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TREND OF GLOBALIZATION

-

COMPETITIVENES OF THE CZECH

REPUBLIC IN INTERNATIONAL COMPARISON

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UNIVERSITY CATHOLIQUE DE LYON

ESDES

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Statutory Declaration

I, the undersigned, declare that the thesis Competitiveness of the Czech Republic in International Comparison is wholly my own work, and only sources I used are listed in the references.

In Lyon, 3. 9. 2014

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Dominika Šťastná

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1 INTRODUCTION

The 21th century is the century of globalization. The term “Globalization” refers to a process of integration on the higher geographical level, than it used to be in the previous stages of the development of the society (Skoda, 2000). The process of globalization is natural, inevitable and expectable as well. Process of globalization can be traced to the past, from the local level to the regional one, and further more from regional level to national one. Globalization has significant impact on countries’ economies since it connects productions and markets in different countries at different continents. This connection is made through market of goods and services, the movement of capital and information and also the interconnected networks of ownership and the directness of multinational companies. The beginning of impact of globalization on economy has been perceived since 70s of 20th century (IMF, 2008). Globalization is a process which is often being discussed, some people perceive this process as positive and appreciate narrower connections among nations and people in general. Other people as well as organizations perceive globalization as a thread which can erase cultural differences and be more harmful than beneficial.

Another very important term which is narrowly connected to economic impact of globalization is competitiveness. There are many definitions of the world competitiveness, but in this thesis it defines as the ability to sell products and services on the international markets and with the simultaneous increase of domestic incomes in a sustainable way (Rocha, 2008). Vendors and later companies always competed but this competition was usually limited by some geographical area. Since globalization has started these distances relatively decreased or even vanished. Nowadays competition is not limited by geographical area anymore. Since globalization decreased all the distances which formed natural borders of markets (and their particular competition) competition

grew rapidly and it is harder and harder for companies to survive and keep their position at the market.

According to the facts posed above it is obvious that in modern world examination of these trends is crucial for the companies in order to ensure sustainable development and growth. This thesis is focused on economic impact of globalization and it tries to reveal all the positives and negatives it brings. Since it is narrowly connected to competitiveness this thesis deals with it as well. This thesis is focused on competitiveness of the Czech Republic's market and it compares it to the states all over the world, more concretely with 147 states. It is specialized in the comparison of competitiveness of the Czech Republic within these states as well as the contrast between the economy of Czech Republic and France is given. To demonstrate the differences between these states will be also used the method of comparison two groups of state. First group will consist of the western states, represented among France by Germany and United Kingdom. On the other hand, the second group will be involve the post-communist countries, among Czech Republic it will be Poland and Slovak Republic. The comparison is based on the twelve pillars which were defined by World Economic Forum, and will be explained deeply in the literature review.

1.1 STRUCTURE OF THESIS

The first part of the thesis is focused on definition of the most important terms which are crucial for understanding the topic. These terms are introduced, described and put into context. Since one of the most important issues of this thesis is globalization we will introduce this term, its history and development and also both positive and negative consequences of its development. The relationship between globalization and competitiveness will be introduced and described and variables will be defined. Process of globalization will be also examined in the framework of European Union and possible impacts will be presented. While we are also measuring the competitiveness of Czech Republic and France, and as mentioned above the competitiveness of blocks of post-

communist countries and non-post-communist parties, it is essential to add at least basic information about the states themselves and their economic development.

As the measurement of the competitiveness is based on the usage of index calculated from the indexes of the twelve pillars, it is crucial to enlighten the pillars in deep, to truly understand the meaning each of them. This content will be included in the literature review.

As a third part of this work will be given the empirical observation, which will content the accurate data of the competitiveness. This chapter will be split in to several parts, first of all will be analysed the competitiveness of the Czech Republic, also the change in respect with previous years, eventually the analysis of the cause of change. Similar procedure will be used in order to consider the competitiveness of France. Considering the consistency of the results, this part will also include the data for comparison the two blocks, as mentioned above.

The methodology of analysing the empirical observations will be based on synthesis, induction, deduction and extraction. The software Gretl will be used for the statistical examination.

After analysing the data, there will be place for discussion. This will be the content of the forth chapter will be the comparison between the literature review and the empirical observations, in other words the difference between theory and real numbers. The result will be interpreted and the proposals will be provided.

The last part of this work will contain the summary of the diploma thesis as well as the limitations, which I have had to deal with.

1.2 INTRODUCTION TO WORLD ECONOMIC FORUM

In the point of view, that this work closely analyses the data, given by the World Economic Forum, it is important to introduce this organization a bit. The World

Economic Forum is an independent organization, which promises the effort of improving the situation in the world by appealing on the business, academic and political leaders of society to raise global and regional wealth (WEF, 2013).

This organization was founded in 1971 in Geneva, Switzerland. The headquarters takes place at the same place. The meetings of WEF are three times per year, the regional meetings are six time per year. It also employs more than 550 people from 60 different countries (WEF, 2013).

1.3 INTRODUCTION TO TWELVE PILLARS

To evaluate the competitiveness of each state is used the index calculated from quotes from the twelve pillars. These levels includes the state of institutions, policies and other factors, which influence the productivity level. This level indicates the maximum level of prosperity, which can be reached by given economy at given time (WEF).

The level of the economy is measured based on these twelve pillars:

- Institutions
 - The environment is of the institutions is defined by the administrative and legal outline, in which all individuals as well as all companies and governments cooperates in order to generate wealth.
 - It includes the legal framework, protection of private property, efficiency of government in the questions of regulations, bureaucracy, transparency)
- Infrastructure
 - The development and maintain of infrastructure is crucial for ensuring, that the economy will be functioning in the most effective way. It also helps with identifying the location of economic activities

and also type of activities, which can be further develop in the country.

- It includes transport, energetic and telecommunication infrastructure.
- Macroeconomic environment
 - Especially in the meaning of the stability of macroeconomic environment which is very important for business and therefore it is a significant factor of competitiveness of a country.
- Health and primary education
 - The stress in this index is on the healthy workforce, which automatically leads to higher productivity in the country and by that to increase country competitiveness. In other words, those employees, who are ill will not bring the same amount of benefit as if they would be health, so their productivity is decreasing. Also the costs to business when employees are ill are included.
- Higher education and training
 - The level and the quality of higher education is essential for countries, who are willing to grow up in the value chain. These economies do not want just to be part of simple production process, but they intend to be beyond it.
- Goods market efficiency
 - Only economies, with high goods market efficiency can meet the market demands for goods, in other words, to efficiently meet the supply-demand conditions on the market, and even ensure, that the

mix of products, which produced within the market, can be successfully traded on the international level.

