cooperation within the network.

Wosiek concludes that the regional competitiveness, which can be here overtaken into the wider concept of national competitiveness, can vary according to the two influencing channels: transaction cost and intellectual capital. Both can be stimulated by the evolution of the mentioned factors itself (shown in the Table 10.) but also through arising opportunities, where the social potential adapts to the needs of the situation. As an example can be mentioned a modernization or restructuring.[50]

[49] Cf. Wosiek M. (2009) p. 182.
[50] Cf. Wosiek M. (2009) p. 183.

3. Institutional Framework of Poland and its Transition after the Accession to the European Union

After 15 long years of transformation and very deep reforms, on Mai 1st 2004 Poland became a full member of the European Union. This incredible moment was not an end of a very hard work, but just the beginning of new challenges which Poland had to face, regarding deep changes which it still had to undertake. Joining the European Union had a multidirectional impact on the Polish economy. In many cases it was rather indirect impact, which resulted from the fact that Poland received funds from the European Union and their amounts were dependent on various factors and commitments, which Poland had to meet. The funds from the European Union helped Poland become one of the fastest growing economy in the world and the only country in the entire European Union, which did not suffer from the financial crisis of late 2000s, but due to the complexity and requirements of the funds, they affected the situation in Poland on many aspects.

Legislative changes which Poland had to face refer to the European Unions' standards such as direct legal requirements, standards and certification of security, safety requirements in the workplace or environmental standards. These changes created a new institutional environment in the country. Poland had already implemented many of the European Union's regulation during the 90s and at the beginning of 2000s as the Polish government was negotiating its accession and for that reason the reformation was not as rapid as the one at the beginning of 1990s. Another significant aspect was that the European Union gave Poland relatively long period of time for implementation some of the new laws. For instance the country had 10 years to adjust its ecological standards to the ones required by the European Union. It seems that a large amount of the necessary legislative adjustments and requirements regarding the economy had already been made prior the accession, and the additional load of adjusting the institutional environment, after Poland became a member of the European Union, associated with the introduction of remaining regulations was not as large.

On the one hand there was a burden of adaptation to the regulations and standards, but on the other hand there was a new demand for services and products which this burden created and from which many entrepreneurs in Poland have been profiting. Multiple markets which had not existed before were created and only that fact alone already increased the employment in Poland. For instance, the standards and requirements of the European Union relating the protection of the natural environment obligated Poland to reduction of gas emission, decline in waste disposal etc. This created a demand for products and services to help keeping clean environment, ultimately a new structure of demand was shaped.

3.1 Procedural and Functional Changes

Other significant aspects of the institutional environment, which had to be adjusted after the accession to the European Union by Poland, were the procedural and functional changes. The requirements of the European Union's law made the operations of governmental divisions more business friendly and efficient, although at times it might seem complicated itself. It requires following sometimes very complex procedures and fulfilling a number of requirements, which might seem unnecessary. For instance the assessment of impact of a given investment on the environment requires a submission of a number of applications to a various institutions and obtaining their opinions. The European Union on one hand introduces a very liberal economic system, which deregulated the Polish economy, but on the other hand it is a system which imposes high bureaucratic obstacles.

Poland experienced an entire cycle of reformations, which in fact transformed the complete system from fully regulated economy, which means that the economy was fully controlled by the government, to a highly deregulated economy, which is free and efficient marketplace without any unnecessary involvement of the government. It took years for Poland to adopt its laws to the European Law by introducing new regulations which were conform to European Union's standard, but also needed to be carefully adjusted to the Polish reality and capability.

For instance, the production of electricity is historically mainly based on coal in Poland. Unfortunately, the process is characterized by a very high emission of CO_2. "The Belchatow Power Station is a large 5,053 MW lignite-fired power station situated near Belchatow in Lodz Voivodeship, Poland. It is the largest thermal power station in Europe, and one of largest fossil fuel power stations in the world. It produces 27-28 TWh of electricity per year, or 20% of the total power generation in Poland."[51] The power plant was modernized from a subsidy from the European Union in 2011, which reduced both fuel consumption and emissions. Unfortunately although it is one of the most polluting powers stations in Europe[52], Poland does not have any alternative as one now, other than building a nuclear power plant. This exhibits that although Poland should drastically reduce its CO_2 emission as a member of the European Union and Kyoto Protocol state country, it is not capable of doing that within the next years without becoming fully dependent on foreign energy sources.

Another important aspect of the new institutional environment in Poland after its accession to the European Union was regulations associated with the arbitration and appeals procedures and their timeframes. Changes made in accordance with the European regulations improved the credibility of the administrative process in the eyes of businesses and especially foreign investors, although in the first years of Polish membership in the European Union, Poland faced many difficulties meeting the standards and requirements of the European Union by its regional governments and offices. Naturally it was not expected, that Poland would introduce all the necessary solutions on the day if the accession, but that the process would take long years and a lot of patience from both side, namely European Union's and Polish. Employees of regional governments and offices had to learn how to implement new regulations on a daily basis, which required a lot of training and practice.

For instance, if Poland did not fulfill some of European Union's commitment to arbitration, a company that experienced a loss has the right to claim a compensation, which enables the legal system of the European Union. According to this system, a physical or legal person can sue own country or any other member state of the European Union, in order to implement a new law. It is also important to bear in mind, that the European Court of Justice, which determines whether the new laws should be implemented, demand relatively long time before it announces its decision. Normally one should expect a timeframe of two to three years and for that reason undoubtedly the positive impact of changes resulting from European regulations is very time consuming.

[51] http://www.yourindustrynews.com/alstom+signs+a+%E2%82%AC160+million+contract+with+pge+to+modernise+the+be%C5%82chat%C3%B3w+power+plant+in+poland_28932.html
[52] WWF European Policy Office (2007).

3.2 Abolishment of Customs Inspection

Another significant change regarding the economic system in Poland was to provide an access to its market. It was not only the abolition of duties, since they did not exist for the European Union's state members anyway, but were present only in case of some agricultural commodities. The main change was the abolishment of customs inspection, which in the past significantly lengthened import and export real times, and had a very negative influence on willingness of other countries, or businesses located within them, to do business with Polish enterprises. The customs inspection was an extremely important factor that did impede exchange of goods and eventually the entire economy.

From entrepreneurs' point of view, who had been interested in purchasing products in Poland prior to its accession to the European Union, importing associated with customs inspection caused additional costs. They were interested in Polish products only then, when the added expenditures were compensated accordingly by much lower prices. For products which could have been produced in many other countries, especially member states of the European Union, this factor played a deciding role. Oftentimes importers were discouraged by the bureaucracy bourdon and chose more expensive products from other countries, so the abolition of border controls was a very strong incentive for entrepreneurs especially from the European Union to import products made in Poland.

An important outcome of accession to the European Union by Poland was also the amount of duties paid by third party countries, meaning the countries outside of the European Union. Poland had to namely significantly reduce the amount of duties, for instance prior Mai 1st 2004, good imported from countries outside of the European Union and the Central European Free Trade Agreement, were subject to 35% duty. After the adoption of the European regulations regarding the Common Customs Tariff by Poland[53], these goods were subject to only 10% duty. Thus, in case of direct import of products from the United States of America, Russia or Japan, the duty cut equals to 25%. On one hand it was a huge cut of revenues for the budget, but on the other hand the reduction of duty was an enormous incentive for the foreign exports to Poland from countries outside of the European Union.

[53] http://ec.europa.eu/taxation_customs/customs/customs_duties/tariff_aspects/customs_tariff/index_en.htm

Providing the free access to the market simultaneously meant also lifting many other barriers. For instance, the requirement for double certification, namely obtaining one certification valid for goods sold in Poland and another one valid for goods, which were supposed to be exported, were replaced by one certification valid for the entire European Union. The harmonization of certification procedures definitely reduced the bureaucratic burden for enterprises.

Extending eventual market for own products was an enormous advantage also for Polish manufacturers. Before 2004 their duty free market had equaled to around 38 million consumers, and after Poland accessed the European Union, that market increased to over 450 million customers. The number of potential buyers grew intensely taking into consideration fact, that a lot of Polish products were cheaper than then ones from the old member states, due to cheap labor costs in Poland.

Comparing the economies of the European Union with the Polish economy it can be seen that becoming a member completely liberalized and opened the Polish market. After joining the European Union, Poland had to accept the economic agreements, or became a part a system of economic agreements with the other countries, including the ones from outside of the European Union. In fact, Poland had to terminate its own contracts with countries, which were not members of the European Union and replace them with the system of economic agreements and regulations provided by the European Union. Economically Poland got a much better protection of its interests in the markets of third party countries, which is based among other things on Poland becoming a part of an economic security system provided the European Union. Liberalization of the market, abolishment of customs inspection, but also reduction of duties undoubtedly had a huge impact on the development of the Polish economy.

3.3 Transition of the Governmental Bodies

After Poland joined the European Union, the Polish government was aware of the fact that research and development of innovative products was the future of the entire economy.

The government authorities knew that it was their responsibility to create business friendly environment, in which companies could concentrate on inventing modern products, for which there would be not only high domestic demand, but also large foreign demand. The authorities faced the challenge of simplifying the bureaucratic burden and decreasing the expenditures of running a business for entrepreneurs, especially if they were concentrating on innovations.

Setting strategic priorities, defining common policy goals and distribution of the budget are tasks of the Council of Ministers and the Prime Minister. The Science and Technology Development Council was created in January 2005 in order to make recommendations to the Council of Ministers and ultimately to the Prime Minister regarding the scientific research and development, but also technology and innovation in the Polish economy. Until October 2005, the obligation for making adjustments, brining new ideas on how to improve the system and handling the institutional framework for the domestic research and development of technology and innovation was divided among three ministries, namely the Ministry of Scientific Research and Information Technology responsible for the science and technology aspects, the Ministry of Economic Affairs, which was responsible for the economic aspect of research and development of technology and innovation. The third ministry responsible for the educational aspects was the Ministry of National Education and Sport.

One of the main tasks of the three above mentioned Ministers is the preparation of new legislation, which are later taken into consideration by the Council of Ministers and after the eventual regulations are authorized, they are passed on to the Parliament as a law proposal. Once the proposed legislations are approved by the Parliament, this body takes decisions regarding the yearly financial planning as budget and taxes. This governmental body takes the final decision regarding the extent of the budget assigned to the research and development of technology and innovation, which has a significant impact on the undertaken activities of government-funded research organizations and institutions throughout the entire year.

The Parliament typically always rely on the expertise of the three mentioned Ministers regarding the necessary law and regulations adjustments to the research and development of technology and innovation sector, although theoretically it could make a use of its authority to propose a new legislation and then validating it. Importantly also the activities which the Private Sector undertakes to a huge extend depend on the decisions taken by the Parliament, especially regarding various investment incentives as tax exemptions, governmental grants, limits of non-taxable income for entrepreneurs, which all enhance companies to invest in the research and development of technology and innovation sector.

3.3.1 The Committee of Scientific Research

The Committee of Scientific Research which was founded in 1991, during the first reformation phase after the new democratic government was established. It was in charge of the allocation of annual budgeting for scientific research and development in Poland, such as distributing the money necessary for statutory objectives of universities and governmental research institutes, but also for development of infrastructure of the mentioned institutions, for instance expanding computer networks or libraries. The Committee was also responsible for organizing of international exchanges and participated in the work of Polish integration with the European Union.

The most significant role which the Committee of Scientific Research played was definitely funding of research in the form of governmental grants. They amounted to a very important portion of the budget on education, which between 1991 and 2005 equaled to around 30%, thus the policy of granting them to a large extent determined the direction of the scientific research in Poland in that time[54].

3.3.2 The Ministry of Scientific Research and Information Technology

In 2003 the Ministry of Scientific Research and Information Technology was founded and serves until today as a direct successor of the Committee of Scientific Research, which was completely reorganized in 2005. A second governmental body was founded in its place serving solely as advisory institution, namely the Council of Science. The Ministry of

[54] http://kbn.icm.edu.pl/index_p.html

Scientific Research and Information Technology after taking over the responsibilities of the Committee of Scientific Research, is today responsible for budgeting of the research and development of technology and innovation, thus it determines not only the direction of scientific progress in the Polish educational system, but also the direction of progress of the economic system by setting research priorities and financing various necessary projects with governmental grants.

Until October of 2005, the supervision over the universities was executed by the Ministry of National Education and Sport, which was also essential not only for the educational system, but also for innovations and improvement of the economy. This Ministry was also providing funds for their didactic responsibilities, but also gave directions for education policy. The Ministry of National Education and Sport was not in charge of financing universities' research and development activities, but rather for providing funds for educational work of researchers working at universities. Oftentimes it was scientists' only source of income, thus had a significant impact on the research and development in Poland at the time, as it gave a possibility to many people to work on innovation, rather than finding another employment in order to provide for their living.

3.3.3 The Ministry of Education and Science

With the decision of the Prime Minister, for a period of seven months, between October 2005 and May 2006 the two Ministers, namely the Ministry of Scientific Research and Information Technology and the Ministry of National Education and Sport were merged. The new Ministry was named the Ministry of Education and Science and basically took over all the responsibilities, which before were assigned to its precursors. In May 2006, this structure was reverted to the previous situation to form the Ministry of Science and Higher Education and the Ministry of National Education, which exhibits strivings of the Polish government to improve the research and development of science sector and how these strivings oftentimes turned into costly and unsuccessful attempts.

The consolidation of the two Ministers had no large impact on the situation of the education sector, nor on the research and development of technology and innovation policies, as the merged Ministry shortly after it started adjusting to the new situation and coordinating of all the aspects of its responsibilities, it was divided. The newly founded Ministers, namely the Ministry of Science and Higher Education and the Ministry of National Education took over the responsibilities of the precursors of the Ministry of Education and Science with a significant exception, namely as of that reform, the control of the higher education in Poland was assigned to the Ministry of Science and Higher Education.

3.3.4 The Ministry of Science and Higher Education

The Ministry of Science and Higher Education was now led by the minister who previously remained as the head of the Ministry of Education and Science and took charge over the research and development of technology and innovation laws. Already between 1972 and 1987 a similar situation took place, when the control over the higher education system was to a science ministry from an educational ministry[55]. However this time the deep reformation was supposed to create a coherent research and development policies, in order to improve the educational and economic systems, by enhancing the bureaucratic burden of the governmental administration.

The Ministry of Science and Higher Education was now responsible for all the aspects of the scientific budgeting, namely allocation of resources and giving the direction to the research and development of technology and innovation between scientists and professors, but also setting the priorities between research and educational objectives, which was now easier as only one Ministry was responsible for these aspects of the science sector.[56]

[55] http://isap.sejm.gov.pl/DetailsServlet?id=WDU19720110071
[56] Kudrycka B. (2011) p. 20.

3.3.5 The Ministry of Economic Affairs

Formerly known as the Ministry of Economic Affairs and Labor, the Ministry of Economic Affairs is responsible for various significant programs for the entire economic sector, such as the European Union Cohesion Fund or Sectorial Operational Program - Improvement of the competitiveness of enterprises. Its main tasks are forming conditions for business friendly environment, promoting competitiveness and innovativeness in the Polish economy, enhancement of economic cooperation with foreign countries, but also promotion of the domestic economy, including support of the improvement of exports and investments abroad and also foreign direct investment.

The Ministry of Economic Affairs also overlooks number of institutions significant for the Polish economy, such as the Polish Patent Office, the Polish Center of Accreditation and the Polish Agency for Enterprise Development. Until July 2007 the Ministry of Economic Affairs was also in charge of the tourism sector, which then was taken over by the Ministry of Sport.

3.3.5.1 The Polish Patent Office

There are various intermediate bodies which were founded by the Polish government ministries in order to maintain the progress of science, competitiveness and attractiveness of businesses located in Poland. One of them is the Polish Patent Office, which is responsible for securing and protecting legal ownership over industrial intellectual property, but it also participate in cooperation of international institutions under international agreements contained by the Polish government regarding industrial property, in particular the Paris Convention.

3.3.5.2 The Polish Center of Accreditation

One of the main institutions in the Polish research and development sector of technology and innovation is the Polish Center of Accreditation, which performs the assessment and eventually confirms competences of research laboratories, certification bodies, but also inspects other institutional entities, which are evaluated on the basis of standards and regulations of the European Union.

3.3.5.3 The Polish Agency for Enterprise Development

For many the most important of all the intermediate bodies founded by the government is the Polish Agency for Enterprise Development, which is responsible for managing funds from the budget and the European Union in order to support of small and medium enterprises, but also enhance human resource development. One of the important programs supervised by the Polish Agency for Enterprise Development is the annual competition "Polish Product of the Future"[57], which aims to promote new and innovative technologies in Poland.

There are many other intermediate institutions founded by the government, which enhance the research and development of technology and innovation in Poland, such as the National Small and Medium Enterprise Services Network or the Foundation for Innovation, Restructuring and Entrepreneurship, which support business countrywide in their efforts to implement new products which might improve the entire economic sector of Poland. Moreover, many other Ministers have their own research and development departments and thus they have very marginal influence on the nationwide policies regarding the research and development of technology and innovation, but still work on improving their own sectors.

[57] http://www.ppp.pi.gov.pl/ppp/chapter_86103.asp

3.3.6 Research and Development Institutions in Numbers

In Poland there are over 800 institutions active in the research and development of technology and innovation sector, which significantly contribute to the growth of the Polish economy in the recent years. These institutions can be divided into three main government founded categories, namely the research entities which are a part of the Polish Academy of Science with over 80 research and development units[58]. The second category form over 130 universities and other types of research and development performing higher education institutions, structured in faculties, departments and institutes[59]. The third category of the government founded institutions contributing to the research and development of technology and innovation in Poland are over 200 various entities, which are supervised and funded by various ministries.

Scientists and professors are in most cases governing research institutions for which they work and have their own representatives in the Science and Technology Development Council, which simultaneously assures them involvement in the process of preparing new legislations in the research and development sector at the highest strategic level.

Currently there are around 2 million students in Poland and over 23% of them study business and administration[60], which exhibits the great potential of highly skilled workers in Poland and the prospective of future economic growth in the country. An important fact is that the number of foreign students in Poland is rapidly increasing, which shows that also abroad the higher education institutions are earning a good reputation and this fact is encouraging foreign students to seek their education in this Eastern-European country. The number of students from abroad being educated in Poland at the present equals around 25 thousand people compared to around 8 thousand in 2004 just before Poland became a member state of the European Union[61]. Importantly around 25% of the foreign students in Poland are enrolled in economic majors. The mentioned statistics exhibit the importance of economy in Polish society, which associate good economical preparation with their potential success in business sector in the future.

[58] http://www.instytucja.pan.pl/index.php?option=com_content&view=article&id=6&Itemid=33
[59] http://www.nauka.gov.pl/szkolnictwo-wyzsze/system-szkolnictwa-wyzszego/uczelnie/uczelnie-publiczne/wykaz-uczelni-publicznych-nadzorowanych-przez-ministra-wlasciwego-ds-szkolnictwa-wyzszego/publiczne-uczelnie-akademickie/
[60] Lyson P. (2012) p. 32.
[61] Lyson P. (2012) p. 33.

3.4. The Policy Framework

The research and development of technology and innovation legislations in Poland have been transformed concentrating on three various aspects since the accession to the European Union on May 1st 2004. “Technological and innovation policy comprises at least three categories of actions: priorities, incentives and institutions”[62] as the National Development Plan of April 2004 states in which the direction in which the Polish economy should evolve was scratched by setting broad priorities.

The Ministry of Science and Higher Education and the Ministry of Economic Affairs are both responsible for encouraging discussions regarding designs of new regulations and eventually implementing new general policy framework of research and development of technology and innovation. The Ministry of Economic Affairs is principally in charge of the new regulations regarding innovation, which contributes to the economic development of the country, whereas the Ministry of Science and Higher Education is mainly responsible for regulations regarding scientific research.

After either of these two ministers proposes a new strategic document setting goals regarding research and development of technology and innovation, it is in the competence of the Council of Ministers to approve a given document. Sejm, which is the lower house of the Polish Parliament, or Senate, which is the upper house of the Polish Parliament, have the competence to pass bills and bounding legal acts regarding the research and development of technology and innovation proposed by either the Ministry of Science and Higher Education or the Ministry of Economic Affairs.

According to the National Development Plan, the general research and development of technology and innovation legislations in Poland should be fooling the priorities set out by the plan, which was passed on June 22nd 2004 by the Council of Ministers. The document was a structural action plan that Poland, as a member of the European Union intended to implement between 2004 and 2006. The investments and activates defined in the National Development Plan were party financed by the European Union structural funds and were particularly intended for three aspects of economic development, namely infrastructure development, business development and human resource development.