- Labour market efficiency
 - This index cares about the efficiency of allocation the workforce on the labour market. The proper allocation ensures the most effective use of labour in the economy and by that it provides the motivation for employees to give their best in their jobs.
- Financial market development
 - As was obvious from past years, the functioning financial market is crucial for the stability of economy. This could be easily seen from the previous financial crisis. The well/functioning financial sector plays a key role by allocating resources, which are collected from citizens as well as those resources, which flow in to economy from abroad
 - This includes bank sector, regulation of market of stock and bonds etc.
- Technological readiness
 - The appropriate usage of technology is essential for almost every company in order to be able to compete and profit on the market. This pillar measures the ability of the economy to adopt already existing technologies to improve the efficiency of its production.
 - It also includes the access to information and communication technologies.

- Size of the market
 - The market size influence the competitiveness in the meaning of the possible usage of economies of scale. In small market it is very difficult to exploit the advantage of economies of scale, while there is much smaller demand, compared to big ones. This issue was traditionally connected with the borders of each country, but since the era of globalization, the international markets has enable to spread the business beyond the country's borders.

- Business sophistication
 - This pillars includes two elements, which evaluate the business practices. The first one is the quality of a country's general system and the second one is the quality of individual companies' functions and strategies. Of course, the higher and better sophistication of the business is, the higher efficiency of production is achieved.

- Innovation
 - We can divide the innovation into two categories. The technological ones, such as new machine for the production of some goods; and the non-technological ones, which represents the know-how, skills etc. (WEF, 2013).

These pillars will be used for evaluation of competitiveness of the economy of Czech Republic as well as for the other comparisons, which were already described.

1.4 REMAINING CONTENT OF THE LITERATURE REVIEW

Since this thesis (practical part) is focused on the state of Czech Republic this country will be introduced as well. Its history and development in the past decades will be introduced to the reader in order to enable him to understand the historical context and events that influenced today's situation in the Czech Republic. The similar procedure will be done also for France. As for the comparisons of the two blocks, only basic introduction of the states, which will be examined, will be included as well.

1.5 INTRODUCTION OF THE METHODS USED IN THE ANALYTICAL PART

Characterization of the state of economy of the Czech Republic will be made based on twelve pillars mentioned above and index of global competitiveness from the Report of global competitiveness 2012-2013. Proper statistical methods such as linear multi-regression function with the intention of revealing the relation between the pillars indexes and the final number, next to it will be used the times series method in revealing the time trend and possible future development and also the correlation matrix with the purpose of identifying the strength of the variables on the final score.

These methods will be used to evaluate the development of Czech Republic based on the data from the pillars and by that to evaluate the success or the failure of the facing of Czech Republic to globalization in the meaning of higher competition. The result of the evaluation will be compared to results of other members of the European Union but primary to France and later on will be also compared the results of the two blocks of states, which are already mentioned before.

In the end of the thesis the strong and weak points of the Czech economy will be identified and we will try to find answer on question "How good is Czech Republic in competing among the world? What are the main weak points of post-communist country compared to other western European country such as France?" And furthermore "Is there any pattern of the competitiveness of post-communist countries and the western countries? How well can Czech Republic compete compared to the stated will similar political situation?" By the analysing the data, we will try to find the answers for such questions and also try to suggest ideas, who to improve the position of Czech Republic.

1.6 CONTRIBUTION OF THIS THESIS

The issue of globalization and its impact on competitiveness is important because it influences all of us does not matter if we want or not or if we realize that or not. Globalization is a process which already begun and it cannot be stopped or reversed. The only way how to deal with it is to know what positives and negatives does it bring and what can we do to eliminate those negative impacts and take advantage of the positive ones. This thesis can be useful for every reader who is not familiar with the concept of globalization and competitiveness in general. It can be beneficial for Czech companies as well as for companies operating in other European countries because this thesis deals with the impact of globalization in general and it examines its impact on states' competitiveness. It is not likely to happen but results of this thesis can be useful for members of Czech government as well because it proves impact of diminishing borders to the Czech economy and its ability to compete.

2 LITERATURE REVIEW

This chapter will include the explanation of terms such as globalization, competitiveness and others, which are used in this thesis. It will also include the deep clarification of the twelve pillars, on which the empirical observation are based on, as well as the basic introduction of Czech Republic, France, and other states, included in the two blocks

mentioned above in order to really understand the relationship between the political and economic history and its influence on the present state of these economies.

2.1 THE CHALLENGES OF GLOBALISATION

There are several challenges which are directly or indirectly connected to the globalization. For the purpose of their identification the key ones, it is necessary to give a summary what globalization is in general, to pinpoint its positive and negative impacts and explain the relation between globalization and competitiveness.