[62] "National Development Plan", Law of 20th April 2004, Dz.U. 2004, No. 116 item 1206, article 5, point 6

The National Development Plan was made of a number of strategic documents covering various aspects and objectives. The broad objectives were divided into sub-objectives or strategic goals, which had to be reached in order to fully utilize the structural funds provided by the European Union. A series of strategic documents regarding the research and development of technology and innovation was developed by the Ministry of Science and Higher Education or the Ministry of Economic Affairs after the accession to the European Union by Poland. The following documents have constituted the policy framework of the objectives and projects undertaken by the Polish government and had a large impact on the development of the economic sector and the transition of the institutional environment:

In January of 2003, the Ministry of Economic Affairs proposed the National Development Plan for years 2004-2006, which after being approved by the Commission of the European Union, eventually was approved in June 2004by the Council of Ministers in Poland:

- In 2003 the Pro-Growth Activities Plan for Years 2003-2004 was approved
- Also in 2003 the Ministry of Economic Affairs introduced strategic documents setting out objectives in regard to improving the economic sector, namely "Increasing Innovativeness of the Polish Economy until 2006"
- In March 2004, the Council of Ministers approved the document proposed by the Ministry of Science and Higher Education and the Ministry of Economic Affairs, which collaborated on preparation of strategy of constant increase of research and development of technology and innovation expenses intended to fulfill the Lisbon Strategy.
- The Ministry of Science and Higher Education presented a document in November 2004, which significantly contributed to the improvement of the research sector, namely "Directions of the Development of Science and Technology in Poland until 2020".
- On month later, in December 2004 the Ministry of Science and Higher Education introduced the strategy document "Science, Technology and Innovation Policy for Poland until 2020"
- Eventually in September of 2005 the National Development Plan for years 2007-2013 was approved by the Council of Ministers.[63]

[63] http://www.funduszestrukturalne.gov.pl/Wiadomosci/Narodowy+Plan+Rozwoju/

Apart from the strategic documents, legal acts were introduced in order to enhance incentives for investments of foreign and domestic investors into research and development of technology and innovation. They had a huge impact especially on increasing the Foreign Direct Investment in Poland and the following legal acts were the most significant:

- The Law of October 8th 2004 regarding the Rules of Financing Science (Journal of Laws 2004, No. 238, item 2390 No. 273, item 2703, Journal of Laws 2005, No. 85, item 7), which effectively came into force on February 5th 2005.
- The Law of December 22nd 2004 regarding the Support to Innovation, when the Polish Agency for Enterprise Development was created, made a significant improvement in the polish economic sector.
- An important law of July 27th 2005 regarding the Higher Education was approved by the Sejm, which is the lower house of the Polish Parliament, on June 3rd 2005 and became effective as of August 30th 2005[64].
- The Law of July 28th 2005 regarding the Public-Private Partnership, also called PPP, was an important regulation on financing of investments from both private and public funds.[65]

The transition of institutional environment in Poland after its accession to the European Union on Mai 1st 2004 was a very complex and long process, which as we can see it today, was very successful. It enabled enormous changes not only in the Polish economy or business sector, but in daily life of the entire nation. Many foreign direct investments were made, which without incentives made by the changes in Polish legislation, would not have been possible. Naturally it took many years to create the current economic environment and encourage the biggest companies in the world to trust Polish law-makers and locate their businesses in this post-communist country, which turned into one of the fastest growing economies in the world.

[64] http://isap.sejm.gov.pl/KeyWordServlet?viewName=thasP&passName=Polska%20Agencja%20Rozwoju%20Przedsi%C4%99biorczo%C5%9Bci

[65] http://biuletyn.piszcz.pl/index.php?option=com_content&view=article&id=207:problemy-interpretacyjne-na-gruncie-nowo-obowizujcych-ustaw-o-wspopracy-publiczno-prywatnej-cz-i&catid=70:maria-witkowska&Itemid=47

4. Private Sector in Poland and its Transition

After 1989 movement, when prices dropped and salaries increased, Polish economy was threatened by the risk of hyperinflation. The new government of Tadeusz Mazowiecki with the finance minister Leszek Balcerowicz, decided to set a salary index to control their growth and equalize them. Moreover he created an economic plan where he described all reforms Poland should implement. The goal was to decentralize the economy, reactivate the territorial governments, privatization, changing the taxation system, liberalization of the international trade and commercialization etc.

Polish private sector has a long tradition. After the Second World War the private sector which was represented by mostly small and medium enterprises developed, but the process was very slow. The reason was the political system of Poland which was till the year 1989 communism. The interference of the government into the economical regulations was very high. Strict policy controlled everything from prices to wages. Actually before 1989 the private sector took only a small percentage of the market. Small florists, candy shops, hair dresser, tailors etc. were private, mostly family owned. On the bigger scale, there existed societies as for example society of tailors and those were public companies.

The polish government was not very sympathetic towards private business, which was seen more as threat for the strict and dominant policy of the communism. The development of the private sector was enabled by the industrial and structural changes from 1989 by Leszek Balcerowicz prepared new acts regulating the economy, mentioned above. Those were more supportive for the development of private enterprises but also privatization of the big public firms.[66] However the internal and external factors became more favorably for the existence of the private sector, the economic situation still set many limits as for example high interest rates of loans, high inflation and adverse laws: the maximum of employees was five people. Privatization did not include all the sectors. Some of them were excluded by being declared to be not strategically worth or too sensitive.

[66] Cf. Kaliński J. (2004) „Gospodarka Polski w procesie transformacji ustrojowej (1989-2002)" Journal Bank and Credit, Nr. 1, Warsaw,Poland [in:] Narodowy Bank Polski (2007): „Gospodarka Polska na przełomie wieków". Departament Komunikacji Społecznej, Warsow, Poland

4.1 Overview of the History. Influence of the Institutional Framework on Private Sector

First phase of the transformation was noted between 1989 and 1993 where the growth of the number of SMEs reached 162%. The newly introduced act about unconstrained entrepreneurial freedom encouraged to entrepreneurial actions. New firms were filling the gaps between the public companies or transforming them to private firms. Nevertheless after some years of assimilation to the new rules and increasing liberalization, inflation started to decreased, and the money flow became more fluent. On one hand market observed an increase of the SMEs with domestic capital and even bigger one with foreign capital, on the other a dynamic process of creation and bankruptcy of many firms. This phenomenon can be compared to the concept of creative destruction by Josef Schumpeter.[67]

From 1994-1997 industries became more diversified and SMEs became more powerful, representing approximately 99% of all companies, and also 99% of the new created firms were in the private sector. Moreover the inflow of foreign capital into the small and medium companies became more and more popular. In this period firms became very efficient, improved the technical equipment and enlarged the number of employees. That is why significantly increased the GDP, which grew since 1989 by 7%, the budget deficit decreased and the unemployment rate raised. An important aspect of the development became international trade. Despite many difficulties as not stable polish currency “Zloty” and not enough skilled management, Polish SMEs exported and imported more and more goods to and from Europe. In comparison to the EU countries, Poland still had more small firms employing less people than average European company. This became one of the points to improve with the help of the EU.[68] As of an active reaction of the government can be recognized an initiative governmental program started in 1995 called “Small and medium enterprises in the national economy. Policy changes towards SMEs”. The return was immediate when in 1996 numerous new firms appeared at the market scene.[69]

After the phase of an intense economic growth, 1998 Poland noted a significant slowdown of creation and development of SMEs. The GDP growth, employment rate and the

[67] http://www.sceno.edu.pl/print_content.php?dsid=&cms_id=1407&ctr=c&tr=&lang=pl
[68] http://www.sceno.edu.pl/print_content.php?dsid=&cms_id=1407&ctr=c&tr=&lang=pl
[69] Cf. Jaworski J. (2011) p. 161-176.

speed of investment decreased. The proportion of new firms to the closed once became negative. The indirect reason for this stagnation was economic crisis in the neighborhood countries, especially Russia, but also a conscious policy of the polish government to "cool down" the economy. Factors as instable and ambiguous law caused excessive government interferences, having a negative influence on the willingness to expand and grow, but also invest in research and innovation.

The unfavorable conditions forced polish SMEs to fight more intensively for their existence. They became more effectively and with the time even with fewer employees achieved higher results. In consequence after 2002 the negative course was fought back. The economic development increased again and also the number of employees went up, what cause a transformation of many small into medium size companies. The public sector still remained strong, due to the voluminous resource condition. The statistics say that between 1999 and 2005 private sector represented only 20% of the GDP and employed 28% of the workers.

In 2004 Poland joined the European Union, what stimulated the growth again, by receiving numerous funds and grants for development of the infrastructure and R&D implementation. Nevertheless the lost determined by increase in prices of resources and energy cost had to be balanced with higher exportation rate. Stagnation in the old member countries influenced positively the imports from one of the new member country: Poland. The integration into the EU market abolished many trade barriers and restructured the rigid regulations about competitiveness. In result SMEs in Poland made out 99% of all enterprises and played a significant role in creating the GDP. The majority are small firms, which are easier to keep, since employ till 4 employees, the average cost of maintaining of a working place is lower. Moreover they introduce more variety in the market and are easier to restructure and adapt to the market needs.[70]

From the time perspective, polish private sector went through all difficulties, cause by different political systems and now is booming, enjoying all advantages of free trade, open market, transparent organizational structures and fast information flow. Private sector absorbed many public enterprises since 1989 where the privatization process was allowed. Nowadays sectors as healthcare, energy and transportation are increasing their working field in the private manner. The most popular functioning structure among SMEs is the linear

[70] Cf. Jaworski J. (2011) p. 161-176.

structure, not only at the very beginning of their existence but also in the more advanced phases.[71] This causes higher transparence, faster decision making process and bigger effectiveness.

[71] Cf. Jaworski J. (2011) p. 161-176.

5. Agriculture in Poland

Agriculture always has been very relevant part of the economy. It is the oldest, the strongest and most important sector in Poland. Agriculture was also one of the main income sources for the national budget and for long time also the biggest employer in Poland. With development of the service sector, the importance and ratability of agricultural activities diminished. During the Second World War many territories have been destroyed by bombing and passing armies. After the war the borders of Poland changed and Poland lost many agricultural areas. The total territory of agricultural lands in Poland make 58.7% out of the whole territory of the country (18.3 million ha), out of that 44.5% arable lands, 13.2% meadows and pasture and 1% orchards[72].

5.1 Overview of the History. Influence of the Institutional Framework on Agriculture

In 1955 the policy of the government caused a massive private passing of the agricultural territories to the State Treasury, in return for pension benefits and preferences in the agricultural policy. The sector almost fully changed from private to state-owned. Farms became small enterprises with living possibilities, gathering often whole families at the rural areas. The State Agricultural Farms existed till the transformation of the polish system into open economy, in 1989 when the government stopped giving them financial support. The PGR either went bankrupt, or became owned by the Agricultural Market Agencies or employee-owned companies. Till then government was protecting the agricultural sector from foreign competition, but also blocked the possibilities of exportation. After 1989 agricultural sector became almost fully privately owned and did not develop very well, becoming often conducted for private purpose. As one the steps for the accession of the European Union, Poland created in 1992 together with Czech Republic, Slovakia and Hungary the CEFTA

[72] http://encyklopedia.pwn.pl/haslo/4575033/polska-gospodarka-rolnictwo.html

(also joined later by Romania, Bulgaria and Slovenia)- agreement about the free trade. This strategical move initiated the trade, the gross domestic product increased, what caused the growth of consumption and higher competition on the agricultural market.[73]

The European Union entry strengthened the agricultural sector the most, by modernizing and restructuring it. Through the financial support from the structural funds, farmers introduced new technologies, purchased new agricultural machinery, increased the effectiveness and efficiency of the food production. With the European Union accession, also drastically rose the price of land in Poland, what means rising the value of the agricultural farms. Nevertheless the open market within the EU countries had its price. The institutional framework of the European Union implemented in Poland many new regulations unifying the agricultural sectors across the EU countries and demanded high investment outlays on the food producers. The concentration of the market changed from agricultural products' supply into "*production of agri-food processing*"[74]. The most innovative part became production of biofuel, which is constantly developing till today.

Disappearing trade barriers within the EU countries caused high development of imports and exports. Polish agriculture became that competitive that the value of exports soon exceeded the value of imports. The growth number of population increased the demand for food and strengthened the agricultural sector. Also spreading consciousness about the food quality, created polish farms to leaders in the market, who still follow natural agricultural methods.[75]

[73] Cf. Kaliński J. (2004) [in:] Narodowy Bank Polski (2007).
[74] Cf. Zielinska I., Dabrowska M. (2008) p.55-70.
[75] Cf. Zielinska I., Dabrowska M. (2008) p.55-70.

6. The Situation of Poland in Comparison to Other Central and Eastern European Countries

Poland belongs to the group of post socialistic Central and Eastern European countries. Poland geographically belongs to the Central Europe, however is often called as an Eastern country. Matkowski in his research about polish economy compares it with Czech Republic, Slovakia and Hungary, calling all four countries Central Europe, with South-Eastern countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Serbia and Montenegro and Slovenia), and other Baltic countries (Estonia, Latvia and Lithuania). The territory of the all three groups of countries together measures 1.343 thousand km^2 with 123 million inhabitants, what shows the relevancy of this region.[76]

6.1 Economy

The status of the economy can be well epitomized by the gross national product. The GNP of Central, South-Eastern and Baltic countries measured by the exchange rate took in year 2002: 456 milliards USD, what makes it 1.4% of all global income and production and 5.6% of the 15 old EU members. GNP measured by the purchase power parity (PPP) took 1.209 milliard USD or 2.5% of global income and production and 12.3% of the 15 old EU members. Comparing the regions with each other, Poland belongs to the strongest one (Central Countries), which generates 63% of the total production of all the regions. Calculating the annual income per capita, taking into consideration the exchange rates and differences in prices, Poland has the lowest income from all four countries of the region. Polish income per capita had (in 2002 before the EU accession) approx. 10 000 USD, whereas the other had approx.13 000- 15 000 per person.[77] Through the years of European Union membership, the diversification among the annual income has diminished- EU accession had a positive impact on equalization of the income level. Moreover after the European Union

[76] Cf. Matkowski Z. (2004) p. 59–91, p. 119–120 [in:] Narodowy Bank Polski (2007) .
[77] Cf. Matkowski Z. (2004) p. 59–91, p.119–120 [in:] Narodowy Bank Polski (2007)

entry in 2004, the speed of development of countries like Poland, Czech Republic, Slovakia and Hungary became much faster, what can be shown in decreasing difference to the annual income of old EU members (15 countries). The difference became the smaller the better the market conditions: tighter trade and capital relation.[78]

The spreading tendency in the world is decreasing agricultural and industrial sector (heavy industry, mining) and increasing services (financial, trade etc.). Comparing Poland with other three Central European countries, in 2002 the GDP consisted of 3% agricultural sector, 30% industry and 66% services. Agriculture of Poland had the lowest value among the compared countries, however service was very high. As a result, the consumption level in Poland both public and private was higher than in the other countries. There can be observed a positive correlation between the consumption level in the national income and income level per capita. The more developed is a country, the higher are possible savings.[79] In 2012 agricultures remained still by only 3.5% of GDP, services 62.3%, and industry 34.2%, what confirms that polish economy develops only by quality without any drastic changes.[80]

6.2 Economic Development

Countries of Central, South-Eastern Europe and also those called Baltic countries, have similar history. All of them went through changes in the system to function properly as a country. Economic and political system changed what first implied an overall depression, indicated incentive for development and growth. All countries mentioned a positive growth of the real GNP, what made them fastest developing economies in the world. Poland, same as Albania had the highest production rate growth which took 35-40%, strongly pushed by growing exportation. Export sector was very successful, since all countries had competitive products, with high quality and low raw material prices.[81]

[78] http://akson.sgh.waw.pl/~zme2/6.pdf
[79] Cf. Matkowski Z. (2004) p. 59–91p.119–120 [in:] Narodowy Bank Polski (2007).
[80] http://www.indexmundi.com/poland/economy_profile.html
[81] Cf. Matkowski Z. (2004) p. 59–9, p. 119–120 [in:] Narodowy Bank Polski (2007).

The European Union accession did not stop, but even more accelerated the growth. As already mentioned, open markets both for foreign enterprises in Poland and Polish ones abroad, caused higher import and export activities. Also from the financial aspect, EU accession supported more foreign direct investment movements; bringing more financial capital, as well as access to funds. This helped opening new companies, developing and modernizing infrastructure and technology. In the effect Poland, Czech Republic and Slovakia all noted a positive and a sustainable growth connected to the European Union entry. Poland even remained the only one European country with positive GDP during the economic crisis in 2008. An exception stays Hungary as the only one had lower growth, what can be explained by the national policy, influencing the macroeconomic situation.[82]

6.3 Inflation and Unemployment

After the system changes, when economy stopped to be governmentally controlled, economy became market driven, prices adjusted to the market, also the exchange rates became more liberal, production decreased, taxes were increased and nominal income increased, the unavoidable became the increase of the inflation. Only few countries as Czech Republic, Slovenia and Macedonia were able to avoid the hyperinflation, by keeping the control over prices. Same effect triggered the change while entering the European Union. In Poland, due to growing interest in buying cheaper Polish products from consumers and companies by foreigners, the prices of nourishment as meet, ham, milk etc. increased drastically.[83]

Unemployment is similarly connected to the structural changes: privatization and liquidation of public entities and farms. Huge differences in gross payment incurred by employers and net payment received by employees, high social benefits, discourage from hiring new workforces or creating new firms. The actual number of unemployed in the 90s in the Central, South-Eastern and Baltic countries is not exactly known, since the documentation is uncompleted. Nevertheless the estimated rate shows, that Poland belong to one of the

[82] Cf. Rokicki B., Żołnowski A., (2008), p.14-17 [in:] Czarny E. (2008).
[83] Cf. Matkowski Z. (2004) p. 59–91 p.119–120 [in:] Narodowy Bank Polski (2007).

countries with the highest unemployment rate: 17-20%, whereas Czech Republic for example reached 10%. First with the pre-accession phase EEC countries planned more carefully how to deal with unemployment, creating possibilities to receive information and consultancy, retrain or open own business.

6.4 Country's Deficit and Debt

28 September 2010 at the Marszałkowska Street in Warsaw appeared a huge counter of the national debt, similar like the one near Times Square in New York. The US one has been taken away, since the display was not able to show all the digits of the debt anymore. The initiator of this polish undertaking was Leszek Balcerowicz, past Finance Minister. His aim was making polish inhabitants conscious about the problems of rapidly and what is more, constantly growing national debt. National debt and budget deficit could drive to an economic slowdown or even stagnation. Another consequence of growing debt and budget deficit is inflation. The reason for the budget deficit in Poland, are high expenditures which are not balanced with high enough income: income from tax, privatization etc. Poland had in 2003 one of the highest budget deficits in the region of 5-7% of the GDP, together with Czech Republic, Hungary, Croatia and Albania. In most of those countries, the current turnover with abroad in the mentioned countries has a negative balance. Polish public debt, same as Hungarian, Croatian and Albanian, took in 2003 already 50-60% of the GDP. Budget deficit does not always go together with the debt. Czech Republic despite high budget deficit has relative low public debt.[84]

After 2004 appeared a problem of different ways of calculating the public debt by the Polish government and by the European Union. The factors taken by Poland to the equation of public debt, was much wider than the one used by EU. For example till 2006 Poland counted with the amount of the expected payments by way of assurances and public guarantees, or till 2007 added the general government section the financial assets of OFE – open pension fund. All the discrepancies have been unified. Moreover European Union has two ways of defining

[84] Cf. Matkowski Z. (2004) p. 59–91, p.119–120 [in:] Narodowy Bank Polski (2007).

the public debt and one of them is called “excessive deficit procedure“[85]. EDP is calculated by nominal value of the public debt. Regarding the level of public debt in all new EU members from 2004, and also other countries which did not join the euro zone, remained quite stable. The only exception was Hungary, where the public debt significantly raised. After the financial crisis of 2008, the situation became worst. Many countries due to necessary financial anti-crisis package for the endangered markets increased the debt. Poland got on the list of European Commission with countries (ex. Latvia, Hungary etc.) where the public debt potentially might reach the 60% of the GDP. [86] At the moment the public debt of Poland is 854 638 517 198 PLN and is growing with each second by 1031 PLN per second, what means till this sentence is finished the debt raise to 854 638 629 763.[87]

6.5 Trade and Foreign Investments

All compared countries, went through an important transformation, which resulted with more open economy and what is more development of import and export activities. The examination of Matkowski (2004) shows that the smaller an economy and higher the openness towards trade activities, the more income brings the international trade. Example: Estonia where international trade makes 85% of the GDP. In bigger countries with bigger territory and more inhabitants, for example Poland, the income form the international trade makes 30-50% of the GDP. Nevertheless already before the EU entry Poland was placed on the second place behind Czech Republic and before Hungary by the scale of absolute value of import and export. The growth between 1993 and 2001 was one of the fastest among the countries of Central, South-Eastern and Baltic countries.[88]

The level of foreign investment rose after the transition of the political and economic system in all examined countries. Poland was again placed very high on the list of countries with the highest FDI inflow, followed by Czech Republic, Hungary and Romania. However the FDI inflow depends mostly on attractiveness of the country, an important role places the

[85] http://orka.sejm.gov.pl/WydBAS.nsf/0/A7E4BFAD112AC7E8C1257A480029DA27/$file/BAS_23-8.pdf
[86] http://orka.sejm.gov.pl/WydBAS.nsf/0/A7E4BFAD112AC7E8C1257A480029DA27/$file/BAS_23-8.pdf
[87] http://www.dlugpubliczny.org.pl/pl/metoda-liczenia
[88] Cf. Matkowski Z. (2004) p. 59–91,p.119–120 [in:] Narodowy Bank Polski (2007).

risk of investment, measured by the World Bank under 22 partial grades. This time in such comparison Poland was not one of the leaders. Countries being the safest target for foreign direct investment were in 2002: Slovenia, Latvia, Czech Republic and Hungary.[89]

European Union regulates the trading agreements on its own. As a European Union member, Poland enjoys the Free Trade Agreements, favorable regulations stimulating the growth, but also the transparency and security guidelines. Till 2012 imports and exports of Poland faced a constant growth, however imports always exceed the exports. The most important trading partner for Poland is Germany, which in 2012 imported alone 25.3% of polish export products and reached 21.3% of polish imports.[90]

The foreign direct investment in Poland was also systematically growing after the EU entry. In 2012 Poland became the sixth country in the whole Europe by the amount of foreign direct investment inflow, surpassed only by old EU members as United Kingdom, Germany, Spain, France and a non-EU but strong country: Russia.[91] Poland is often called "the connector between Eastern and Western Europe", the location, domestic market and stable economy, might bring Poland in the future much further as a center for governing Europe.[92]

6.6 The Living Standards

Plenty of measurements as GDP per capita, GNP, coefficient of the growth etc. will never fully illustrate the standard of living in a country and the satisfaction of the inhabitants. From the view of a resident, important is the income per capita, accessibility of housing, availability and quality the insurance and health care system, quality and accessibility of the education, easiness of the system of administration and law but also even consumption. The level of inequality of the income shows the disproportions in the quality of live within a country. Under the three countries with the highest inequalities (measured by Ginieg

[89] Cf. Matkowski Z. (2004) p. 59–91, p.119–120 [in:] Narodowy Bank Polski (2007).
[90] http://inwestor.msp.gov.pl/portal/si/337/25120/Analiza_makroekonomiczna_polskiej_gospodarki.html
[91] http://www.businessinmalopolska.pl/aktualnosci/bezposrednie-inwestycje-zagraniczne-na-swiecie-raport-fdi-intelligence-2013
[92] http://brandpoint.pl/klienci/ksse/wydarzenia/polska-jako-centrum-koordynowania-dzialan-na-rynkach-europy-srodkowej-i-wschodni,15

coefficient) was in 2002 also Poland, with Hungary and Romania. [93] After 4 years in the European Union, Poland moved to the 5th place.[94] This improvement can be explained by new reforms and acts striving for more transparency from the side of EU regulations. Many unemployed decided to take the first steps for self-employment and also European Union funds compensated some gaps in financial assets. The quality of health care system can be found in the mortality rate, where Poland was placed near to the upper limit, passing Slovakia, Hungary, and Latvia etc. and passed by Czech Republic.[95]

Next measurable factor, implying the quality of living is accessibility of education. The coefficient which can estimate this feature is not reliable enough. It bases on statistic data, which often is either hard to collect or not very actual. Nevertheless gives a rough overview of the situation. The richest and far developed countries have the coefficient 0,9. Similar results brought also a test on Poland, Hungary, Slovenia and Baltic countries.[96] With the European Union restructuring, also the educational system changed. The school system has been adapted to do European standards. The schooling was divided by the amount of school years 6 (primary school) +3 (Gymnasium) +3 (Liceum ending with the maturity exam), where each phase is finishes with an exam enabling the classification of the pupils, and not as previously 9+3. This change brought more mobility, higher diversification of the students and stronger focus on learning, due to many important exams deciding about the future career. In the university education possibilities, Poland is already many years at high level: university degree can be obtained through a full time university program, evening schooling or weekend classes.

The balance of the comparison between Poland and other Central, Easter and South European countries shows that Poland has indeed one of the strongest economies in this region. The potential is still not fully exploited and still need to be supported by own government but also European Union's institutions.

[93] Cf. Matkowski Z. (2004) p. 59–91,p. 119–120 [in:] Narodowy Bank Polski (2007).
[94] http://www.poverty.org.uk/e14/index.shtml
[95] Cf. Matkowski Z. (2004) p. 59–91,p.119–120 [in:] Narodowy Bank Polski (2007).
[96] Cf. Matkowski Z. (2004) p. 59–91, p.119–120 [in:] Narodowy Bank Polski (2007).

7. Funds

The financial support of the European Union has been offered to Poland both before and after the accession. There is no doubt in the enormous significance of the European Union's support in building the national competitiveness of Poland. Without the EU funds, the potential of the Polish economy would not be possible to exploit in that far as it is now. The scarcity of financial resources, blocked many entrepreneurial activities and the development of polish infrastructure, technology and R&D. European Union's contribution in form of funds to finance various programs to develop each economic and life sectors, still significantly improves the conditions, also the institutional framework by propagating democracy and market driven economy.

There can be distinguished two kinds of funds: the ones offered before the EU entry and called "pre-accession funds" and the ones after the entry. The funds are available for various entities under fulfillment of requirements stated by the European Commission and national governmental institutions. Those regulations have been created to control the applications for projects to finance, to estimate and judge the reliability, feasibility and credibility. Each application requires specific documentation with detailed plan, cost estimation, and results expectation to ensure transparency, compliance with EU expenditures and real project donation, higher effectiveness, instead of unclear money movements and corruption. That is the reason why applying for funds is connected with risk. The accurate documentation for application often cost a lot of time and money, what does not guarantee receiving the fund. Special and very important role play here the local governments with the municipal corporation at the spearhead. Those institutions are the main information source and incentive creator to apply. Polish government hired in years 2002-2003 approximately 600 new employees, who has been dealing with the pre-accession funds. In comparison to the other European countries, this number remains still low. From the time Poland became a full member of the European Union, this number multiplied to approx. 5000 employees occupied with funds. This fact one hand initiated creation of new working places and on the other higher expenditures on administration departments, educational trainings and workshops.[97]

[97] Cf. Grosse T. G. (2003) p.2-3.

7.1 Pre-Accession Funds

The pre-accession funds represent the group of non-repayable financial support offered by the European Union to the countries preparing to be members of the union: Poland, Czech Republic, Hungary, Slovakia, Lithuania, Latvia, Estonia, Slovenia, Romania, and Bulgaria till the accession in 2004. The financial support should aim to diminish the differences in the development and structures between the member countries and those applying for membership. The funds available till the accession are: Phare, Ispa and Sapard. The pre-accession funds were available for applicants, but the problem was the information flow. Potential applicants were not well enough informed how to apply correctly to meet all requirements for receiving the fund. A series of trainings, informational evenings, flyers and brochures have been prepared and distributed through the country. Governmental bodies offered direct help by writing the application: project description, expecting results and budget. The result of unclear use of the funds was the threat of paying money back to the European Commission.

1.1 PHARE

The roots of the European Union lay in the economic association to unite countries after the Second World War- especially the two big powers: Germany and France and rebuild the economic power. In 1989 as the meaningful structural changes in Poland happened, Hungary faced similar economic and social transformation. The immediate reaction of the European Economic Committee established a non-repayable fund PHARE: Poland and Hungary Assistance for the Restructuring of the Economy. In 1997 PHARE was transferred into a special pre-accession fund for East European countries to be accepted in the future as members of the European Union. Under the candidate countries was also Poland.[98] [99]

[98] http://www.parp.gov.pl/index/index/399
[99] http://europa.eu/legislation_summaries/enlargement/2004_and_2007_enlargement/e50004_en.htm

On the 16th of December 1991 came to an economic agreement between Poland and the European Community, to start five years long plan of preparation of the polish economic, political and scientific environment to fulfill the West European ultimatum of common standards. From this moment Poland received an intensive and progressive financial and directive support from the European Union in form of the restructured PHARE Program. The focus of PHARE for Poland was on the following sectors: agriculture, private sector and restructuring of the enterprises, environment protection, infrastructure, education and science, unemployment control and the labor market, public administration and institutions.[100]

Table 11 shows the exact sum of money destined for the CEE countries, in the years 1990-1996. It can be easily stated, that Poland is the country with the highest allocation of the money. The financial benefit- a little bit more than 30% of the whole fund.

In the Table 11 can be seen that above the country specific money, were also additional components as the multinational and horizontal programs. The First one is a program to extend the cooperation between candidate countries. For this money can apply only countries working together for a common reason as an example is improvement of common infrastructure elements as international transportation, communication ways and energy channels, but also human resources, environment protection etc. However the horizontal program should influence the development of democracy, partnership (local industrial progress) and ACE (Action for Cooperation in Economics) for a business research.[101]

7.1.2 ISPA

In the year 2000 European Union launched second pre-accession fund: Instrument for Structural Policies for Pre-Accession (ISPA). The goal of this fund was financial support of the social and economic projects in the sector: environment and transport, of the countries preparing the accession. The amount of assets dedicated for ISPA between 2000 and 2006 was 1 528.4 million Euros. Till 2004, when Poland became a member of the EU and lost the

[100] http://biurose.sejm.gov.pl/teksty/r-132.htm
[101] http://biurose.sejm.gov.pl/teksty/r-132.htm

benefit from this grand, received a fund to cover 69 projects, thereby used the full amount of forecasted assets. The projects supported on one hand the development of the national and international railway and road networks, and on the other hand adapting the conditions of the drinking water, pipe the sewage, waste recycling and the atmosphere protection, to the EU norms. With the EU entry of Poland the projects did not terminated, they only stopped being supported by the ISPA grand and started by the "Cohesion fund".[102]

7.1.3 SAPARD

The SAPARD program (Special Accession Program for Agriculture and Rural Development), was as ISPA created in the year 2000 for the period 2000-2006 with the budget of 1.084 billion euros. However in contrary to ISPA the focus lied, as the name says, on the agriculture, fish and rural sector. In Poland the program has been activated in 2002, when the national SAPARD agency has been confirmed. From this moment, Poland applied for participation in following projects: promotion and improvement of the fish products processing and fishery, investments into farms and general improvement of the infrastructure of the country side and diversification, professional trainings and technical support.[103]

7.1.4 Other Funds

Besides those three European Union allowed the candidate countries to apply for additional EU funds specialized for certain target group or sectors, not being a specific pre-accession funds. The fund can be grouped into general clusters. The first can knowledge and education Leonardo Da Vinci, Socrates, Youth for Europe, Media II, ARIANE, Kaleidoscope and IV Framework Program. The first one is supposed to support the lifelong learning process

[102] http://www.bcgconsulting.pl/fundusze_przedakcesyjne.php
[103] http://www.bcgconsulting.pl/fundusze_przedakcesyjne.php

of authorities, entrepreneurs and universities, through mobility and international cooperation. Similar grant targeted to students and pupils represents the Socrates program and Youth for Europe, however the first one emphases on university education and the second on institutional. Next three programs (Media II, ARIANE, and Kaleidoscope) maintain the support of the cultural and sector: development of the cinematography processes, literature development- support in translations and stimulation of the cultural activities in general. IV Framework Program is the program encouraging the scientific research and building a network for information flow, and RAPHAEL has the aim to protect and promote the cultural heritage of Europe.[104]

Second cluster is environmentally oriented and consist of the following: Save II, Life-nature, Life-environment. Save II should control the emission of the CO_2 to and to improve the competitiveness in the industry. Similar aim has Life-environment fund, promoting the environmental friendly industry with balanced development. However the Life-nature is a specific one, created to protect the endangered fauna and flora on the European territories.[105]

The responsible part for allocation of the fund, were the State Treasury. Through the year, European Union worked on improving of the process. In Poland special convenience became the application preparation procedure. This helped to avoid complicated process of applying for a fund and collecting documents. Nevertheless the decision process on the side of EU is not perfectly functioning and still includes many approval steps.

7.2 Structural Funds and National Programs

From the EU entry in 2004, Poland benefited from the funds according to a document called Community Support Framework. This document bases on the National Development Plan prepared by polish authorities, recognizing the strengths and weaknesses of Poland in all

[104] http://biurose.sejm.gov.pl/teksty/r-132.htm
[105] http://biurose.sejm.gov.pl/teksty/r-132.htm

sectors. The main objective of the structural funds in Poland was improvement of Poland's geographic economic and social development level.[106]

During the years 2000-2006 there existed four structural funds within the EU: Social Fund, EAGGF - European Agriculture Guidance and Guarantee Fund, ERDF- European Regional Development Fund, Fishing and Fish Processing Fund.[107] For 2007-2013 there were only 2 structural funds left: ERDF and ESF with a common budget of 278 billion Euros.[108] European Social Fund aims to deal with unemployment promoting education and trainings and improvement of the work conditions, modernizing of the labor market. The budget of the ESF for the years 2004-2006 was 438.5 million Euros. Moreover for the budgeting period 2007-2013 Poland insisted successfully for European Union to pass an act about cross financing. This system allows financing one program from different funds; however the financial support from the second fund cannot exceed 10%. Cross- financing was never permitted before. In Poland this opportunity is used in the Human Capital Operational Program and in the Operational Program for Economic Innovation.[109]

A relevant part of the National Development Plan has been dedicated to ensure the economic growth of Poland to achieve an improvement of the competitiveness defined in "Competitiveness of Enterprises Operational Programme"[110]. As already mentioned Poland's enterprises consist mostly of small and medium sized companies. Almost the biggest weakness of the economy was the lack of investments, which should be donated to the two of the objectives of the program: "knowledge-based economy and environmental growth", and "direct support to enterprises"[111]. The first one covers the information supply necessary to entrepreneurial incentives but also business development of small and medium companies, as well as an access to external financing. With the second should be ensured incentives of new job creation and the competitive advantage of the new and existing firms. Moreover, it aims to create favorable environment for start-ups as incubators and links to know how.[112]

[106] http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/3FAE9823-CD76-4125-A6E2-D7D340AB5E50/22286/pww_en300807.pdf
[107] www.funduszestrukturalne.gov.pl
[108] http://europa.eu/legislation_summaries/glossary/structural_cohesion_fund_en.htm
[109] http://www.uniaeuropejska.org/crossfinansing
[110] http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/3FAE9823-CD76-4125-A6E2-D7D340AB5E50/22286/pww_en300807.pdf
[111] http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/3FAE9823-CD76-4125-A6E2-D7D340AB5E50/22286/pww_en300807.pdf
[112] http://www.funduszestrukturalne.gov.pl/NR/rdonlyres/3FAE9823-CD76-4125-A6E2-D7D340AB5E50/22286/pww_en300807.pdf

7.2.1 ERDF

The European Regional Development Fund (ERDF) is the largest fund. It is dedicated to equalize the disproportions of the regions- supporting the less developed and poorer regions to reach the same level of the rich ones, also by helping those regions whose economy is on the decreasing course. Focus of this fund lies on all three goals of the European Union: first one convergence, second: regional competitiveness and employment and the third: European territorial cooperation (harmonize development).

ERDF aims to give financial support for creating new work places and securing the existing by supporting the existence of small and medium enterprises, ensuring production efficiency and constant improvement of the infrastructure. Keeping a growing employment rate should be also reached by promoting tourism and culture, constant environmental protection and improvement of the informational technology.[113] ERDF supports cooperation on the territorial level: cross-border level, international level and interregional level.

All polish regions has been qualified by the European Commission as priority objectives of the first level, what means that *"Funding priorities include research, innovation, environmental protection and risk prevention (…)."*.[114]

7.2.2 ESF

The goal of European Social Fund is to improve the quality and availability of places of employment. Active market policies to prevent unemployment, prevention of social disparities and discrimination, improvement of the management and promotion of the entrepreneurial activities and increasing of the ratio of female employees are the main operations funded by ESF. Moreover European Social Fund was created to stimulate the development of the educational system and learning environment: meaning ordinary schools

[113] http://www.funduszeeuropejskie.gov.pl/OrganizacjaFunduszyEuropejskich/Strony/czymsafundusze.aspx
[114] http://ec.europa.eu/regional_policy/information/legislation/index_en.cfm#erdfregulation

but also trainings providing additional professional qualifications. The aim of Poland is to improve the employment rate with help of ESF by 71% till 2020.[115]

7.3 Cohesion Fund

Besides the structural funds European Union introduced the Cohesion Fund, also known as the Unification Fund as a tool to help the weaker member countries to fulfill the requirements to access the Economic and Monetary Union. Till 2004 there were four countries: Greece, Ireland, Spain and Portugal, and after the 2004 this fund included the new member countries. In contrary to the structural funds, this one was applicable only on the national and nor regional level. The Unification fund supported only two kinds of projects which deal either with environment or transportation. For example: development of environmentally friendly products and technologies, or building and development of the sewerage or highway network.

The requirement for a country to apply for the Unification Fund is GDP per habitant (measured by the purchasing power parity) have to be lower than 90% of the EU's arithmetic mean, but have no excessive budget deficit. Moreover the bailout from the Unification and Structural funds should not excess 4% of the GDP of the country. [116] Poland received between 2004-2006 7,86% out of the whole fund budget and EU planned to increase the proportion to 19,4% for the years 2007-2013.[117]

[115] http://ec.europa.eu/esf/main.jsp?catId=393
[116] http://www.bcgconsulting.pl/fundusze_przedakcesyjne.php
[117] http://ibs.org.pl/site/upload/publikacje/raport%20strony%20ue-15.pdf

8. Investment Incentives

After entering the European Union by Poland on Mai 1st 2004, new possibilities emerged. Poland's political and economic status on the international stage increased as it became a desirable partner in business cooperation. After adjusting its laws and economic institutions to the European Union's regulations, such as new company law in effect since 2001 which entirely fulfills the European standards regarding the principles of company registration and operations, investment attractiveness of Poland increased due it its improved legal stability, predictability of actions taken by investors and better opportunities for the potential growth of the country. Further improvements, as implementation of European Union's regulations with regard to the free flow of goods, enhanced the national system for control of standards, producers' responsibility for manufacture and product safety, which assured foreign investors that Poland is the place with very high investment potential and sustainable legal system. Thanks to grants from the European Union, Poland was able to develop its infrastructure, namely the network of national motorways and expressways increased by over four times since 2004 and equals almost 2.500 kilometers[118], which exhibits how both Poland and the European Union try to improve attractiveness of investments in Poland.

One of the most significant challenges which Poland has been facing in the past years was how to attract foreign investors to allocate their money in this rapid developing economy. The government authorized a series of various incentives for investors, who seek to make sustainable investments in Poland, which would last for long period of time simultaneously granting employment to the well-educated and relatively low-priced labor.

Some of the most successful investments incentives were creating Special Economic Zones, but also Industrial and Technology Parks. Further actions taken by the government in order to encourage the economic growth are Governmental Grants, Real Estate Tax Exemptions but also founding Research and Development Centers and Main Council of Research Institutes.

[118] See Table 4

8.1 Special Economic Zones

The main incentive for attracting foreign investors in Poland was certainly creation of Special Economic Zones. As of today there are fourteen zones, which aim to enhance export and create new jobs. Similar economic zones already exist in other developing countries as China, India, Philippines, Indonesia and Kazakhstan. In a Special Economic Zone, which is geographically separated territory under special management and administration, the national laws are oftentimes suspended in order to grant more free-market-oriented environment for investments.

If a company invests in a Special Economic Zone, it is a subject to special tax exemptions, namely the income which it receives from business carried out within the Special Economic Zone will be exempt from any income tax, neither CIT - from legal persons - nor PIT - from physical persons. Further privileges which an investor can also expect when investing in Special Economic Zones are specially prepared slots ready for development at very competitive prices, but also free of charge support by individually designated advisors when dealing with various formalities associated with the investment.

In order to operate in a Special Economic Zone, a company must fulfill a couple of requirements in order to obtain permission, since the tax exemption is granted by regional governments and is considered as a publicly founded regional aid. The incentives serve to increase employment, make use of post-industrial property and infrastructure, create new businesses or expand existing ones in order to diversify the industry in a given region, which would enhance the economy’s resistance against changing market tendencies. For instance, a company which obtained a permission to operate in a Special Economic Zone, must provide a net growth in employment in a given company and that the new workplaces will be maintained for at least five years or at least three years in case of small and medium businesses. Moreover, the company would not be permitted to transfer the ownership of any tangible or intangible inventory directly connected with the investment in the Special Economic Zone for five years, whereas a three year period applies again to small and medium businesses.

The permitted level of the tax exemption is basically dependent on a couple of factors, namely extent of invested capital, costs of employing new workforce, the size of the company, but also location of the investment – the poorer the region where a Special Economic Zone is located, the higher the maximum level of the regional public aid, which is the maximum amount to be exempted from income tax.[119] In order to be eligible for the tax exemption, a company must invest in tangible inventory which is new – this rule does not apply to small and medium size companies – and the invested capital must not be less than EUR 100.000,00.

The maximum amount which can be exempted from income taxes is calculated by the following formula[120] assuming that the company or companies investing mutually, are acquiring tangible inventory which is economically indivisible and the total amount qualified for tax exemption equals or exceeds EUR 50 000 000:

$$\boldsymbol{I} = \boldsymbol{R} \times (50\,000\,000 \text{ EUR} + 0.5 \times \boldsymbol{B} + 0.34 \times \boldsymbol{C})$$

I – The maximum eligible value of regional investment aid

R – Intensity of regional investment aid, depending on the area in which the investment is located

B – The size of the expenditure eligible for regional investment aid, over the equivalent of 50 000 00 EUR, but not exceeding 100 000 000 EUR

C – The size of the expenditure eligible for regional investment aid, exceeding the amount of 100 000 000 EUR

For small companies, which invest less than EUR 50 million, the maximum eligible value of regional investment aid can be increased by 20% and for medium sized companies the maximum value can be increased by 10%.

“By the end of June 2011, nearly 1,400 permits had been issued for all Special Economy Zones in Poland. Entrepreneurs operating in the zones had invested over EUR 22

[119] See Table 5

[120] http://www.bankier.pl/wiadomosc/Zany-jest-wzor-na-maksymalna-wartosc-regionalnej-pomocy-inwestycyjnej-1928432.html

billion and employed over 240,000 people."[121] These numbers exhibit how significant importance and influence on the Polish economy the Special Economic Zones have.