2.1.1 GLOBALIZATION IN GENERAL

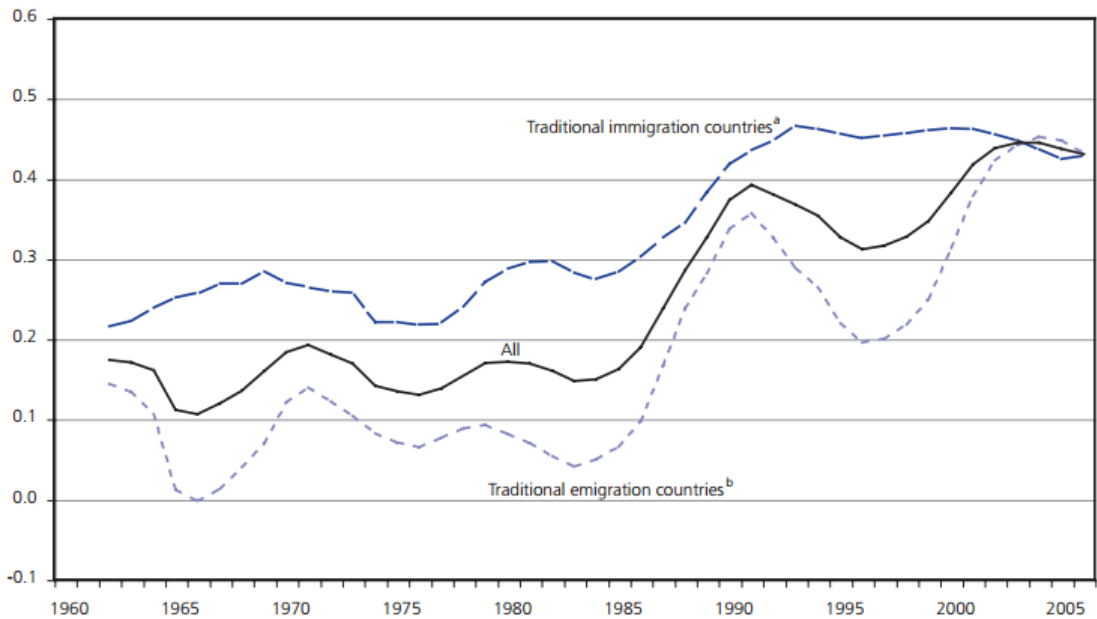
Globalization is a process of integration on the higher geographical level, than it used to be in the previous phases of the development of the society (Skoda, 2000). This process can be seen even in the past, from the local level to regional one, from regional level to national one. The drive was the globalization of economic activities, which connects the production and markets of different countries. This connection is made via the market of goods and services, the movement of capital and information and also the interconnected networks of ownership and the directness of multinational companies. The beginning of economic process of globalization is generally perceived as the 70s of 20th century (IMF, 2008). The globalization effect can be easily seen on the graph of immigration between the years 1960 and 2006. The rapid increase started around the 70s of 20th century and the trend remains. The graph represents three lines, one line represents the immigration in states in group A, second line shows the immigration in states in group B and the last one shows the total amount.

Traditional immigration countries comprise A: Australia, Canada, New Zealand and United States.

Traditional emigration countries B: composition of 18 western European countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Chart 1: Net immigration into developed countries, 1960-2006

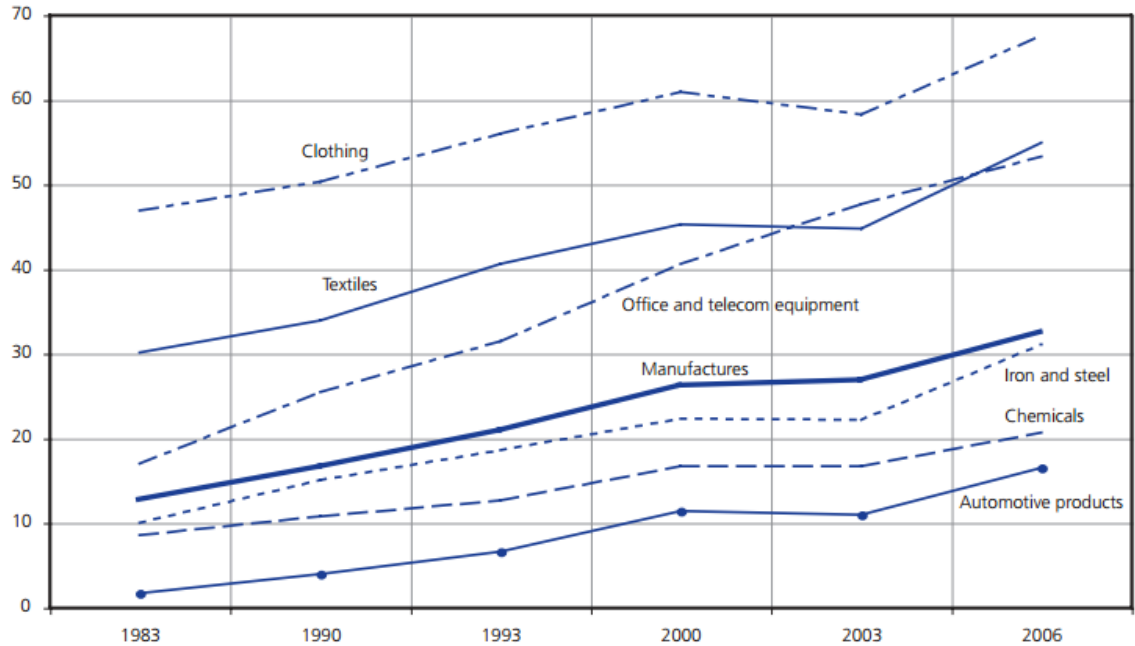
(Five-year moving averages, net immigration as percent of population)



Source: OECD, Labour Force Statistics

The economic influence of globalization can be view from different ankles and one of the common used is the share of exports of the developing countries. In this example it was chosen to compare the development of the ratio of manufactures exports, also divided according to product line. This is observed in the chart below.

Chart 2: Share of developing economies in world manufactures exports by product group, 1983-2006



Source: GATT, 2008

Globalization can be occur mainly due to two factors. First of them is the technological development and the second one represents the changes on the political level. The technological development means the lowering of cost of transport, development of information flow to make it quicker and by that to make it more efficient and enable the flexibility of market forces, in other words, the flexibility of demand and supply. The political side is characterized by the different political tools, which can be implemented by government in order to protect its own domestic production. To these policies we classify the protectionisms policies, contra the liberalisation policies on foreign investment rules which enforce the foreign trade and by that it also carry out the level of globalization. The technology development since the middle of 19th century was in the favour of the globalization but the political environment was rather volatile, thanks

to many key events, like the two world wars as well as the following cold war (Crafts, 2004).

Measuring of the level of globalization is a bit tricky task, because it is very hard to identify the global measured factors. One method of the quantifying the level of globalization is the proportion of world merchandise exports compared to the GDP and the second possibility is the proportion of foreign assets related to World GDP (Crafts, 2004).

World Merchandise Exports/ GDP	
Year	Per cent
1820	1.0
1870	4.6
1913	7.9
1929	9.0
1950	5.5
1973	10.5
1998	17.2

Source: Madison, 2001

Foreign assets/GDP	
Year	Per cent

1870	6.9
1913	17.5
1930	8.4
1960	6.4
1980	17.7
1995	56.8

Source: Obstfeld and Taylor, 2003

The tables above shows the historical development of the level of globalization. As it is obvious, there were several jumps in the development. The rate of foreign assets/GDP before the First World War was over 17percent and it fell to even 6.4 after the end of the Second World War and the recovery period. The level of the foreign assets, which was before the wars was again achieve not before 80s. The data from the table of the world trade, or world exports to GDP are not so dramatically volatile, but there is obvious significant extent, where the globalization level crosses the previous peaks. In other words, even though it has some plumps, caused by the political instability, it recovers and straight in higher proportion (Crafts, 2004).

The economic globalization leads to the shift of the organization and the integration of production systems, exchanging and consumption from national to global level, or even better said, the adding of the global level of the organization or integration to the current national, regional and local systems, including their mutual vertical connection (O'Rourke, 1999).

Globalization has really extensive social impacts. To the most significant belong the empowering of unequal social and economic development, which come from the fact, the

subjects of the economy, such as firms, individuals and by them also the locations, towns and even states have different power and capability to actively integrate in the process of globalization. The redistribution of power, which comes with globalization, is not detected only within the inequality between individuals and firms. The key actors of globalization process even influence the character and priorities of the public sector. The most considerable impact of globalization is the influence of multinational companies and global financial markets on the state, and on the varying the ratio between the public and private sector (O'Rourke, 1999).

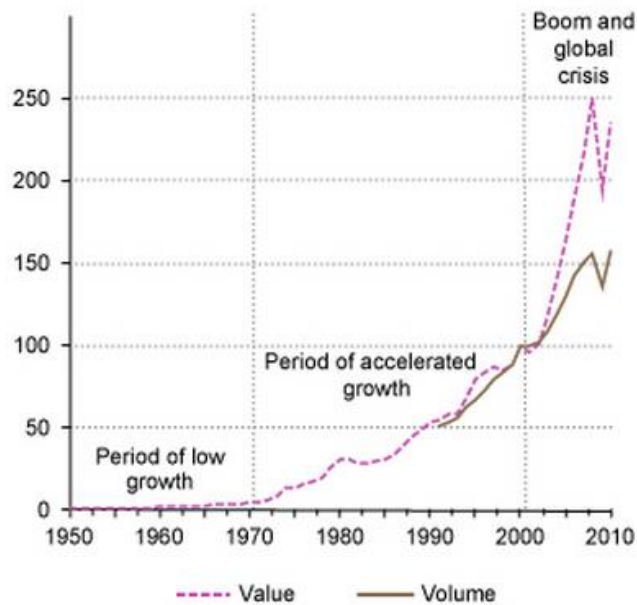
2.1.2 POSITIVES AND NEGATIVES OF GLOBALIZATION

To the main positive features of globalization we can include:

- the increase of international tradable goods
 - Long-term trends in value and volume of merchandise exports, 1950-2010

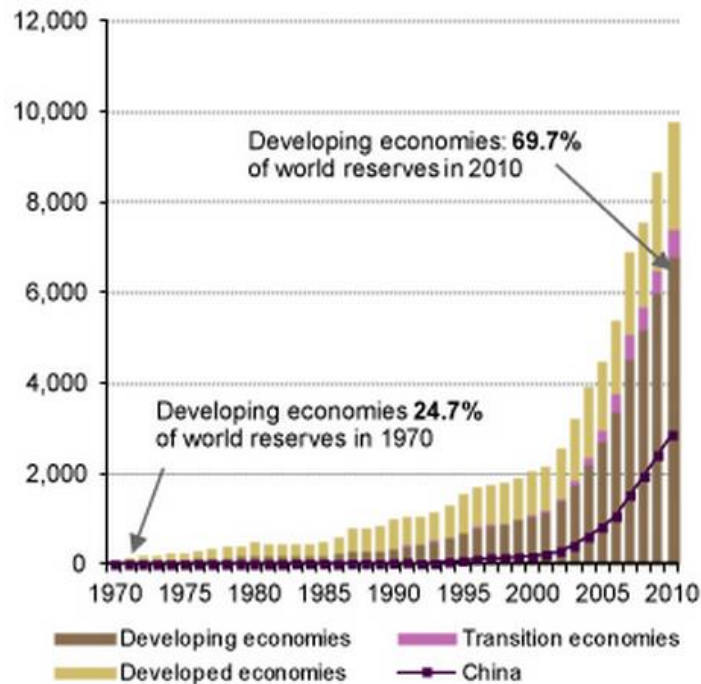
Note: Measurement via index, the year 2000 serves as base (2000 = 100)

-



Source: UNCTAD, 2012

- the speed and complexity of direct investment
 - The speed and complexity of direct investment is closely related to the amount of financial reserves, which are possessed. So the following graph includes the development of the reserves in developed countries, developing countries, countries in transition phase and also the development phase of China.
 - Reserves of developing economies, developed economies, economies in transition phase and China.



Source: UNCTAD, 2012

- the economic growth of the originally developing countries such as South Korea, Hong Kong, and Malaysia as the examples of East Asia countries but also countries from Latin America, such as Brazil, which now belong to the countries with already developed countries (Zhang, 2001)
- encouragement of the development in the countries, which have participate in the process of globalization later, but their role within the international market has significantly increased, such as People's Republic of China, Brazil, India. (Zhang, 2001)

To the main negative features of globalization we can include:

- the increase of inequality to the attitude to the social welfare and development, which is monitored by the World Income Inequality Database, which is the most extensive

database on the inequality trends within more than 150 states all over the world (Julius, 2001)

- although the global consumption increase, the consumption in some developing countries decrease, due to the shifts of the place of production and consumption of the product

This is caused because of the market forces and the effect of the demand and supply prices. (Bretschger, L., & Hettich, F. 2002)

- the percentage of unemployed population increase or maximally is stabilized in developed countries due to technological innovation (Tsaliki, 2009)
- weakening of the role of national state, small and medium-size states are in hands of the more powerful (Měřický, 2009)

On the basis of the facts given above we can summarize, that the process of globalization limits the independency of each state and the stress is on the mutual cooperation and exchange. This is related not only to business activities of companies but also to the mutual cooperation on the political level. There is space for creating the competitive advantage of the state by support the science, development of infrastructure and education in order to ensure sustainable economic growth (Steinmetzová, 2008).