8.1.1 The Lodz Special Economic Zone

This zone is located in the central Poland and with 218 permits issued, there were over 26 thousand jobs created and the invested capital exceeded two billion EUR[122]. The success of the Lodz Special Economic Zone can be emphasized by the variety of industries located here as cosmetic, pharmaceutical and medical equipment, household appliances, IT, building materials, food dispensations, wrapping, plastics, research and development, but also logistics, which is thanks to strategic location and high-quality infrastructure. The entire zone is divided into 45-sub-zones - Investment allotments – which are easily accessible and their entire surface equals 1290 hectares[123].

8.1.2 The Katowice Special Economic Zone

Automotive industry is a dominant sector in the Katowice Special Economic Zone. Investment carried out by companies from this sector constitutes for over 60% of total investment.[124] "Almost 200 companies have invested in KSEZ by the end of 2012. These enterprises carried out over 200 industrial projects, invested almost EUR 4.75 billion and employed around 50 000 people"[125] American companies amount to 35% of all the investors present in the Katowice Special Economic Zone, followed by Italian entrepreneurs of around 22%, then Japanese and Polish companies each 12% and German companies which make up

[121] Baranski P., Zagun K. (2012) p.10.
[122] http://www.european-times.com/countries/lodz-special-economic-zone/
[123] http://www.sse.lodz.pl/index.php?lang=en
[124] See Table 6
[125] http://en.invest.katowice.eu/business/24/23/special_economic_zone.html

for around 9%. What is also significant for the Katowice Special Economic Zone is the fact that it lies in the region which is the second biggest didactic center with 44 universities and 200 000 students who are potential highly skilled labor.

8.1.3 The Walbrzych Special Economic Zone

The entire amount of invested capital in the Walbrzych Special Economic Zone summed up to almost 4 billion EUR and 32 thousand people were able to find employment within this 2.2 thousand hectares huge economic territory[126]. It is situated in the south-western part of Poland, which is undoubtedly very convenient geographical location for investors from Germany and Czech Republic. Moreover its huge advantages are well developed road and railway network, as well as international airport located in Wroclaw, which encourages companies from the entire world like Japan, USA, Sweden, France, Netherlands, South Korea and many others to locate their production plants in this region.

8.1.4 The Special Economic Zone Euro-Park Mielec

This Special Economic Zone located in south-east Poland, was the first one established in Poland. The zone consists of 24 sub-zones and the compounded surface equals around 1246 hectares. As of today, the Special Economic Zone Euro-Park Mielec has issued 221 permissions to businesses mostly originating from the United States of America and Germany. Investors created roughly over 18 thousand jobs in this region often suffering from unemployment. The revenue reached almost EUR 1.3 billion[127].

[126] http://www.invest-park.com/guide
[127] http://www.europark.com.pl/en/why_sse_europark_mielec/effects/

These few examples exhibit the variety of the investors around the globe who believe in the Polish economy and have made sustainable investments which will last for years, not only profiting the Polish economy, but the entire European Union. Even though there are some disadvantages of Special Economic Zones for the investors as higher real estate prices within the zones or additional administrative costs, the advantages undoubtedly overweight. Another important factor is that revenues created by Special Economic Zones continuously increase, so does the number of created jobs and businesses from various countries which want to operate within the zones, thus there still is a huge investment potential in Poland.

8.2 Technology Parks

Another important step taken by the government in order to enhance not only investments but also scientific research and development, was creation of Technology Parks. The parks are aimed on concentrations of various companies from single sector in single location with the purpose of enabling fast exchange of information and experience, but also to improve compounded technology and business processes. They are typically managed by higher education institutions, such as universities with the assistance of local authorities and are oftentimes called "science parks". Basically they are intended to provide privileged conditions particularly for small and medium sized companies.

Naturally the companies located within the parks not only profit from extensive tax exemptions, but also from well-managed and organized facilities. The companies may also expect "consultancy in the formation and development of an enterprise, transfer of technology and transfer of results from scientific research and development work into technological innovation but also creating favorable conditions for businesses."[128] Typically firms and scientific groups as students in the parks focus on advancement of existing products or development of new ones, opposed to Special Economic Zones, which focus on manufacturing.

[128] http://www.technopark.kielce.pl/pl/co_oferuje_park

Silicon Valley, as it is known today, was founded in 1950s and was the world's first science park operated by an institution of higher education, namely the Stanford University.[129] In Poland there are 54 well prospering Technology Parks today implementing a whole range of services for various companies.

8.3 Governmental Grants

In order to attract more entrepreneurs in Poland, the government initiated further incentives as governmental grants. Any company which decides to locate its business operations within the borders of Poland, making a significant investment of considerable importance for the Polish economy, can apply for a grant sponsored by the Polish government under the "Program of support of investments of considerable importance for Polish economy", which is a regional aid specified for a particular purpose. This grant can also be awarded to an entrepreneur as a supplement to any tax exemption, if a given company locates its business in a Special Economy Zone. "Support can be applied for exclusively by entrepreneurs planning investments in the following priority sectors: automotive sector, electronic sector, aviation sector, biotechnology sector, modern services sector, research and development."[130]

There are two main categories for which the governmental grant can be obtained, namely depending on the number of new jobs created - employment grant, and depending on the significance of the investment - investment grant. In the first category, the amount of grant is calculated by not only the increase in employment, but also by the percentage of the employees with higher education, sector, complexity of processes provided by the entrepreneur and attractiveness of the products on the international market. In the second category, namely investment grant, the maximum amount of the grant can ranged between 2 and 10.5% of the eligible costs of the investment. In this case important is the significance of the investment, but also the location, number of new jobs, but also investment expenditures per workplace

[129] Markoff J. (2009): "Searching for Silicon Valley", New York Times, No 4/2009, p. 10, New York, USA
[130] http://bip.mg.gov.pl/files/upload/13843/program7czerwca2011.pdf

8.4 Real Estate Tax Exemption

Further incentive initiated by the government is the exemption from local real estate taxes and charges. Municipalities have the authority to set tax rates and establish the mentioned exemptions within their territories. Basically any charges or taxes associated with a purchase of land, buildings or parts of buildings associated with conducting an economic activity can be eligible for this aid, also called "automatic aid" a company is automatically entitled to exemption from real estate taxes and charges after fulfilling the requirements provided in the resolution of a given municipal council. The only obligation which a company must fulfill is to notify the municipal council of the intention to take the use of the real estate tax exemption.[131] After the council receives the notification, no special permission is required for the company. Important is that only the costs and taxes which the company incurred after sending the notification are eligible for the aid.

The government regulates the conditions under which a company may use the real estate tax and charge "automatic aid", namely the company must cover at least 25% of the costs eligible for the aid from its own funds, there must be a net increase in workplaces, meaning there must be more people employed than in over twelve months prior the investment and then new workplaces must be maintained for at least five years, or three years in case of small and medium enterprises.

The maximum amount eligible for the real estate tax and charges exemption is generally EUR 200 thousand, or EUR 100 thousand in the road and transport industries, for the period of three consecutive years. The expenditures which qualified for the "automatic aid" are the costs of investment in intangible assets or tangible assets which are directly connected with the completion of a new investment, but also the costs of creating workplaces associated the investment.

[131] http://www.gofin.pl/17,2,119,109453,lokalne-zwolnienia-w-podatku-od-nieruchomosci-dla-firm.html

8.5 Research and Development Centers

Receiving a status “Research and Development Center” by a company, grants it a number of various tax exemptions, including real estate tax exemptions, agricultural and forestry tax exemptions, but also substantial decrease of the taxable income. The government initiated the Research and Development Centers’ incentives in order to enhance the improvement of the private sector in Research and Development, advance the efficiency of the implementation of innovations at regional and national levels, increase the effective use of public funding for innovation activities, but also to give the private sector an incentive for innovation and increase its business expenditure on Research and Development.

The government also regulates the criteria under which a company may receive a status of a Research and Development Center: “an entrepreneur, who is trying to obtain the Research and Development Center status, should achieve net revenue from sales of goods, products and financial operations for the previous year in the amount of at least EUR 1.2 million […] a minimum of 20 percent of this amount should be net revenue from sales of its own research and development services.”[132] A company which obtained the Research and Development Center status may receive tax exemption of maximum EUR 200 thousand for the period of three consecutive years, but also decrease its taxable income on a month-to-month basis, by 20% of income earned in a given month. The amount by which the taxable income is decreased flows into so called “innovation fund”, which later can be used by the company to finance its Research and Development on innovation.

As of today there are number of companies in Poland, which have obtained the status of Research and Development Centers and conduct innovation processes in various fields such as biotechnology, information technology, telecommunications, medical and pharmaceutical industry, but also construction and mining fields.

[132] http://www.mg.gov.pl/Wiadomosci/Strona+glowna/Status+Centrum+BadawczoRozwojowego+wsparcie+dla+innowacyjnych+przedsiebiorcow.htm#

8.6 The Main Council of the Research Institutes

This important organ in the innovation environment of the Polish commerce is mainly responsible for representing research and developments institutes around the country to the local and national governments. The Main Council of the Research Institutes gives its opinions and recommendation regarding science and innovation policies and most importantly provides new ideas on how to fully utilize the resources existing in Poland in combination with the funds made available by the European Union and the Polish government.

The Main Council of the Research "becomes involved in scientific development as well as in improvement of economic innovativeness and effectiveness. Apart from that, it contributes to the development of research staff and highly supports the young scientists"[133] Today there are around 120 research institutes, which employ over 24 thousand people, including more than 12 thousand researchers.

[133] http://eng.rgib.org.pl/

9. Ability to Attract – Foreign Direct Investments

Foreign direct investment is very relevant for developing countries, because it gives additional financial assets, is favorable for restructuring and development of technologies and creates competition on the market. FDI positively influences market growth, creation of new workplaces, additional know how in form of tangible and intangible factors as experience and technology. That is why foreign direct investment was a relevant development stimulator for the post-communist countries like Poland. According to Dunning[134] FDI is generally caused by an expectation of an entrepreneur to find new business opportunities regarding factors as resources (material and immaterial), market possibilities (demand structure and instantiation), efficiency (production standards and technology) and strategic asset seeking (synergies). Taking the decision about foreign direct investment, a firm has to face a dilemma of the exact mode type. The scientific literature is not unanimous regarding the exact definition. The most often mentioned are: green-field investment, acquisition, and joint venture[135], some consider only two of them, without joint venture, arguing that they are included in the green-field (start-up).[136]

9.1 Historical Draft of Foreign Direct Investments in Poland

First legal act allowing foreign investors to directly invest in Poland was a decree of the polish Minister of Trade from 1976. Nevertheless this did not bring any significant reactions of the foreign investors. First the governmental act from 1982 describing the investment activities of foreign investors in Poland can be recognized as an incentive for development of the FDI process.

[134] Cf. Dunning (1998) p. 45-66. [in:] Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.
[135] Cf. Kogut, Singh (1988); Woodcock et al. (1994); Nitsch et al. (1996); Bruning et al. (1997) [in:] Gorynia, M ; Nowak, J ; Wolniak, R (2007).
[136] Cf. Caves/Mehra (1986); Zejan (1990); Hennart/Park (1993); Padmanabhan/Cho (1995); Barkema/Vermeulen (1998); Gôrg (2000); Harzing (2002); Dikova et al. (2003) [in:] Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.

The beginnings were not easy, since the law was allowing market entry only entrepreneurs with polish origins. With the time when the economic policy became more open towards foreign investors (act from 1986 about creating of joint ventures), foreigners were able to open an activity inside of Poland, but still only by setting a partnership with internal party. Also the rules about the governance of such firms were strict, giving more rights to the polish part. In consequence only few joint ventures have been created. With the economic and political breakthrough in 1989, another relevant act came into existence, bringing concrete incentives for investors as 3 year tax exemption, customs allowance and permission of creating enterprises based solely on foreign capital. From 1997 the foreign direct investment inflow was growing rapidly, till 2001 when there was a remarkable breakdown in the world noted. The decrease in the FDI was not that drastic in the whole CEE region, where the economy stayed stable and the costs were still very low.[137]

Table 12 presents the popularity of the forms of FDI from 2000-2004. The remarkable majority represent fusions and acquisitions followed by start-ups (green-field). On one hand privatization process and advantageous law regulations in Poland additionally encouraged foreign investors to overtake or fuse with obsolete or inefficient polish companies. The process run ever easier since public entities, which were given for private sectors required often huge capital expenditures, which were often missing in Poland. On the other hand, huge demand functioned as incentive, were not balanced with high cost of restructure of the obsolete fabrics, their bad locations, or inefficient scale of production indicated green-field investments instead of acquisitions.[138]

From the moment that Poland became a candidate for European Union member, interest for foreign direct investment rose noticeable. Following changes to adapt polish institutional framework for foreign investors equalized in the rights enterprises with foreign capital with those with national capital.[139] In 2004 Poland following Russia, had the second highest investment share in the Central and Eastern Europe, however from 2000-2004 the growth rate remained negative. Looking at the FDI per capita distribution Poland places far behind the other countries. Average FDI per capita in the EU was USD 273, whereas in Poland USD 160.[140] Looking globally at the value of foreign direct investment, the whole Central and Eastern European region never achieved higher foreign direct investment results

[137] http://www.nbp.pl/publikacje/zib/zib2003.pdf
[138] Cf. Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.
[139] http://www.nbportal.pl/prezentacje/biz-w-polsce/bizWPolsce.html
[140] Cf. Proppé, M., Strojny, M., (2006).

than China, nevertheless had higher growth rate between 2000 and 2004 than the biggest Asian investment target.[141]

In the Table 13 can be seen the distribution of the value of the inflowing foreign capital between 1994 and 2011. In 2001 can be observed a drastic fall of the value, caused by economic contraction in Poland, instable law structure and low scale of privatization. Table 14 shows additionally the approximate current situation (statistics from 2011) which countries decided to invest in Poland. The leading investors are OECD countries, whose investment gives in sum 93.4% of the whole FDI in Poland; however European Union members contributed 87.1%.[142]

9.2 Attractiveness and Incentives of the Market Regarding Foreign Direct Investments

Factors admitted by CEOs and Managers of Capgemini Poland, Servier Group, Kye Soo Park, IKEA, HP etc. which make Poland so popular are labor cost, geographically strategic location, market size, labor skills etc. Polish labor is well educated, having qualified knowledge[143]: both specialized and general, while still being cheap in comparison to the Western conditions. Those investors praised high growth potential of Poland, satisfaction with their investment and real achieved profits.[144] Firms investing in Poland have a wide range of possibilities to growth by penetrating the market, pre-empting competitors, establishing a strong brand and all by facing a huge internal demand, especially in the post-communism period.

Nevertheless Poland has many threats for potential investors, which could be bureaucracy: complicated and often not reliable administration, judiciary and also the policy of the government with the tax rates of the personal and corporate income tax. Also the infrastructure is still not developed enough, to be an advantage factor. In the KPMG report

[141] Cf. Proppé, M., Strojny, M., (2006).
[142] http://www.paiz.gov.pl/polska_w_liczbach/inwestycje_zagraniczne
[143] http://www.paiz.gov.pl/why_poland/why_we_have_invested_in_Poland#
[144] http://www.paiz.gov.pl/why_poland/why_we_have_invested_in_Poland#

(2006) Mr. Proppé and Strojny examine myths about Poland, where interesting fact is that foreign investors deny that polish workers are inefficient, that a "kickback" is necessary to get anything done or that polish people do not speak foreign languages. Relevant observation is that foreign investors often "*feel the competitive pressure*"[145] of the internal competitors, what can indicate a strong competitiveness of polish firms.[146]

The foreign direct investment of Poland can be also measured by the Investment Attractiveness Index (IA)[147]

$$IA = \frac{FDI\_INij}{FDI\_OUTij} : \frac{\sum FDI\_IN}{\sum FDI\_OUT}$$

Where:

FDI_IN_{ij} = inflow of FDI into industry j of country j

FDI_OUT_{ij} = outflow of capital from country j abroad to industry i

∑ FDI_IN == total FDI inflow into country j

∑ FDI_OUT = total outflow of direct investment from country j

The IA index appointed the most attractive polish industries in 2009 divided by manufacturing and service sector. The first one represented *"production of office machinery and computers; the manufacturing of RTV and communications equipment; production of mechanical products, rubber and plastic products, and food processing"*[148]. However in the

[145] Proppé, M., Strojny, M., (2006).
[146] Cf. Proppé, M., Strojny, M., (2006).
[147] http://ftp.sgh.waw.pl/aci/20100528/doc/pres/Raport.2010.pdf?PHPSESSID=21c14ce710f88112c2d54e0760afcbbc
[148] http://ftp.sgh.waw.pl/aci/20100528/doc/pres/Raport.2010.pdf?PHPSESSID=21c14ce710f88112c2d54e0760afcbbc

service sector most popular for the foreign direct investment were *"business management consultancy and accounting; transport and communications"*[149].

9.3 Ability to Sell-Expansion of Polish Firms

The size of the outward foreign direct investment of a country shows its strengths and weaknesses of the business. If the government supports or creates barriers, how is the financial status of the entrepreneurs, if the production cost are competitive and the current globalization state, these and more aspects are here reflected. In order to invest in another country, it is not enough to have sufficient financial assets. An entrepreneur needs to be well informed about the market, have higher sensibility about the demand profile and requirements, competition and laws and regulations in the target country.

9.3.1 Historical Draft of Outward Foreign Direct Investments of Poland

Due to the communism governance the possibilities of free movements between Poland and the neighborhood countries was limited more to trade support of the export of Poland. The information flow was also not sufficient but above all the entrepreneurial activities were not supported by the government, both country internal and external. Table 15 shows the diagram of the intensity of FDI of polish firms outside of Poland. That is why the actual foreign direct investment activity started after 1989 but was still very low till 2005, what is connected with the European Union entry. Between 1994 and 2003 the yearly average outflowing foreign direct investment was not even USD 100 million. With the time Poland became the leader in FDI among the new EU members: 2004-2009 the investment abroad

[149] http://ftp.sgh.waw.pl/aci/20100528/doc/pres/Raport.2010.pdf?PHPSESSID=21c14ce710f88112c2d54e0760afcbbc

reached USD 4.8 billion.[150][151] This phenomenon confirms that Poland has a fast developing economy, is advanced in the globalization process and has firms with high potential. The biggest foreign direct investment is dated in 2006, where polish petrol company PKN Orlen acquired the majority of the shares of Lithuanian refinery Mazeiku Nafta.[152] In 2011 Poland reached a point, where the cumulated foreign direct investment outflow was equal to the FDI inflow.[153] During the financial crisis also polish FDI outflow decreased, however as the whole polish economy (only one OECD country with positive GDP), remained quite resistant.

Polish government has been following the laissez-faire policy against the FDI of polish firm's abroad. It interacted mainly during the communism time and afterwards it was more.[154]

9.3.2. Attractiveness and Incentives of the Market Regarding Outward Foreign Direct Investments

The main incentive for foreign direct investment of the polish firms is to win new sales markets, optimally with lower transaction and production costs (like for example Eastern Europe). Besides this, Polish firms search for alternative ways of resource supply and new technologies.[155] Polish companies are very competitive on the foreign markets, due to easy assimilation process, decision making and especially because of high quality products for relative low price.

The distribution of the polish outflow FDI (Table 16) shows that Europe is the world's most popular target for polish investors. 92.8% of all polish investments has been conducted in Europe. The majority of the investments out of that 92.8% have been done into the "15 European Union" countries, then EU-12 and EFTA members. The approach from strict East-oriented to West-oriented counts to the biggest transformations in the 90s however polish

[150] http://www.paiz.gov.pl
[151] Cf. Zimny, Z., (2011).
[152] Cf. Ministerstwo Gospodarki, Departament Analiz i Prognoz (2008) [in:] Zimny, Z., (2011).
[153] http://www.paiz.gov.pl/wsparcie_polskich_firm
[154] Cf. Zimny, Z., (2011).
[155] Cf. Ministry of Economy (2012).

firms are still well represented in the Eastern part of Europe and Russia. The top three target countries are Switzerland, Luxembourg and The Netherlands. Those countries are very favorable for entrepreneurs in sense of taxes and governmental and economic regulations.[156]

Regarding the entry mode, 57.5% of polish investors preferred to make “green field” investments in the target market, 22.4% joint venture.[157] The domination of independency on partnerships can be explained by higher profits of own decision making. Also the investments are mainly financed with own resources and more rarely by bank credit. The reason might be similar as by the choice of the entry mode: higher independency level and more secure access to financial sources especially during the economic crisis.[158]

The outward FDI of a country can be measured by the NOI[159] net outward investment. From the gross outward direct investment stock is subtracted the gross inward direct investment stock.

$$NO = GODI - GIDI$$

GODI - Gross outward direct investment stock

GIDI - Gross inward direct investment stock

The theory of the foreign direct investment distinguishes 5 phases measured by the NOI index. In the first one each country prefers the import and export to FDI. That is why the index is negative. In the second phase FDI inflow already starts to grow but the outflow does still not exist, or is very low. First in the third stage a country starts to develop its outward FDI. Fourth stage is characterized by the fact that the FDI outflow starts to exceed the FDI inflow; and the index starts to be positive. In the last, fifth phase, the NOI index decreases, to finally stabilize itself above the 0 level.[160]

Looking at the FDI history in Poland, it is similar to the one of Spain or Hungary. Both of these countries are in the second stage of development, however the outward direct

[156] http://www.paiz.gov.pl
[157] http://www.paiz.gov.pl
[158] Cf. http://www.pwc.pl/pl/biuro-prasowe/ekspansja-msp.jhtml
[159] Cf. Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.
[160] Cf. Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.

investment is not equal to zero. Their attractiveness of the country is characterized by: growing internal market, attractive economic zones, low labor cost, etc. Gorynia identifies, that an important, but unfortunately negative influence on the polish outward economy had the institutional framework of “a centrally planned economy”[161] in the past- exactly saying: before 1989. Another significant impact on the polish FDI outflow had the transformation of the institutional framework after the EU entry. Internationalization and adjustment of the rules and law regulations to the European Union standards opened the door to neighbor’s markets and equalized the process of doing business in all member countries.