2.1.3 GLOBALIZATION AND COMPETITIVENESS

The term globalization is often connected to the term competitiveness. With the rapid globalization has also increased the level of completion. There is no more just domestic markets, where is relatively small range of suppliers. Thanks to great development in retail and logistic, the problem of distances is minimized. For example to get some cloths from Asian markets now seems pretty normal, nothing extraordinary, but could you imagine this 30 years later? The prices of the transport of goods has significantly decreased, which has automatically led to the increase in international business (Christophersona & Garrentseben & Martinc, 2008)

The other factor, which influences the extension of competition, is also the open market. After the disintegration of Soviet Union, the eastern European states transferred from the centrally planned economy to market economy. The overturn was a bit chaotic, at the beginning, but in the end, the liberalization brought many new opportunities in the new markets and the opportunity for expansion for the enterprises as well as wider range of products for the customer. The higher competition of course led to decrease in the prices (Christophersona & Garrentseben & Martinc, 2008).

One of the direct source of competition to the European markets are the so called Asian dragons or sometimes called Asian tigers. (Zeng & Williamson, 2001). As the world dragon indicates, these states represent powerful players on the global market. The dragon number one was traditionally China, but in the first half of 20th century Japan has become a leader. Next to these two states we can include Hong Kong, Taiwan, South Korea and Singapore as the small Asian Dragons. The characteristic of such states is the quick transformation from developing economy in to modernized and mechanized production, or in other words, the quick industrial transformation. (Vogel, 1991)

The competitive advantage of Asian dragons compared to the European producers is the different price of inputs, which leads to the cost advantage. This represents not only different prices of physical inputs, such as material, but also labour. In the past the imported products form East Asia were perceived as products with lower price but also lower quality. This trend has significantly decreased since the Asian dragons have focused not only on the price level of the products but also on the cost innovation. This is strategy of using cost advantage in the new way. This strategy has three parts. First of them is the offer of the production of high technology at low cost. It represents the production process with the usage of the high technology, but remaining low cost of the produced good. The general perception of the fact that only high-end products can be

made via high technology is denied. The second factor is the choice of products, which is offered. The variety of products and the range in mass production in East Asia is incomparable with the production in Europe or in the US. Their mass production of different products has denied the fact, that if customer wants some specific good, or customize the product, he has to pay price premium. In their range, almost each customer can find the proper product, which he is looking for. The last, third factor is the transformation of specialized products into mainstream category For example the wine-storage refrigerator, used to be a specialty to have one at home, but since Chinese company Haier has started mass production with significantly lower costs than competitors and acceptable price for customers, they managed to capture 60 percent of the US market share. Their profit came up from the volume of sold refrigerators. So if we put these three factors together, we can realize, the thread we are facing. Not only low cost production, but also high quality and flexibility of the Asian Dragons. (Zeng & Williamson, 2001)

2.2 FACTORS WHICH INFLUENCE THE COMPETITIVENESS

The measuring of competitiveness is still more and more desirable because of the shakes in the world economy. As was already said before, with the higher dependency between the states, partly caused by globalization, the economic crisis in one country evoke the economic threat in all countries related to the first one, same as domino. The first countries, which started with the looking for a way, how to better compete with rest of the world were the Asian countries, such as Japan, which were later followed by Europe and United States. (Měřický, 2009).

In recent years the developed countries even creates councils for the measuring the national competitiveness. The purpose of such councils is to analyse the situation and come up with recommendation how to improve the position of the country on the global market. The competitiveness of the state can be taken in the point of view analysis of measurable data, which are obtained from statistical department or by the soft method,

which includes also factors of the quality of life etc., which can be measured in numbers but is rather obtained in the form of survey (Měřický, 2009).

According to Garrelli, 2008 we can divide the globalization into three phases. The first one is the opening up of the economy. This wave is dated back to 1985 and lasted 15 years. In that era, the global economy expand significantly, except countries such as North Korea, Myanmar and to certain extend Cuba. The reasons for expanding were the cost advantage, usually companied by the local policies for attracting foreign investments. The characteristics of the first wave is therefore deflation. Cheap supplies, mainly of labour, materials but also logistic cost automatically has led to lower cost and there for lower prices for final consumers. The second wave of globalization takes place right know, and it is supposed to last till 2020. This period is not only about looking for cheap supplies but rather searching for the emerging markets and settling the access to such market. The emerging market is describe as relatively low developed, but with high potential for growth and with the proper size and population. The example of emerging market is India, Vietnam or Nigeria. The crucial factor is the increased middle population, which drives the economy. The escalation of the middle class population is also partly caused by the booming of the world economy. Comparison of the percentage of world population, which lives under the level of poverty measured as living on one dollar per day or less was 15.4 percent in 1970. In the year 2007 this number has minimised on third, only 5.5 percent. The consequence of the shifts of population according to their income is the need of manufacturing such products, which are available for the poorest. Examples can be Tata car in India, which is sold for \$2,500. As other consequences we can mentioned the increase consumption of oil and also food. According to Food and Agriculture Organization, the increase of prices in 2007 was 37 percent, which is something unprecedented. The globalization also leads to changing of consumption habits. According to World Bank estimation, the world consumption of cereals will

increase by 50 percent and the consumption of meat and meat products even by 85 percent by the year 2030. As the result of such increase in demand for food, the environment will probably suffer by over-exploitation. Next to these effects, there will be also financial site, the inflation, which is connected with the growth of salaries. The next wave will be the era of tension and competition. It is characterized by the emergence of new competitors coming from emerging markets. We have to take into account the amount of currency reserves, which is held by the government of emerging economies. The expert on the reserves is China \$1,647 billion, followed by Japan \$1,008 billion, then Russia \$502 billion, India \$304 billion, Taiwan \$278 billion and South Korea with \$262 billion. As we can see, all the Asia Dragons are in the charge of holding great financial reserves and therefor the power on the global market. The impact will be change in the balance of world power. Not only the economic shifts but also political ones. Emerging economies will have bigger claims for the influence in the international organizations as they will be the main source of finance. There will be also higher press against any domestic protectionism in order to gain wider market and therefor higher potential for profit realization. (Garelli, 2008)

2.3 GLOBALIZATION AND THE EUROPEAN UNION

When we have considered the terms globalization and its impact on the competitiveness, automatically comes the question, how to strengthen the position of a relatively small single state in such big competitive environment? I use the world small on purpose, because countries such as People's Republic of China does not necessarily need to be part of the Union. But what we are talking about are the European states, whose economies are too small to compete with such competitors as USA on their own, but in the alliance, with several countries, their position is much better.

Although the history of European Union is dated back to 1950, the economic role of has been strengthened mainly last 30 years, in the era of globalization. European states must compete with the very strong competition along whole world, namely with very low-cost economics such as China, Vietnam or India on one hand, with the high technology and innovative-oriented such as USA or Japan on the other hand. It is also obvious, when we have a look on the phases of increasing of the number of members of European Union, the biggest increase was right during the globalization (European Union).

The membership within such organization brings the advantages of the ability to compete in such competitiveness global market as well as free trade within the EU and the removal of non-tariff barriers, which has also led to decrease costs and prices for the final consumer. This economic policy is called the establishing of single market, which purpose in general is to bring down the barriers and by that to enable to the individuals, customers as well as whole companies to enjoy the most of the given opportunities which are offered to them by the access to different countries within the integration of EU. The single market policy is also stated by the four freedoms which are:

- Free movement of people
- Free movement of goods
- Free movement of services
- Free movement of capital

These freedoms have increased the flexibility of EU and are applicable to individual in form of the right to live, to have a job, to study or have retirement in another EU country. For the consumer it represents the increase in competition, which automatically leads to lowering within prices and also extension of choice. The business takes

advantages of much easier access for exporting and doing business across the borders, which can bring the competitive advantages.

We should also not forget the environmental issues, such as different regulation and laws implemented in order to reduce the acid rain and the global warming. The support of the environment friendly solution is also significant such as the subsidies for renewable energy.

The membership in EU also brings several disadvantages. The members of the union loose part of their sovereignty and the power of the government, and by that also power of the people within the particular state, is limited. The weakening of on state in the union weakens also the other members, especially when we are talking about such union as EU. The subsidy of depilated members is part of its strategy, but in the view of the rest states can be considered as disadvantage for the rest.

2.4 MEASURING THE COMPETITIVENESS ON THE BASES OF TWELVE PILLARS

This thesis will work with the Report of Global Competitiveness, which is annually released by the World Economic Forum. This reports measures the competitiveness based on the evaluation of twelve pillars. These pillars are also divided into three different categories, which are characterized below the list of the twelve pillars. These pillars are:

1. Institutions
2. Infrastructure
3. Macroeconomic environment
4. Health and primary education
5. Higher education and training
6. Goods market efficiency
7. Labour market efficiency
8. Financial market development
9. Technological readiness

10. Market size
11. Business sophistication
12. Innovation (WEF, 20013)

2.4.1 TYPES OF ECONOMIES AND THEIR KEY PILLARS

Each of these pillar has different influence on the country competitiveness according to the phase of economy, in with it operates in (WEF, 2013). For example the way of the increasing of competitiveness of Vietnam on one hand will be much different from the increasing of competitiveness of Germany on the other hand. The reason why is because they are in different stage of development and are more. Basically we can divide the economies in to three categories:

1. Factor-driven economy

These countries are characterized as the developing states. There is pressure on the development of infrastructure as well as institutions. There is also low level of the primary education. The prices of labour are basically low along with low cost of energy and other primary inputs. The local currency is usually under-evaluated (WEF, 2013).

Examples of such countries: India, Vietnam Nepal and also most of African countries.

The pillars of such economy are institutions, infrastructure, health and primary education and also the macroeconomic environment, the first four pillars.

The comparative advantage of these countries is that their production factors (inputs) are at very low cost level, especially labour costs. The pressure is on the remaining of developing in infrastructure as well as in institution, health and at least primary educated labour force. This comparative advantage is very closely tied to costs, so it is price-cost advantage (Steinmetzova, 2009).

2. Efficiency driven economy

These countries are focused on the development of the technologic environment and also the ability of local firms to use it. The productivity is characterized by the low cost as well as low price of the products/services with one hand of the effective production. The quality of goods produced is sufficient while keeping the costs at low level (WEF, 2013).

To countries, which can be include in this group of states, we can mention Albania, Bulgaria as a representative of Europe, but also such economies as China or Thailand.

To main pillars of their competitiveness belong the higher education level and also the specialized trained labour force. The efficiency of goods market and labour market is also higher than in previous group. The financial readiness is also at reasonable level which leads to higher competition level besides the bigger market size (WEF, 2013).

As the main comparative advantage to the previous group, the quality of production is much higher, and it is based on the higher level of efficiency. Effective producing processes with higher efficiency of financial markets and the higher education level leads to effective production. These economies are efficiency driven that is why they are focused even on higher increase of efficiency.