[161] Cf. Gorynia, M ; Nowak, J ; Wolniak, R (2007) p.132-151.

10. Foreign Investors in Poland - Surveys

Poland remains one of the best developing countries not only in the European Union, but in the entire world, Europe offering highly competitive support for foreign direct investments. The population of Poland, which accounts to over 38 million, represents a large market and a huge and still growing demand for various products and services, as Polish people have more and more funds available, which origin from many sources, as increasing salaries, foreign capital, European Union's funds or simply the money sent by relatives from abroad.

Poland is located in the heart of Europe, which makes it very recommendable in invest here for investors, who wish to access the German market, but also of Russian origin speaking markets, since the labor costs in Poland are still significantly lower than in the European Union and in addition the government offers various incentives for foreign investors, already mentioned in this thesis, which makes investing in Poland even more interesting.[162] Median gross annual earnings in Poland equals to EUR 9.435 compared to EUR 41.123 in Austria, EUR 42.400 in Germany or EUR 58.840 in Denmark exhibits the difference in labor costs within the European Union and a huge advantage of manufacturing in Poland.[163] An important factor of investing in Poland is the fact that the Polish labor is highly qualified, but also very young, which means it is very adaptable and can grip new tasks quicker.

10.1 The Surveys

In this chapter results of two surveys among roughly over 300 biggest investors in Poland, operating in the Special Economic Zones, already widely described in this thesis, will be presented. The surveys were conducted by company KPMG international in years 2011

[162] http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Wages_and_labour_costs (see also Table 16)
[163] http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Table_1_Earnings_in_the_business_economy_(average_gross_annual_earnings_of_full-time_employees),_2008-2010.png&filetimestamp=20130410133321 (see also Table 18)

and 2012. Companies were divided into three subcategories, depending of the following aspects, namely business sector, employment and time of operation in Poland.

In the first category, the companies were divided according to the sector in which they operate in order to give a better overview on the large variety of the business active in Poland, but also in order to make it more comparable, as for instance some industries require higher startup costs but lower labor costs, whereas others require lower startup costs but higher labor or maintenance costs. According to the survey the largest number of companies, which operate within the Special Economic Zones, represent the construction industry with 13 percent of the responders, followed by metal sector with 11 percent and automotive also with 11 percent. Further sectors with significant number of businesses are technology and media sector with 8 percent and pharmaceutical and biotechnology industry with 7 percent.[164] These numbers exhibit the variety of business located in Poland making its economic sector very resistant against changing market tendencies and lowering its exposure against economic cycles.

In the second category, the companies were divided into sub-divisions depending on the size of their employment, namely small companies, which employ up to 49 people, medium-sized companies, which employ between 50 and 249 people and large-sized companies, which employ over 250 people. According to the survey, 32 percent of all the companies active in the Polish Special Economic Zones are small-sized business. Medium-sized business make up around 43 percent of all the companies and 25 percent are large-sized corporations[165].

In the third category, the companies which operate in Poland were divided into sub-divisions of businesses which were active in the Polish Special Economic Zones for less than 3 years, between 3 and 7 years and more those, which have been operating in Poland for more than 7 years. According to the survey, the percentage of companies operating in Poland for less than 3 years equals to 12 percent. 48 percent of companies are active in Poland for the period between 3 and 7 years and almost a half of all the companies, which took part in the survey, namely 40 percent are active in Poland for more than 7 years.[166] These numbers exhibit that foreign companies have been well settled in Poland as they successfully operate here for many years.

[164] Baranski P., Zagun K. (2012) p. 7.
[165] Baranski P., Zagun K. (2012) p. 7.
[166] Baranski P., Zagun K. (2012) p. 6.

An important factor is the growth of the number of companies, which decide to locate their business in the Special Economic Zones in Poland. The year 2010 was a record year in many aspects, but most importantly the number of permits issued to companies, who wanted to operate in the Zones, increased by record high 35 percent compared to the year 2009. In the following year, namely 2011 the number of permits increased again by 6% and equaled 188 permissions. In the year 2012 the number of companies, which decided to locate their business in the Special Economic Zones in Poland summed up to 185 was slightly lower than the year before[167]. These numbers however exhibit the interest which foreign companies have in the Polish market and a huge extend of the newly created business. Moreover also the capital expenditures made by the investors in the Special Economic Zones increased by 13 percent in 2012 compared to year before to PLN 7.3 billion, which equals to around EUR 1.825 billion.

The number of created workplaces is another significant aspect for measurement of strength of the Polish economy and the influence of foreign investments on Poland's society. Since 2010 the number of new jobs in the Special Economic Zones has been increasing. In 2009 the number of people employed equaled to 208.5 thousand and only a year later, there were over 16.8 thousand workplaces created, which is an increase of 8 percent. In 2011 241.5 thousand people had an employment located within the Special Economic Zones, which equals to an increase of 7 percent compared to a year before. In 2012 the number of jobs increased again by further 3 percent and the number of people employed equaled to roughly 249.6 thousand, which exhibits a huge influence on the Polish economy, which foreign investments have in Poland.[168]

According to the survey 78 percent of the companies perceive the functionality of the Special Economic Zones as positive, 18 percent stated that they are average and only 4 percent gave negative feedback. Importantly 7 percent of the respondents stated that if there were no governmental incentives for investing in Poland, they would definitely still in invest here and 33 percent stated that they would most probably invest. On the other hand 42 percent of managers stated that they would rather not locate their businesses in Poland, if there were no governmental incentives available and 15 percent accentuated that they definitely would

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[167] Baranski P., Zagun K. (2012) p. 17.
[168] Baranski P., Zagun K. (2012) p. 20.

not located their businesses in Poland.[169] These numbers emphasize the importance of governmental incentives for enhancing foreign investors to locate their business in Poland.

The further development of economic sector in Poland can be also derived by measuring current condition of the companies located within the Special Economic Zones. 55 percent of all the companies assess the condition of their business as good and 13 percent as very good. 22 percent evaluate that their companies are in average condition. On the other hand, only 8 percent and 2 percent stated that the condition of their business is bad or very bad respectively[170], which indicates that companies operating in Poland seem to be in a very good condition, which has a huge positive impact on the future potential economic growth. Moreover 60 percent of business located in the Special Economic Zones stated that they are planning to increase the number of people employed within the next 2 to 3 years and only 3 percent declared that they would decrease the number of workplaces.[171]

Furthermore 58 percentage of the respondents assured that they are planning future investments in Poland within the next 2 to 3 years, taking into consideration the fact that on average the return on investment requires at least 9 years in Poland and that the governmental incentives in the Special Economic Zones are valid by law only until the year 2020.[172] Currently the government is discussing the need of extending the governmental incentive period until the year 2026 in order to attract more investors to enter the market and enable them to fully utilize their investment's tax incentives. In case the government agreed to extend the period for the government incentives until 2026, 73 percent of companies assured that they would make further investments in Special Economic Zones, which would expectedly increase the expenditures by investors within the next years to PLN 40 billion or EUR 10 billion.[173]

"Investors operating in the Special Economic Zones enjoy various incentives, most notably tax exemptions which drive high interest in the zones. However, give the applicable legislation; investors often face many problems which they would otherwise not experience.[174] 57 percent of businesses claim that legal barriers and vague regulations related to tax incentives, were the most significant issue which they faced while operating in the Special Economic Zones in most probably which would be avoided if they operated outside of

[169] Baranski P., Zagun K. (2012) p. 35.
[170] Baranski P., Zagun K. (2012) p. 35.
[171] Baranski P., Zagun K. (2012) p. 38.
[172] Baranski P., Zagun K. (2012) p. 36.
[173] Baranski P., Zagun K. (2012) p. 36.
[174] Baranski P., Zagun K. (2012) p. 33.

governmental incentive territory. Furthermore 31 percent of respondents stated that additional costs were the second most significant problem, which they faced, followed by 25 percent who claimed that the infrastructure was underdeveloped and 24 percentage of businesses, which faced problems with workforce shortages. Only 9 percent of companies stated that they faced no problems associated with operating in Special Economic Zones, which they would have avoided by operating elsewhere.[175]

An important indicator describing the economic environment in Poland is the satisfaction of the foreign companies, which operate in Poland. According to the survey, looking back, for 65 percent of businesses it was a good idea to invest in Poland. Importantly this statement made 84 percent of companies, which have been operating for over 7 years in the Special Economic Zones, 63 percent of companies which operate in Poland for 3 to 7 years and 52 percent of companies, which have been in Poland for less than 3 years. This statement holds also for 61 percent of small-sized companies, 70 percent of middle-sized companies and 67 percent of large-sized companies.[176]

Moreover, 28 percent of companies stated that it was a fairly good idea to invest in Poland. Among them 14 percent of companies, which have been operating in Poland for at least 7 years, 29 percent of companies operating in Poland for 3 to 7 years and 38 percent of companies, which have been operating in Poland for less than 3 years. The same statement was made by 29 percent of small-sized companies, 25 percent of middle-sized companies and 30 large-sized companies.[177]

The number of companies for which investing in Poland was either a bad or fairly bad idea is rather marginal, namely this statement was made by only 2 percent of companies, which have been operating in Poland for at least 7 years, 8 percent of the companies, which have been operating in Poland for 3 to 7 years and 10 percent of companies, which have been operating in Poland for maximum 3 years. The same declaration was given by 10 percent of small-sized companies, 5 percent of middle-sized companies and 3 percent large-sized companies. All these numbers exhibit that most of the companies operating in Polish Special Economic Zones are satisfied with the opportunity, which they took and how investment friendly environment the Polish government was able to create, after Poland became a member of the European Union.

[175] Baranski P., Zagun K. (2012) p. 34.
[176] Baranski P., Zagun K. (2012) p. 35.
[177] Baranski P., Zagun K. (2012) p. 35.

11. Striving for Energy Independence

The energy consumption is one of the biggest problems, which Poland had to face in the recent years. Since 1990, the increase of energy consumption equals roughly 97 percent and after Poland became a member of the European Union on Mai 1st 2004, the increase of energy consumption equals around 57 percent[178]. Naturally the higher energy consumption is correlated with economic growth, namely the more companies actively produce goods, the more electricity they need. The transition of institutional framework in Poland, and especially its stable economy and politics but also large skilled labor and its relatively low price are the main reasons why many international corporations relocated their production plants to Poland or decided to do so in the next couple of years and for that reason the energy consumption is expected to increase significantly over the next years.

Today's Poland import roughly 35 percent of its energy from other countries and especially from Russia. Compared with around 55 percent, which is the average of the European Union, Poland still seems to be in a good position.[179] Unfortunately taking into consideration the fact, that the energy consumption is expected in significantly increase in over the next years in Poland, but also tough Polish-Russian historical relationship, the government in Warsaw is seeking energy independence almost at any cost. "Poland's green credentials are relatively shaky. The fact that it generates 90 percent of its electricity from polluting coal makes Poland one of the top emitters of CO_2 in Europe. And the country's stubborn – and isolated – opposition to more ambitious European Union's climate legislation is not helping that image either."[180]

Supposedly coal is not only the historical source of producing electricity in Poland, but also a radical shift from coal would drastically increase unemployment in many regions of Poland, where coal mining and utilization is the only existing employment sector. Moreover radical shifting from coal would mean increased dependency on fossil and gas energy from Russia and potential "price war", which Poland wants to avoid. Taking into consideration mentioned aspects, the government wants to develop three sources of energy over the next few years, namely green energy, nuclear energy and the energy produced from shale gas.

[178] http://szczesniak.pl/2140 (see also Table 19)
[179] http://szczesniak.pl/2269 (see also Table 20)
[180] Nolan L., (2013) p. 103.

11.1 Green Energy

According to the Ernst & Young report of 2012, Poland is the 10th country in the world with the best wind power potential[181], which is definitely one of the reasons why the Polish government decided to devote a lot of funds into research and development of new technologies and innovations regarding the renewable energy. The governmental incentives already mentioned in this thesis as tax exemptions and creation of Technology Parks were the main aspects of governmental involvement into improvement of the renewable energy in Poland and its energy independence.

Since Poland became a member of the European Union, it received around EUR 17.8 billion which were dedicated only for financing environmental projects. This exhibits the enormous help that Poland received from the European Union in order to become a more "green" country, which also supports the economic growth in Poland as many projects started such as building wind farms or hydroelectric power plants. Costs of each of these projects can be calculated in millions or billions of EUR, simultaneously increasing employment in Poland and supporting the development of Polish economy. Today there are over 500 green technology companies located in Poland, which create employment for roughly 25 thousand people. This indicates the importance of rapidly growing sector of the Polish economy, which thanks to the support of the government has a large positive impact on the entire country.

With the intention of enhancing research and development of technology and innovation in green energy, the Ministry of Environment founded an institution called GreenEvo[182], which supports companies in finding financial sources and navigate through bureaucratic burden, but also to export their environment friendly technology abroad, simultaneously supporting the domestic economy.

According to the Polish Electro-Energy Network, the wind farms produced roughly 2.8 thousand GW in 2011, compared to the entire production of electricity of around 157.5 thousand GW seem that there still is a lot of room for improvement. Moreover only in 2010, the capacity growth of the wind farms in Poland increased by around 53 percent, which exhibits the influence of the governmental incentives on this sector but also the rapid changes,

[181] Sztuba W, Marcinkowski B., (2012) p. 6.
[182] http://greenevo.gov.pl/pl/informacje-ogolne/greenevo

which are taking place in Poland after its accession to the European Union.[183] "The European Wind Energy Association predicts that Poland will increase its total wind power capacity 26 times by 2020"[184], which exhibits the potential economic growth in this sector alone.

11.2 Nuclear Energy

Following the European Union's regulations regarding the climate change, Poland committed to 15 percent decrease of CO_2 emissions by 2020 compared to 1990, which seems not be possible to achieve if one looks at the constant growth of the Polish economy and increasing energy demand, but also taking into consideration the fact that 90% of Poland's energy production comes from coal. However, Poland macroeconomic situation is significantly different that other member states of the European Union and might require a different approach to reduce CO2 emissions and for that reason the Polish Sejm, which is the lower house of Parliament, decided to build two nuclear power plants in Poland by 2035, which do not exist in Poland. The first one should be operational by 2023 and as the government assures, Poland needs to diversify its energy sources in order to be able to maintain its reasonable import of energy.

The construction should begin in 2015 and cost between EUR 9 to EUR 12 billion. During the construction phase up to 5 thousand people should find a permanent employment and once the power plants are active, they will require up to 3 thousand people to operate, which exhibits the potential economic value, but also additional way of securing country's energy independence. It is estimated that both nuclear power plants should have operational capacity of 6 thousand MW, which indicates that coal will still be the dominant fuel for energy production in over the next 20 years.

Since Poland does not have the necessary technology and will depend on foreign expertise, but still decided to implement its plans to build the nuclear power plants regardless of the fact that Germany only in 2011 decided to close its plants by 2022.

[183] Sztuba W, Marcinkowski B., (2012) p. 5.
[184] http://www.ewea.org/fileadmin/ewea_documents/documents/publications/reports/Pure_Power_Full_Report.pdf

11.3 Shale Gas

April of 2011 was a very special year for Poland. The United States Energy Information Administration announced that in Poland there are reserves of shale gas amounting to 5.3 trillion cubic meters, which is the largest shale gas concentration in the entire Europe. Enormous excitement was present all over the country as it seemed that the dream of the energy independence was about to become true, but also that the political and economic position in Poland was going to become strong again. The Minister of Environment issued a number of permission to foreign and domestic companies for drilling all over the country, which were able to find substantial amounts of shale gas.[185]

In March 2012 the Polish Geological Institute pronounced that according to its conservative estimates, there is 10 times less gas, than what had been believed before and eventually some of the biggest companies as ExxonMobil decided to stop drilling. As of today there are 18 oil and gas companies drilling in Poland in 111 areas across the country, but according to estimates, the reserves of shale gas are huge enough for domestic and international demand, which can last for many years. Experts undoubtedly agree that the real capacity and profitability of the Polish reserves of shale gas will be known within the next three to four years.[186]

It seems that the Polish government is facing a huge challenge regarding creating a new institutional framework for this new industry. In the meantime the Ministry of Environment must define the regulatory environment in which prospecting corporations would operate in case shale gas exploration would be possible on a commercial scale, as setting a minimum percentage demand which would be in control of the government, or taxes which would apply to explore and sold shale gas.

It can be noticeably seen how many efforts the government undertakes in order to grant Poland at least partial energy independence by adjusting its institutional framework for stimulating the constant economic growth.

[185] http://www.ekologia24.pl/gaz-lupkowy-w-polsce--szansa-czy-zagrozenie.html
[186] http://www.forbes.pl/artykuly/sekcje/wydarzenia/polskie-zasoby-gazu-lupkowego--350-770-mld-m-szesc-,25345,1

12. Conclusion

The vision of the European Union's institutional framework influencing the economic, political, social and cultural sector had been seen as a risk of losing own independency as a nation, its own identity and culture, so hardly protected through all the years of wars and revolts. The older generation of Polish inhabitants did not trust allegedly good intentions of the union and all the advantages supposedly that were to come as they were extremely suspicious. The accession of Poland was ambiguous, for that reason polish government carried on the 7th and 8th of June 2003 a country-wide referendum regarding the permission of the inhabitants to access the European Union. The participation was remarkably high: 52.2% of all entitled to vote, and the results were satisfying for all EU sympathizers: 81.9% was for the European Union accession and only 18.1% against.[187] This day remained as memorable as almost the day of the actual accession itself, and was celebrated not only in Poland but also in other European countries.

The changes initiated by the European Union on the Polish institutional environment started with the pre-accession phase and not first after the exact date of the membership. The reorganization of the Polish institutional environment after Poland became a member state of the European Union was very time consuming and complex, but it brought Poland where it is today, namely to the top of developing countries in the world with a very good organized and business friendly institutional framework. According to the mentioned theory by Porter the competitiveness of a country can be reflected by factors as the ability to keep a steady economic growth, the standards of living are improving and foreign investors are willingly to enter the market. All those considered factors have been proven to be valid for the Poland's case, what implies the presence of a significant competitiveness. Moreover the four forces of Porter's diamond are represented in the structure of the Polish market. The available natural resources as plenty of areas with fertile soil favorable for agriculture, or bed of coal and shale gas but also the advanced factors as geographical location of Poland and well-qualified labor. The insatiable demand with demanding buyers, show the presence of the second factor of the diamond. The related and supporting industries can be presented as the constant restructuring of the governmental bodies, adapted to the country needs, and the creation of the special economic zones. Furthermore the development of the private sector and the growing

[187] http://polskawue.gov.pl/Referenda,akcesyjne,w,panstwach,kandydujacych,,informacje,o,wynikach,102.html

competitiveness and power of Polish firms within the country but also abroad, prove both the third and the fourth factors of Porter's schema.

Those competitive advantage indicators emerged from the accession to the European Union by Poland. The natural factors did not change but the technology of resourcing became through European Union funds and grants more advanced, efficient and productive. Advanced factors became more relevant. Poland while becoming a European Union member, gained on importance in the region, became an example for the other member countries, especially our high-competence labor force became a demanded factor. With the free market movement the supply and demand on the real estate market developed into more advanced, more demanding, with plenty of space for improvement and innovation, what not only gave an incentive to national players to gain market shares, but also foreign investors to enter the Polish market. European institutions assumed the authority over Poland and to become a full member Poland had to fulfill the requirements and as a result change the functioning structure of various fundamental sectors. The health care system, the educational system the market barriers, import and export rules became more modern, assimilated to the European standards. The entry to the Schengen Treaty allowed free movements between the treaty members, what improved the trading, traveling and migration activities. All factors together improved the competitiveness advantage of Poland through the years of European Union's membership, looking at the Porter's diamond's perspective.

The reforms of the institutional environment in Poland started with the end of the 80s with the structural changes and the fall of communism. Nevertheless the strongest influence had European Union with its directives for implementation of various new regulations. Most of the changes had to be applied before the accession, in order to fulfill the general requirements. The changes had both procedural and functional character: central deregulation of the economy, electricity production, improvement of the administrative processes etc. Also the abolition of trade barriers, the inspection of the customs and reduction of duty payments, were one of the most impactful changes. With the government transformation, the duties of each governmental body became more clear and the decision making processes faster. The economic, cultural and social procedures became easier to implement and less administrative. Innovation and research got on relevance, and the educational system implemented higher accessibility to higher education.

The most important sectors of the Polish economy agriculture and private sector gained on importance and emerged to stable and the players as strong competitors on the

European market. Constant growth of general economic development caused the positive GDP of Poland while other countries in Europe faced difficulties. The unemployment rate in Poland still stays at an average European level, same as the debt and budget deficit, which in comparison with other countries exhibits that Poland's economy definitely is not worse than its European counterparts. The living standards are still improving gradually from the accession point until now.

European Union support evaluated in various founding programs: European Funds for health care gave more high quality technical equipment for hospitals, funds for schools enabled building new class rooms, sport facilities, new PC laboratories, entrepreneurship funds supported the existence of new firms, restaurants, SPA and hotels etc. Not only investors but also Polish inhabitants feel the growing competitiveness of Poland and the improvement of living standards. According to a study about the satisfaction of life in Poland, approx. 40% of people declare that they are satisfied or even very satisfied with their live, and over 50% expect that their current living standard will remain same or will improve during the year 2013.[188]

This improvement of the competitive advantage of the institutional framework of Poland can be explicitly exposed also by expanding international long lasting contracts with partners from different continents, especially from the United States of America of China.