3. Innovation driven economy

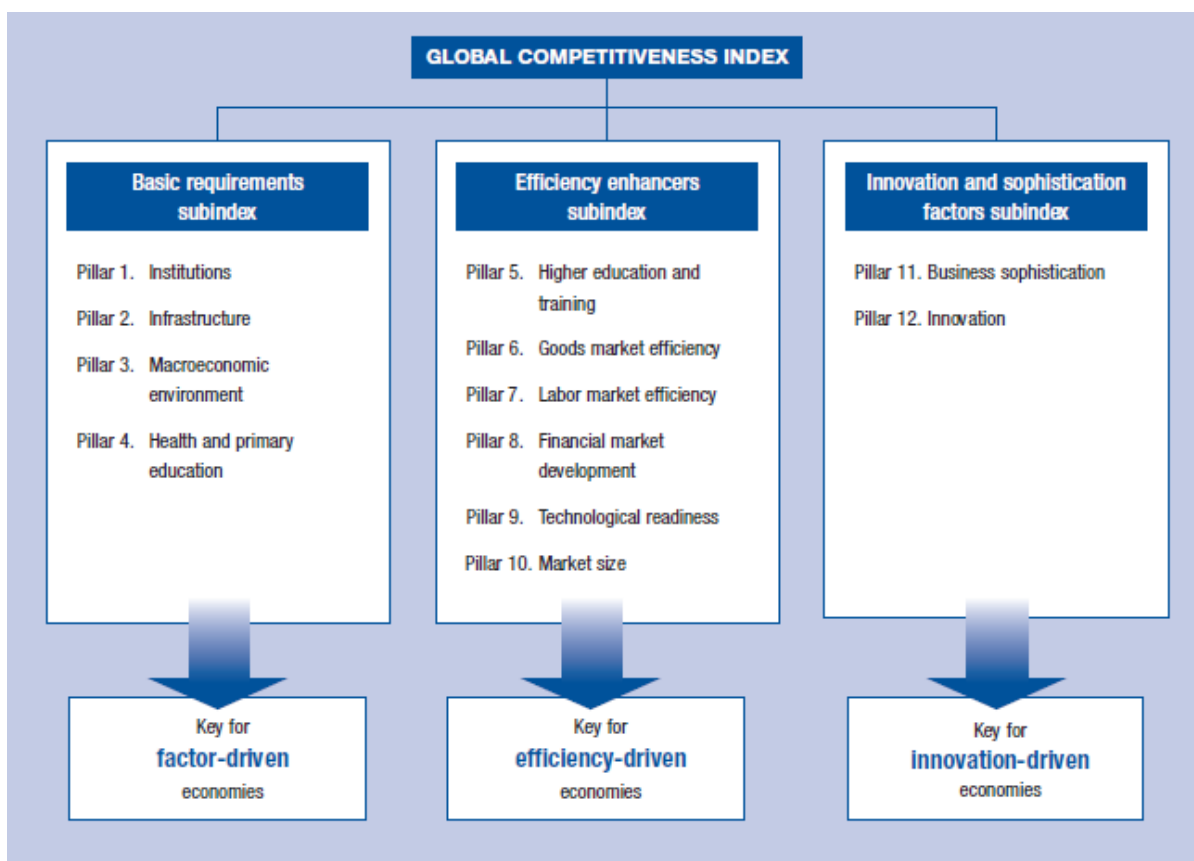
States, which are included in this category, are mainly focused on the development of the two last pillars, which represents the innovation and business sophistication. This represents the development of the business environment and rising its attractiveness. The innovation part stands for the production of innovative products and services, which generate greater profit.

As an example for this last group we can mention states with highly developed economy, such as United States, Japan, Germany but also Czech Republic.

This group consists of the most developed countries in the world. The pressure here is on the pillars mentioned before, therefor on the production of specialized/unique products or unique know-how (WEF, 2013).

The figure below shows the relations between the pillars and the economies, to which are related.

Figure 1: The Global Competitiveness Index Framework



2.4.2 INTRODUCTION OF EACH PILLAR

To truly understand the mechanisms, of the measuring the competitiveness of each country it is crucial to understand, what each one of the pillars stands for. As was already

said, for each economy, depending on their development have different pillars different value. The economies are divided into three categories and therefore we will start with pillars, which are most important for the lowest developed economies which are the factor-driven one. After the explanation of these pillars we will continue to analyse the key pillars for efficiency-driven economies and we will include the description of the last and most developed economies, which are the innovation-driven economies.

2.4.2.1 Institutions

The first pillar Institutions represents the institutional environment, in which individuals, companies as well as government cooperates to generate wealth. The importance of fair institutional environment has even increased with the recent economic and financial crisis and it is crucial for ability of competitiveness in the point of view of increasing role of state at the international level (WEF, 2013).

The content of the pillar is:

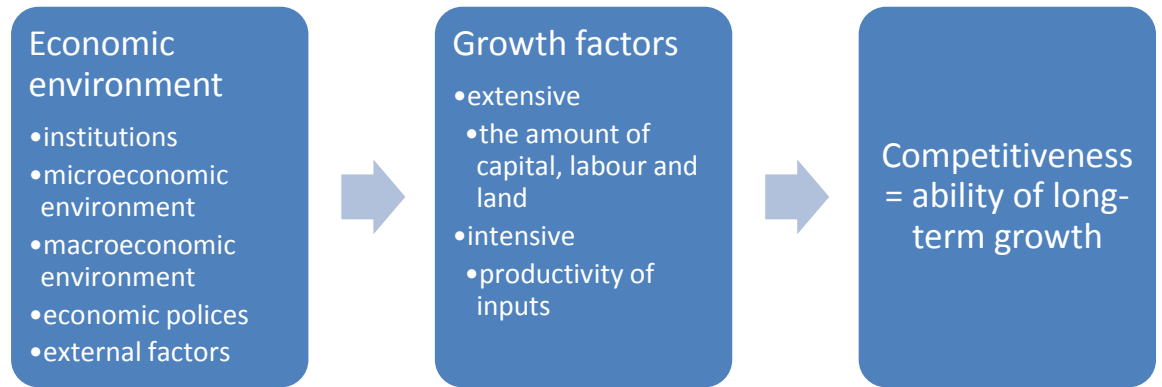
- Public institutions
 - The independency of courts,
- Government attitude toward markets and freedoms
 - The public confidence with government and their political decisions, the factor of national safety in the view of the threat of terrorism, violence and the organized criminal sphere.
- Management of public finances
 - In the meaning of sustaining the business ethics and preventing corruption, usage of public finances in the best way.
- Property rights
 - Which also includes the attitude towards the protection of know mental ownership.
- Private institutions

- This part includes the ethics of behaviour of companies and also the responsibility area, which means the ability of protect the interest of minority owners, the strength of audit and the accountancy standards.

As an overall summary, the first pillar characterize the framework in which interacts individuals, firms and the government (Steinmetzova, 2008). As the most used description of institutions is considered the North's one (Kadeřábková, 2007). According to it the major function of the institution is to lower the uncertainty of the everyday life in the way of setting the rules and creating the durable and resistant relations between people. These rules can be formal such as statutory decisions, laws, property laws, regulations and fees; but also informal, such as the habits and moral rules. The purpose of both of them is to simplify the politic and economic exchanges (Kadeřábková, 2007).

The institutional framework is furthermore divided into institutional aspects taken as the legal framework itself; the framework connected with the microeconomic environment such as regulations within the market; the economic policies which are regulated by the monetary policies and also the foreign exchange (Slaný, 2006).

Scheme 1: Institutional aspects of competitiveness according to Slaný



Source: Slaný, 2006. Competitiveness of the Czech economy. Own processed.