American investors have substantially increased their investments in Poland over the past couple of years, as the Polish institution environment in their opinion seems to be one of the best in the world for doing business by foreign investors and by many is considered a gateway to the rest of Europe. After Poland joined the European Union, the export to the United States of America tippled to USD 3.7 billion and created over 190 thousand workplaces[189], which exhibits the trust that the American investors have in Polish economy.

The second important partner on the Polish market is China. In the recent years, this most populated country in the world realized the importance of Poland as a European player, especially taking into consideration the localization of Poland, namely just in the heart of Europe, with easy access not only to the entire European Union, but also post-communist countries or Russia. For instance in 2012, of the biggest Polish copper miner company KGHM signed a four year long contract with China Minmetals Corporation worth

[188] http://www.egospodarka.pl/91941,Polacy-deklaruja-zadowolenie-z-zycia,1,39,1.html
[189] "World's Investment Report 2011".

approximately USD 3.5 billion to KGHM.[190] Later on in 2012, during a business conference with Polish and Chinese officials and businessmen, a number of contracts were signed worth over USD 10 billion. Moreover, in June 2012 the Bank of China opened its first branch in Poland in order to better assist Chinese businessmen in investing in this rapidly growing economy.[191] Importantly, both countries signed a strategic partnership contract and Poland is the first country among the new European Union's members to sign such an agreement, which exhibits the potential which China sees in Polish economy.

Another important fact about Poland's economy today is the legacy left after the UEFA Euro Cup of 2012, which Poland organized together with Ukraine. After the UEFA announced back in 2007 that the Cup was going to take place in Poland, the country underwent a lot of changes. Especially a lot of modern stadiums were built, which today are used not only as hosts to huge cultural or sport events, but also as business centers. Moreover, there were large investments in infrastructure, airports, railway stations, which modernized the entire country and today Poland seems to be more friendly place for tourist, who not only remember this country as a host to the Euro Cup, but also a beautiful country was amazing food and landscapes. The reputation of Poland among those who came and those who watched the Cup significantly increased and it is expected that extra 500 thousand tourists per year will visit Poland as a Euro Cup legacy[192], which will definitely have an enormous positive impact on the Polish economy.

Also foreign bonds investors see Poland as a safe harbor in times of financial uncertainty on financial markets. On May 10th 2013 the Polish 10 year-long government bonds yielded 3 percent, which was the lowest in the history of Poland and a very positive signal indicating the trust that investors have for this Eastern European country. Importantly, the demand for the bonds was 50 percent higher than the supply and this result was twice lower than only two years ago, which indicates that also the Polish bond market is slowly adjusting to the Western European countries, which means that the operational costs of its debt will be lower, eventually leading to the government having additional funds which can be invested into the economy and stimulate the growth.[193]

[190] http://www.accessmylibrary.com/article-1G1-275405369/polish-copper-producer-signs.html
[191] http://www.boc.cn/en/bocinfo/bi1/201209/t20120903_1961437.html
[192] http://www.newseria.pl/news/pierwsze_efekty_euro_2012,p455486441
[193] http://biznes.interia.pl/makroekonomia/news/rentownosc-polskich-10-letnich-obligacji-na-rekordowo-niskim,1916806

All the mentioned facts exhibit how changes made by the government over the past years created an investment friendly economy, which can by recognized not only by the Polish citizens, but especially by foreign investors. Importantly, Polish business partners do not origin only form other European countries, but as it was indicated, also from other continents covering various sectors, which increases resistance of the Polish economy against economic cycles and makes it more attractive for investors.

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14. Appendix

Table 1

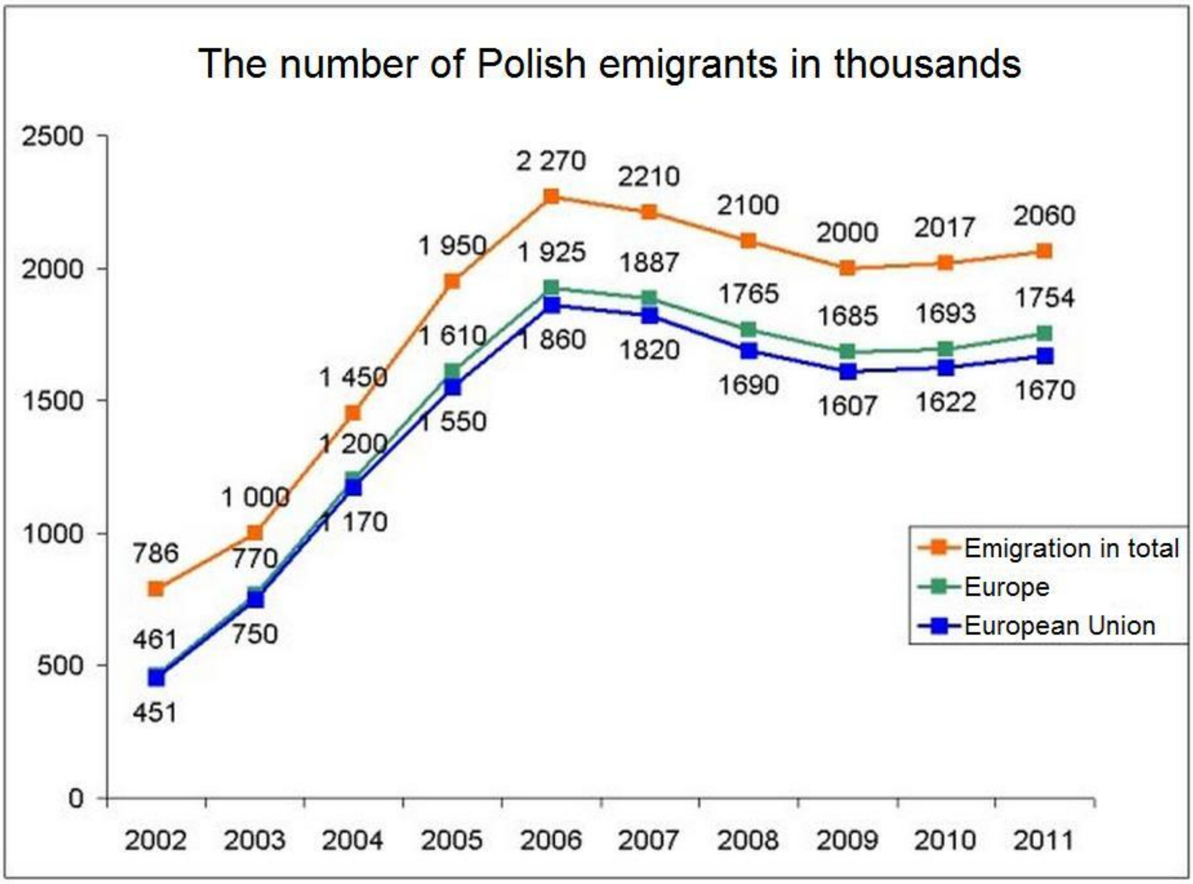

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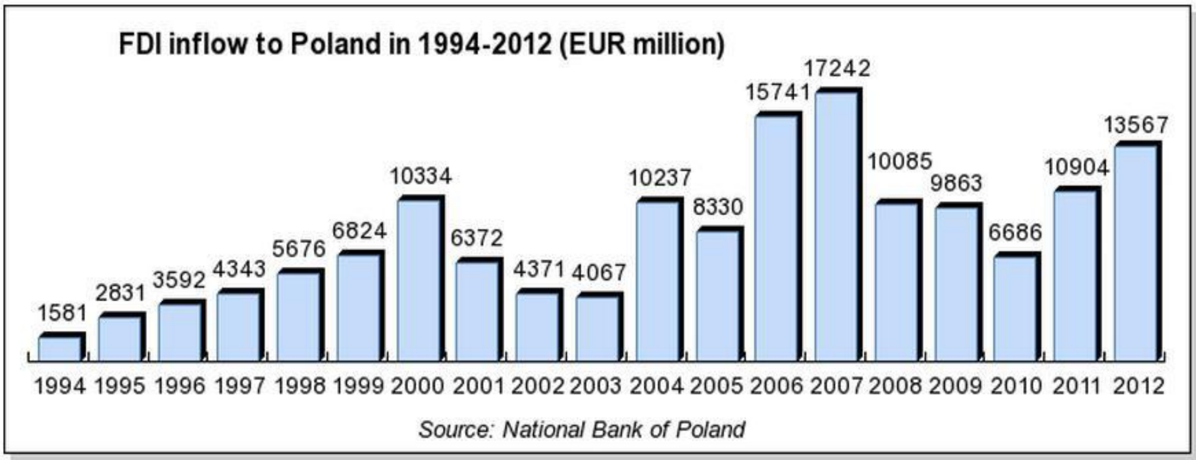
Table 2



Source: http://www.paiz.gov.pl/poland_in_figures/foreign_direct_investment#

Table 3

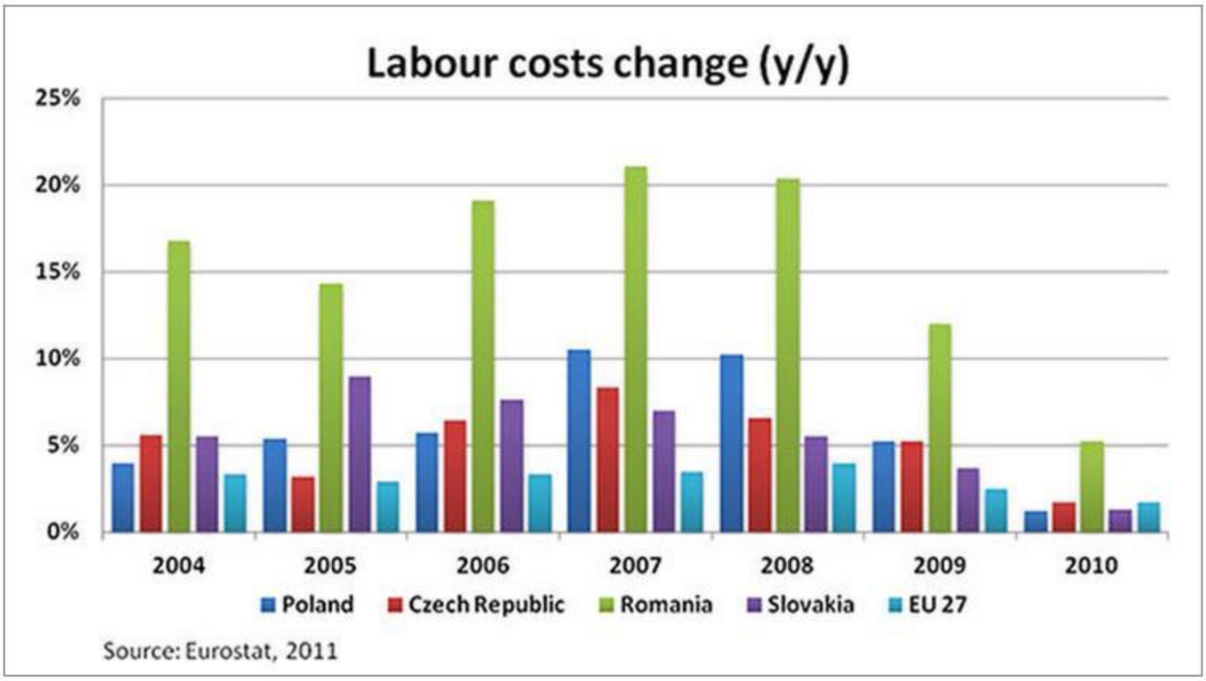


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Table 4

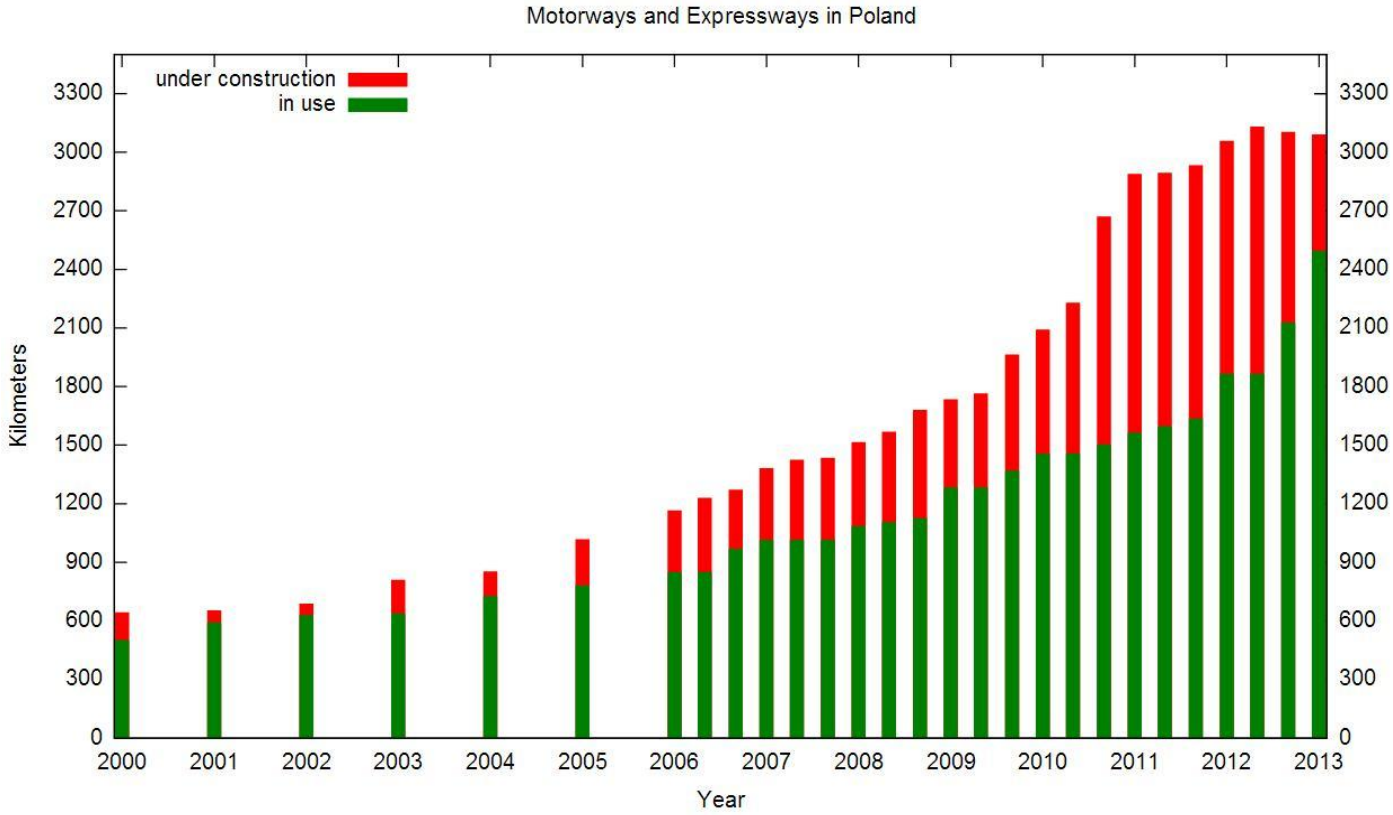

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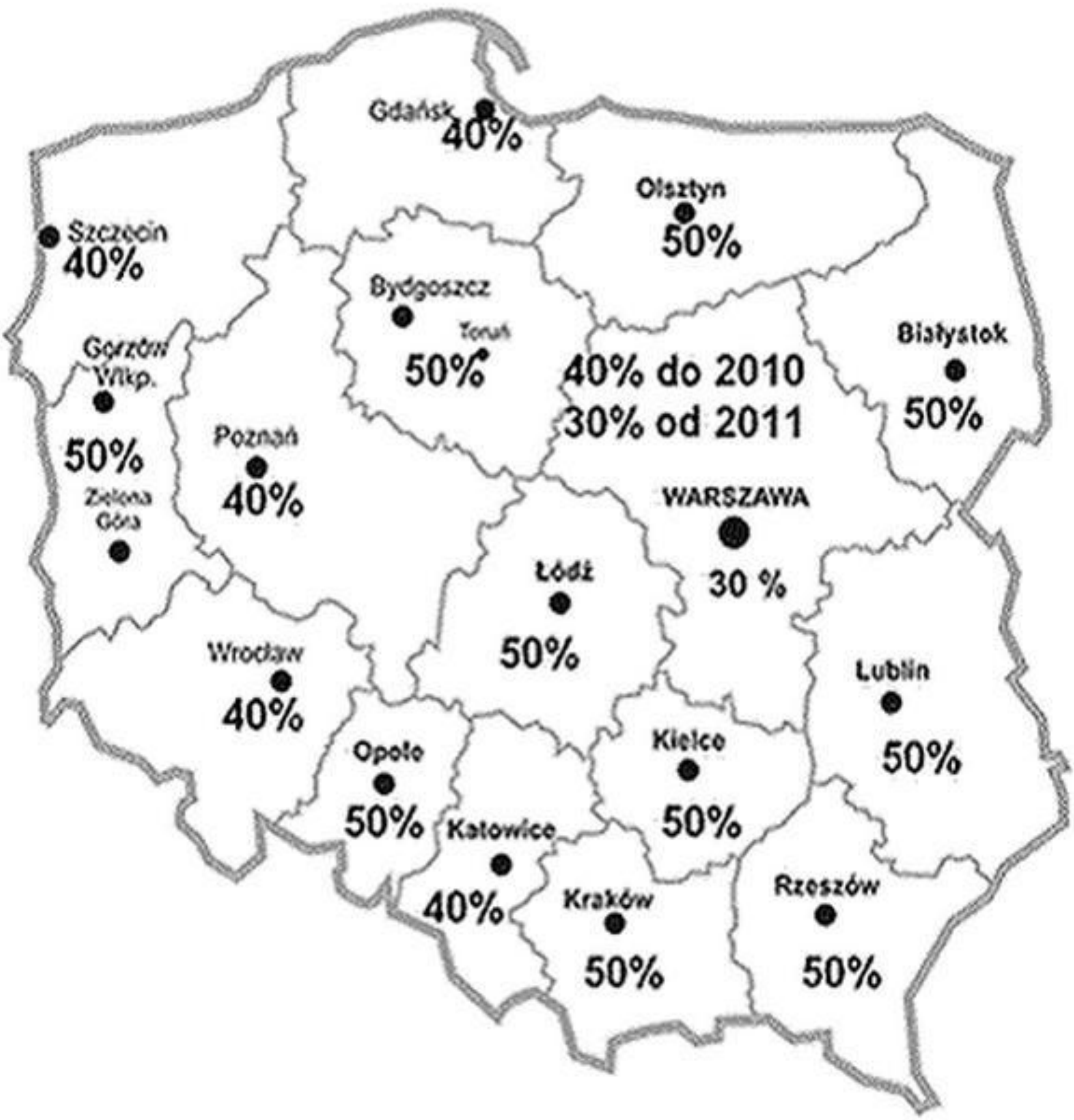
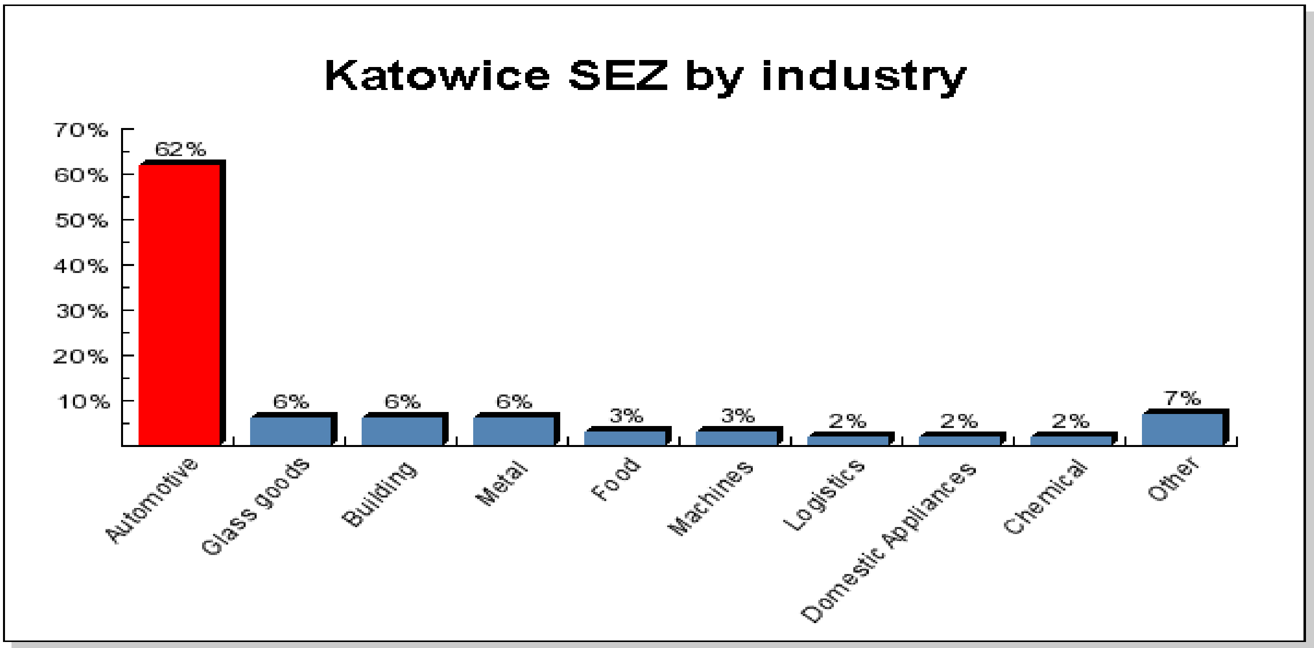
Table 5:



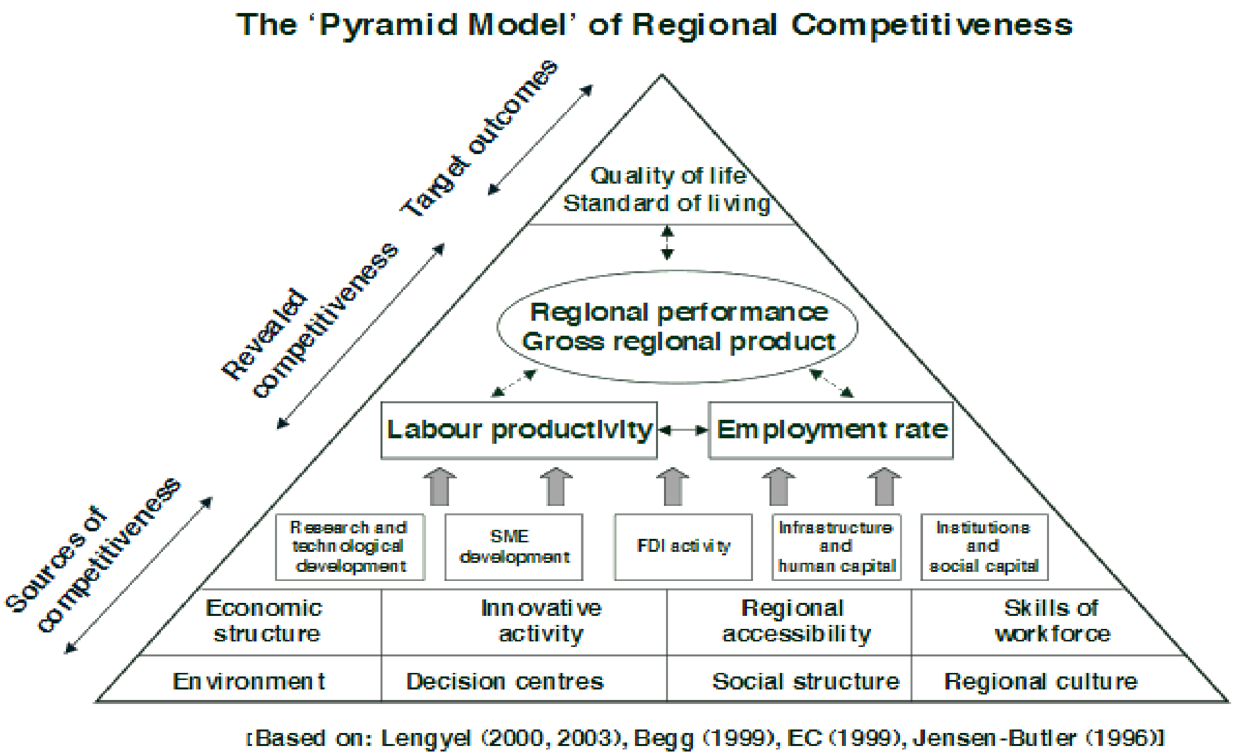
Source:http://www.funduszedlaenergetyki.pl/2,1,mapa_pomocy_regionalnej_w_polsce_2007_2013.html#

Table 6:



Source: http://en.invest.katowice.eu/business/24/23/special_economic_zone.html

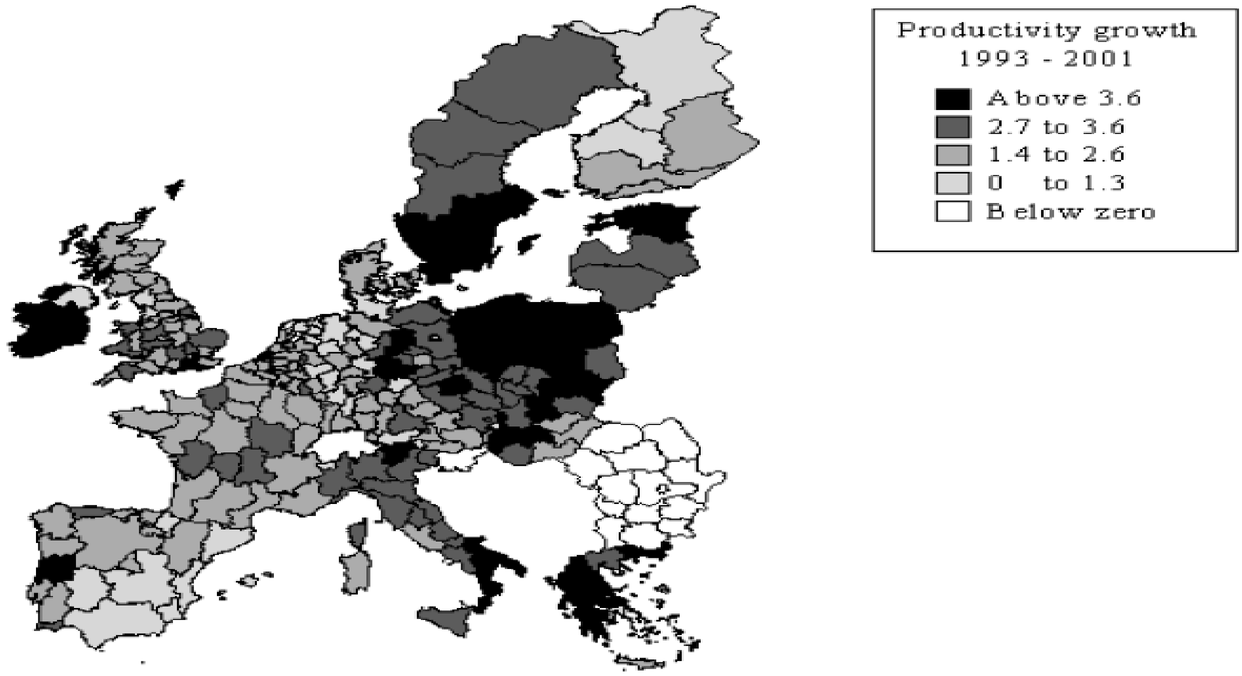
Table 7: The Pyramid Model of Regional Competitiveness



Source: Gardinger et.ali (2004) p. 7.

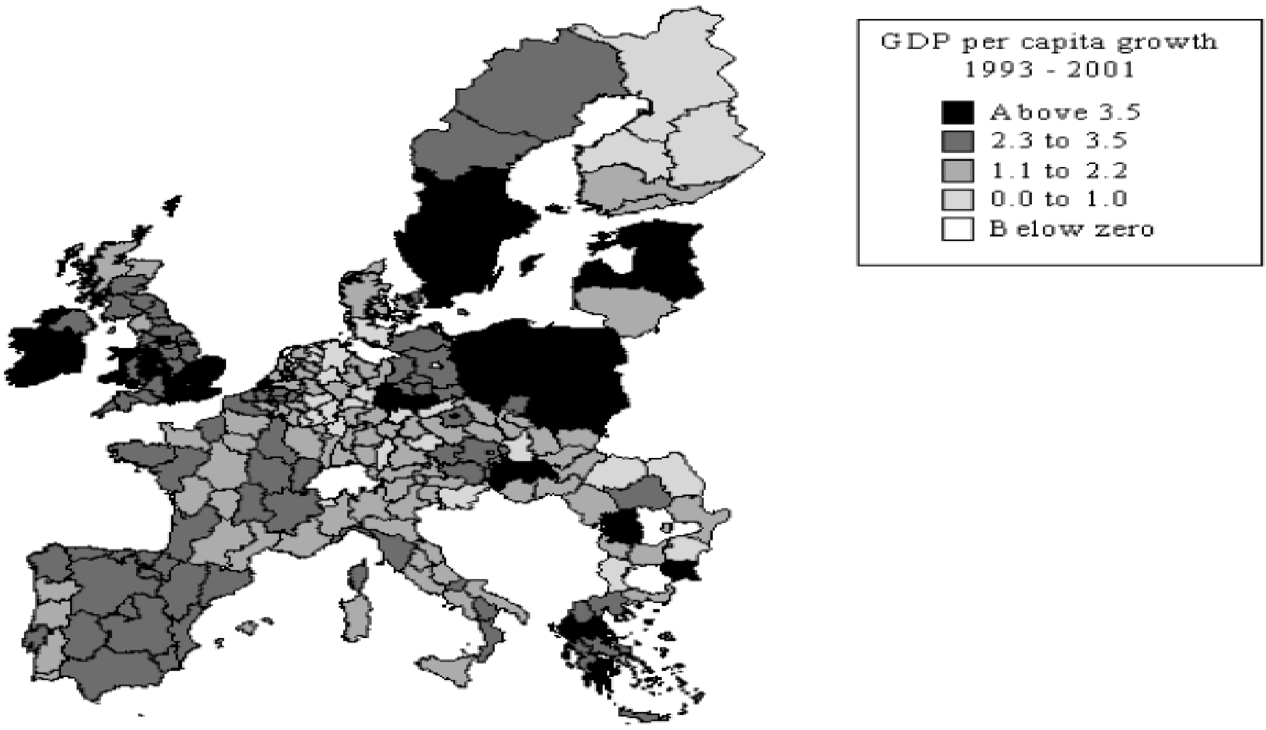
Table 8: Regional Productivity Growth across the EU, 1993-2001

(LFS hours-worked measure)



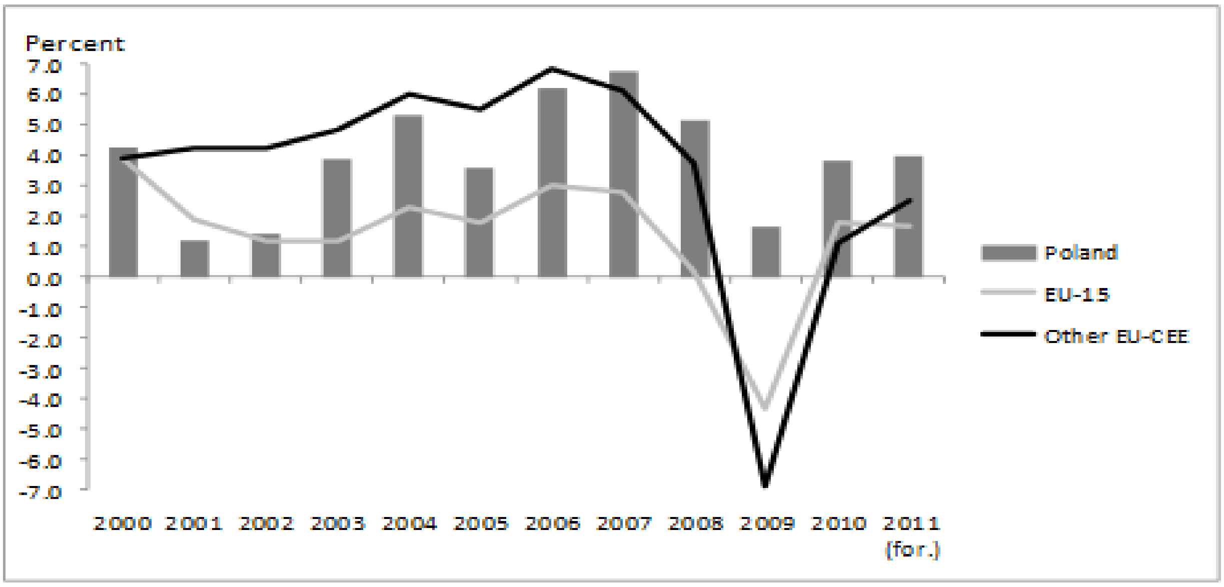
Source: Gardinger et.ali (2004) p.18.

Table 8b: Real GDP per Capita Growth across the EU regions, 1993-2001



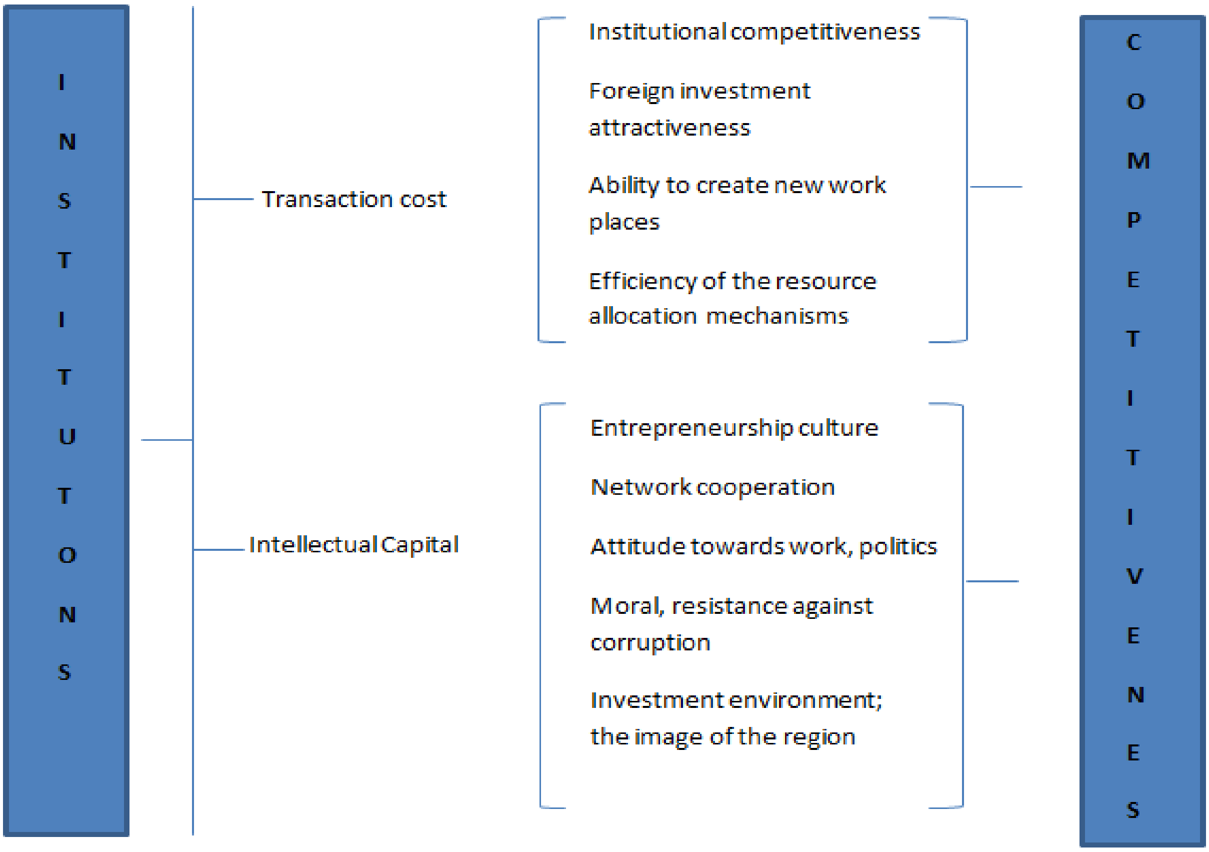
Source: Gardinger et.ali (2004) p.23.

Table 9: GDP growth rates in Poland and various parts of the EU, 2001-2011



Source: Orłowski (2011)

Table 10: Transition channels of the influence of institutions on competitiveness



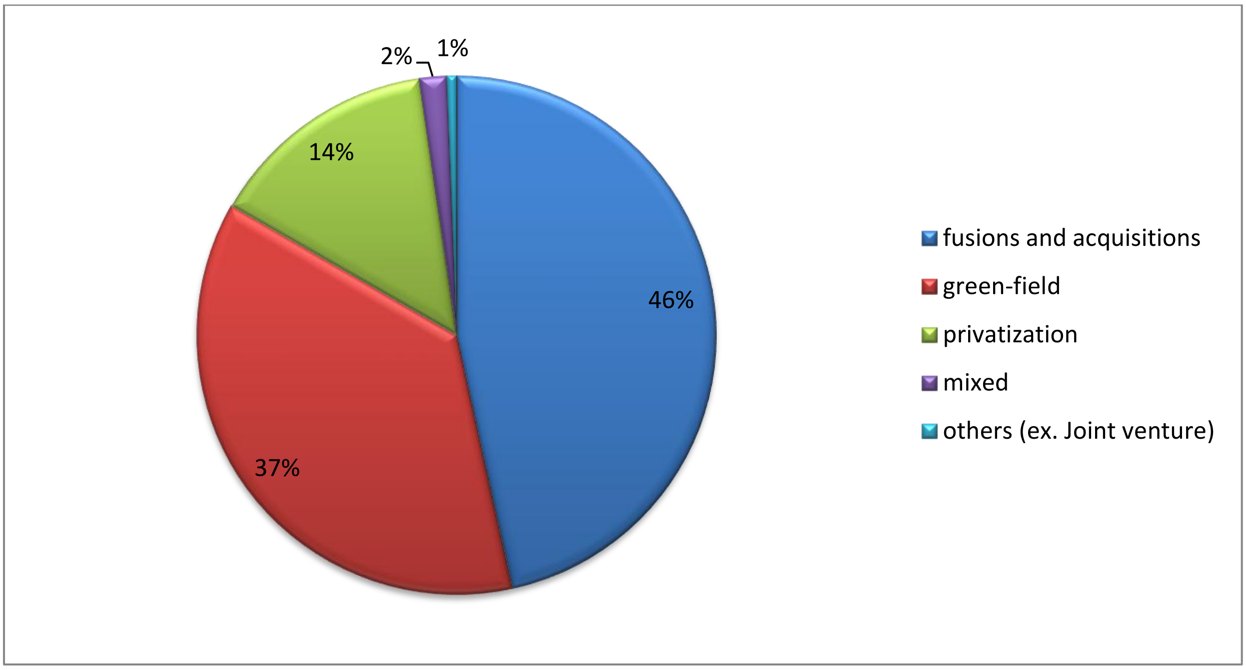
Source: Wosiek (2012)

Table 11: Commitments Phare per country per year

	1990-1992	1993	1994	1995	1996	Total
Albania	120	75	49	88	53	**385**
Poland	577,8	225	206,8	174	203	**1386,6**
Hungary	306,8	99	85	92	101	**683,8**
Czechoslovak Republic	232,7	-	-	-	-	**232,7**
Czech Republic	-	60	60	110	54	**284**
Slovakia	-	40	40	46	4,5	**130,5**
Lithuania	20	25	39	42	53	**179**
Estonia	10	12	22,5	24	61,8	**130,3**
Latvia	15	18	29,5	32,5	37	**132**
Romania	301,8	139,9	100	66	118,4	**726,1**
Bulgaria	223,3	85,2	85	83	62,5	**539**
Slovenia	9	11	24	25	22	**91**
FYROM	10	25	25	25	25	**110**
Bosnia	37,3	-	-	-	140	**177,3**
Multinational Programs	276,7	112	86	104	125,5	704,2
Horizontal Programs	143,8	74,3	119,1	243,2	162,2	742,6
Total	**2284,3**	**1001,4**	**972,9**	**1154,7**	**1222,9**	**6636,1**

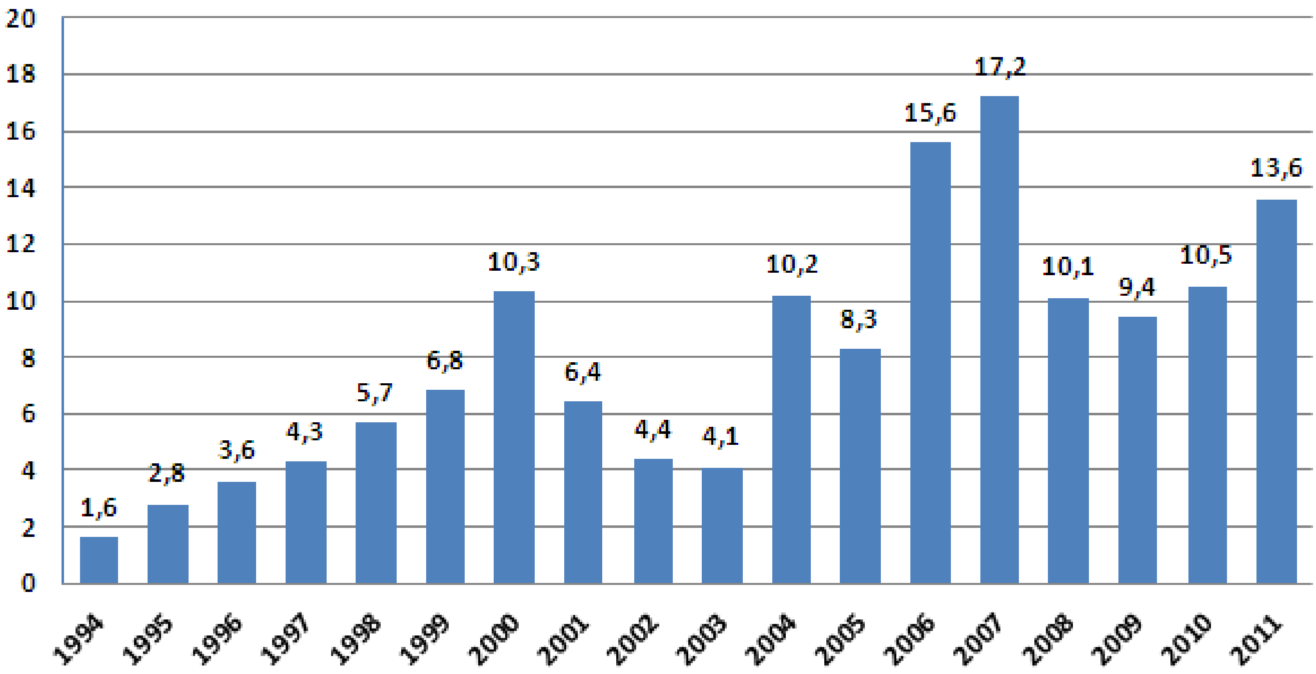
Source: ibidem in Jeziorski (1998) [19.04.2013]

Table 12: Forms of FDI in Poland



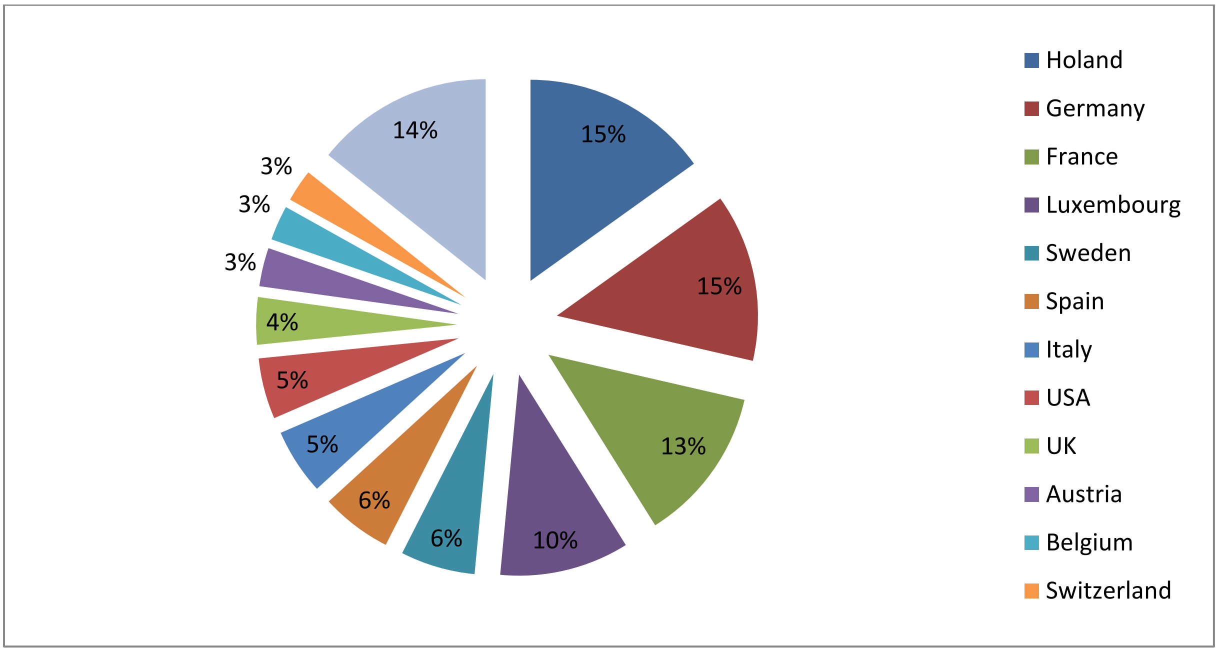
Source: KPMG (analysis based on PAIiIZ)

Table 13: Inflow of the foreign direct investment in Poland (Billion Euro)



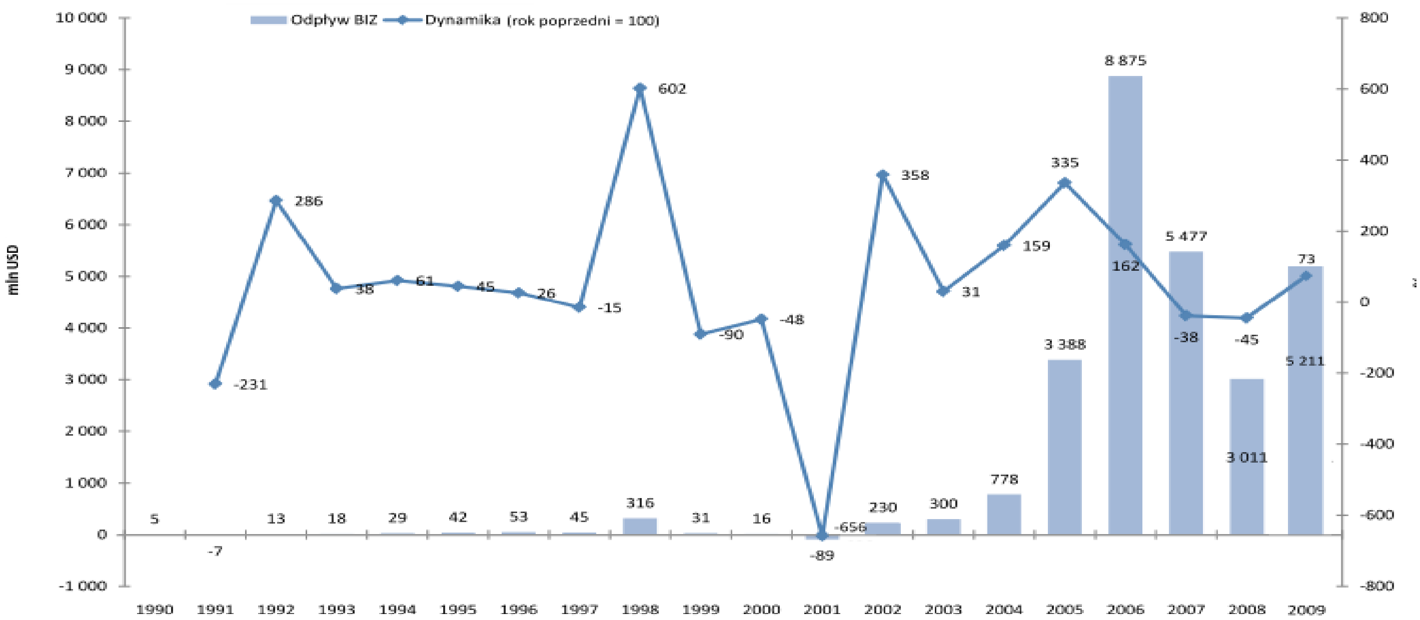
Source: NBP http://www.paiz.gov.pl/polska_w_liczbach/inwestycje_zagraniczne

Table 14: Countries share in polish FDI in 2011



Source: NBP http://www.paiz.gov.pl/polska_w_liczbach/inwestycje_zagraniczne

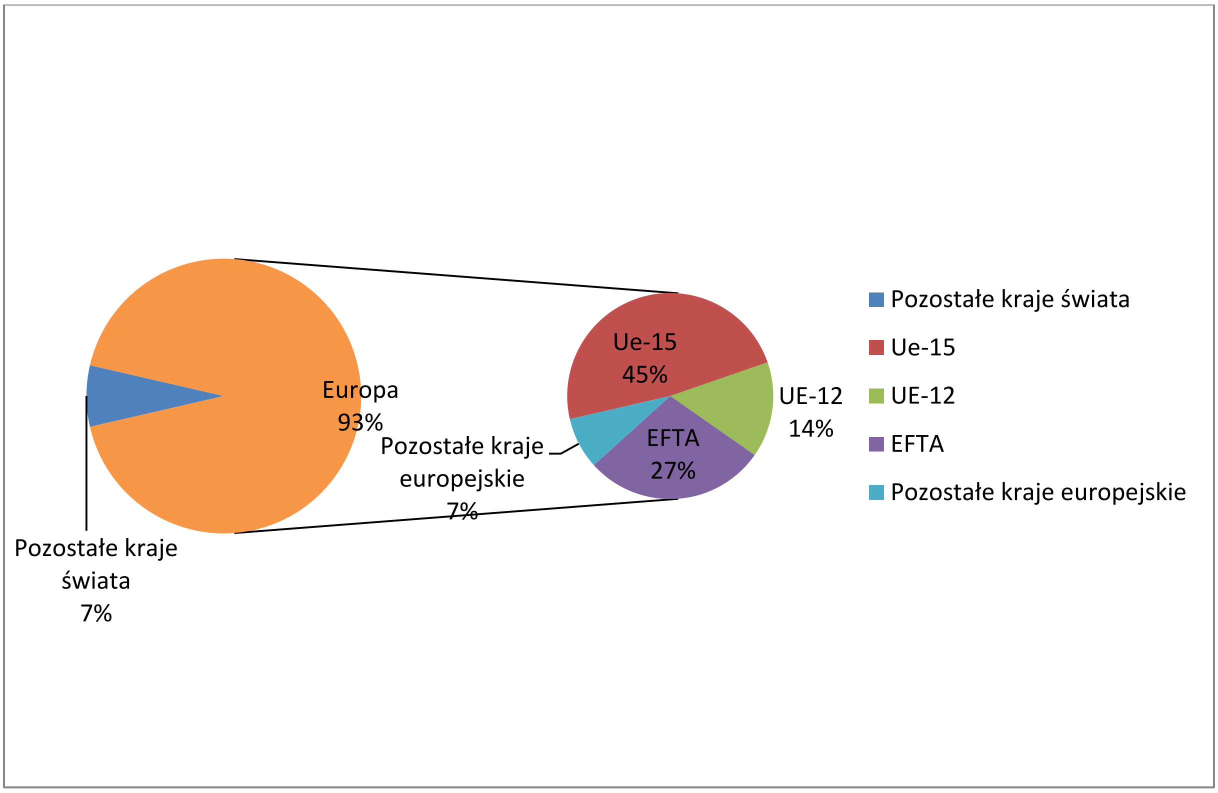
Table 15: Polish foreign direct investment and the dynamics of the outflow in years 1990-2009



NBP, Polskie inwestycje bezpośrednie za granicą w roku 2009, Warszawa 2010;

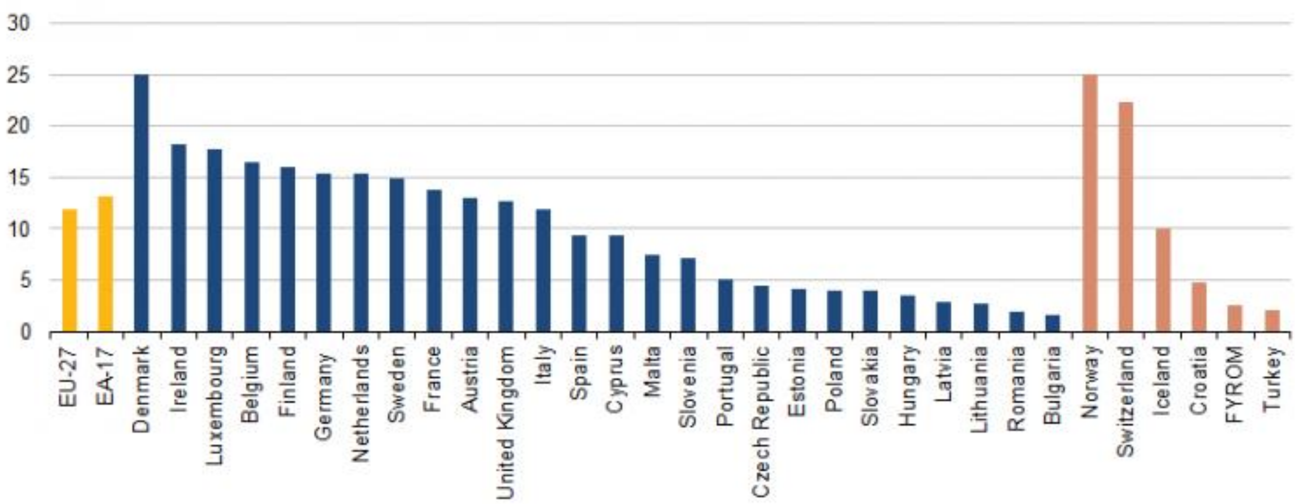
NBP, Polskie inwestycje bezpośrednie za granicą w roku 2001, Warszawa 2002.

Table 16: The structure of receivables of the Polish direct investment abroad broken down by economic zones



Source: NBP, Polskie inwestycje bezpośrednie za granicą w roku 2009, Warszawa 2010.

Table 17: Median Gross Hourly Earnings



Source: Eurostat

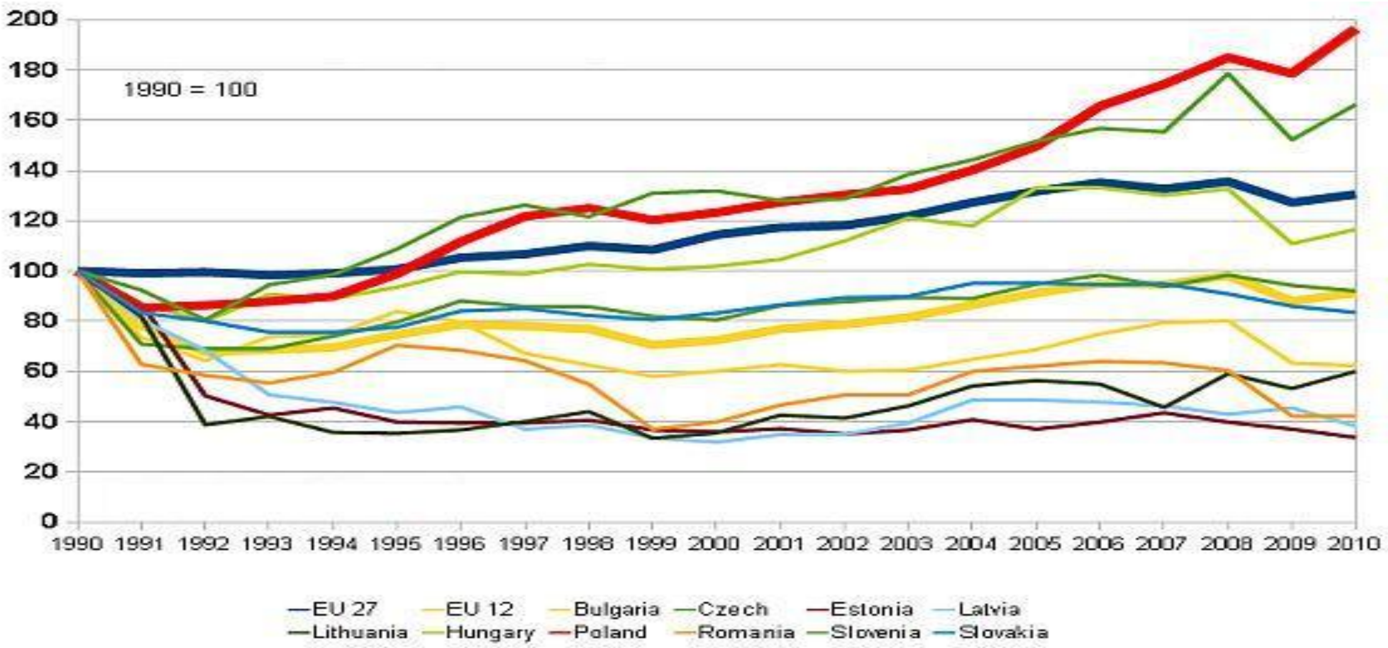
Table 18: Earnings in the Business Economy (average gross annual earnings of full-time employees)

	2008	2009	2010
Belgium (2)	40 698	42 149	43 423
Bulgaria	3 590	4 085	4 396
Czech Republic (3)	10 930	10 596	11 312
Denmark	55 001	56 044	58 840
Germany	41 400	41 100	42 400
Estonia (2)	10 045	9 492	9 712
Ireland	45 893	45 207	:
Greece	25 915	29 160	:
Spain	25 208	26 316	:
France	:	35 530	:
Italy (3)	26 845	27 419	28 230
Cyprus (2)	:	24 775	25 251
Latvia	8 676	8 728	8 596
Lithuania (3)	7 398	6 895	6 735
Luxembourg (2)(4)	47 034	48 174	49 316
Hungary	10 237	9 603	10 100
Malta	:	20 811	21 446
Netherlands	43 146	44 412	45 215
Austria (2)	39 875	40 457	41 123
Poland (3)	9 868	8 399	9 435
Portugal	:	17 129	17 352
Romania	:	5 450	5 891
Slovenia (5)	15 997	16 282	17 168
Slovakia	9 707	10 387	10 777
Finland	37 946	39 052	40 122
Sweden	37 597	34 746	40 008
United Kingdom	42 327	38 047	39 626
Norway (2)	52 632	51 343	:
Switzerland (5)	:	:	56 509
Croatia (5)	11 979	11 969	:

(1) Enterprises with ten or more employees; NACE Rev. 2 Sections B to N.
(2) All enterprises.
(3) All enterprises; full-time units (FTU).
(4) Break in series, 2009.
(5) Enterprises with ten or more employees; full-time units (FTU).

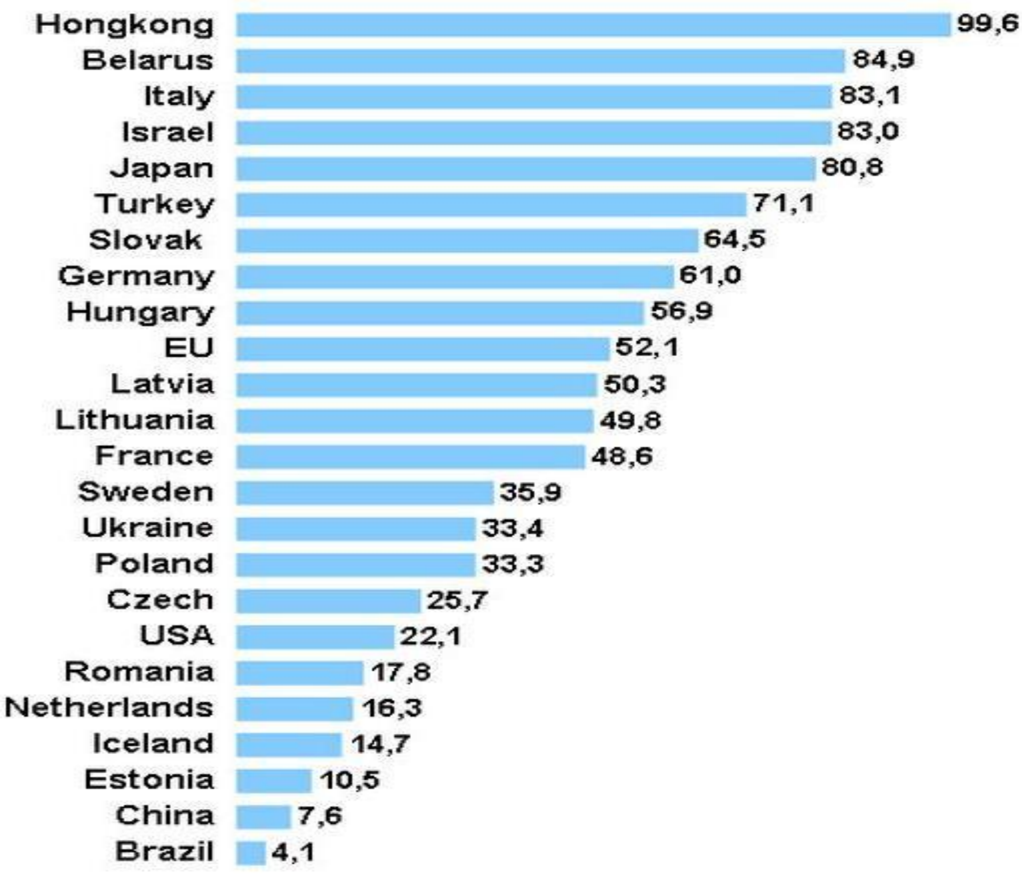
Source: Eurostat

Table 19: Import of Energy by Some Member of the European Union



Source: http://szczesniak.pl/2140

Table 20: Energy Dependancy as Imported Energy / Consumption in 2010 (in %)



Source: http://szczesniak.pl/2269

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August – December 2009	Study Abroad Program - Singapore Management University, *Singapore*
March – October 2008	Study Abroad Program - University of Colorado, *Boulder, United States*

Prizes:

July 2009	Join Study Scholarship – Singapore 2009, given by University of Vienna, *Austria*
June 2011 – present	Class of Excellence – University of Vienna, *Austria*

Work experience:

July 2011 – present	Relationship Manager for Diplomatic Missions and International Organizations – – UniCredit Bank Austria AG, *Vienna, Austria*
August – September 2010	Auditor – The Timbers Hotel, *Denver, CO, USA*
July – September 2010	Denver Business District Ambassador – Service Group, Inc., *Denver, CO, USA*
March – October 2008	Internship – Isle of Capri Casinos, Inc., *Black Hawk, CO, USA*
February – March 2008	Internship – the Embassy of the Republic of Poland, *Bratislava, Slovakia*
July – October 2007	Front Desk Agent – Isle of Capri Casinos, Inc., *Black Hawk, CO, USA*
April 2007 – July 2009	Representative – Marketing & Plannung Werbeagentur GmbH, *Austria*

Additional experience:

July 2012	Certified Bank Advisor, *Vienna, Austria*

Skills:

Language skills:	proficiency level	–	English, German, Polish
	intermediate level	–	French, Spanish

Computer Skills: MS Office, Opera Mgmt, LMS, CMS, SIO, SQL, GEMO, EuroSIG, HTML
Driving License B

Interests:

Traveling, politics, sport, cinema, literature, music.