According the American economist North, there are three forms of the institutional formal framework:

- Political rules (this content the type of the political constitution and also the type of government)
- Economic rules (own rules)
- Agreements (contracts on the exchange, connected with the property rights)

To the informal framework North assign the habits, traditions and other aspects connected to anthropology, for example the creation of social networks. The informal limitations are:

- Extension and modification of formal rules
- Social sanction norm of behaviour
- Internally enforced rules of behaviour

By the creating of the formal and informal rules, the institutions creates regular behaviour and limits the unpredictable behaviour. Otherwise the environment would be unstable. The main purpose of institutions therefore is to create predictable environment for the repeating activities and by that to decrease the transaction cost and also the risk related to the searching of new information. Supportive institutional framework includes functional, responsible administration and legal system, which support and enforce the basic principles of business relations and protects the property rights, together with the mental property (North, 2006).

As an example of weak institution framework is considered the inadequate bureaucracy and also the unreasonable regulation of the business activities. The problems of corruption and dishonest practices (Beneš, 2006). The problem of corruption belongs to the worst within this pillar because it reflects the functionality or rather the defects of the government to fulfil basic tasks. It also influences the perceived structure of whole political system in the country and by that it effect also the willingness to participate such economy not only the participants of domestic market but also potential foreign participants, mainly the investors (Melgar, 2010).

In recent years increases also the importance of institutional framework for the private sector. The weak institutional framework can lead to the falsification of the firms' accountancies and tax evasions. To prevent such deceptions, it is necessary to have strong and functional framework and look after that the legislation of taxation will be properly implemented. As a control of taxpayers and taxables we have tax inspectors and within the company we use the regular tax audit (Melgar, 2010)

The Report of competitiveness understands the institutions as the set of the rules, which affects the long-term development of the economy as well as the productivity of the economy. It consists of legal system, political system as well as the demographic development and the economic development. The level of productivity is closely related

to the quality of public administration and the efficiency and quality of government. The evaluation of the public administration is calculated by the World Bank by the systematic evaluation of the process of electing, control and evaluation of government; ability of the government to formulate and implement the suitable and most benefit policies for the country in the most efficient way; and lastly the evaluation of the respect of inhabitants to the state institutions, which determines the mutual economic and social relations (Moloney, 2012).

2.4.2.2 Infrastructure

The development and the extension of infrastructure is critical factor influencing the possibilities of productivity of the country. It helps to ensure the functioning of the economy in the most efficient way. The infrastructure also determines the location of the economic activity because where is no infrastructure, there is very hard to run a business. With more efficient and extensive infrastructure the problem of distance between businesses is lower by the lowering the costs of transportation. This also means the integration of national markets to international market at the low cost (WEF, 2013)

As the major economic activities are concerned in the biggest cities in the country, the differences between the income in capital and village in the rural area are usually great. The solution how to prevent the expansion of the income gap is to improve the infrastructure. This solution brings job opportunities for the inhabitants of rural areas as well as new business opportunities for entrepreneurs (Atkinson, 2013).

The effective approach to infrastructure ensure the high quality and availability of roads, rail roads, ports along with air transport. This will guarantee that the products and services will be delivered to the market in quick and safe way and conversely that the market of labour will be much more flexible. The productivity of each economy also

depends on electricity and telecommunication. The effort here is to limit unexpected shortages or even interruption during the production process. The promptness of the telecommunication network effect the information flow which is still more and more important (WEF, 2013). According to World economic forum we can identified these components, which identifies the overall level of infrastructure:

Transport infrastructure

- quality of overall infrastructure
- quality of roads
- quality of railroad infrastructure
- quality of port infrastructure
- quality of air transport infrastructure
- available airline seat kms/week

Telecommunication & energy infrastructure

- mobile telephone subscription/100 population
- fixed telephone lines/100 population
- Quality of electricity supply

2.4.2.3 Macroeconomic environment

Macroeconomic environment represent all major external and uncontrollable factors that have impact on the company's decision making process and influence the firm's performance and strategies. This environment comprises the economic factors, demographics of the country, and also the legal, political issues as well as the social and technological conditions. To analyse the macroeconomic environment we usually use the PESTEL analysis (Jackson, 2013).

The macroeconomic environment must be stable in order to be attractive for business and by the increasing of the level of business, the country competitiveness will increase as well. The importance of the macroeconomic environment stability was very clearly noticeable during last years, when the Eurozone has faced the economic crisis. The crisis effected the whole economy of each state and by that it has also influenced their competitiveness on the global view. When the economy of the state is in the recession phase, it is very difficult for government, to fulfil all its functions, when in the

same time it has to pay the high-interest payment on the debts, which arose from such economic situation. The moral of the citizen is also affected, people lose their jobs etc. When we are focusing on firms, during unstable macroeconomic environment, they are also facing a challenge in the term of inflation. Many of them go even bankruptcy. Therefore the macroeconomic environment is also part of the overall competitiveness index (WEF, 2013).

According to World Economic Forum, the third pillar consists of:

Macroeconomic environment

- Government budget balance, % GDP
- Gross national savings, % GDP
- Inflation, annual % change
- General government debt, % GDP
- Country credit rating, 0-100

The macroeconomic environment stability can be influenced by two ways. It could be affected by the fiscal policy or by the monetary policy. Fiscal policy is a tool of government, who to intervene the economy through desponding public finances. This policy affects the economy thanks to changing the amount and structure of government expenditures. These actions are active intervention of state in to economy. The purpose of fiscal policy is to achieve stable economy development, high employment rate, sustainable inflation and price level (Allsopp, 2008).

On the other hand, the monetary policy cares about the currency stability. The crucial condition for successful implementation is the independency of central bank. The decision, which are made on this level influence all subjects within the economy. The main aim is to avoid the currency deflation, inflation. There are direct tools, how to effect the economy, such as liquidity rules, interests limits; and on the other hand the indirect

methods such the discount tools, the operations on the market, limits for obligatory reserves etc. (Bernarke, 2009).

2.4.2.4 Health and primary education

Fourth pillar represents the importance of health in general as well as the great value of primary education. It is obvious, that ill employees are cannot function to their maximum potential and therefore their productivity decreases. The illness of employees often leads to absence and the cost of even up the decrease of labour force is usually very high. The insurance of the most suitable health care and working conditions is consequently a key aim. This pillar also considers the quality and quantity of the primary education, which is perceived by the population. It is generally understandable, that the education increases the productivity. The workers, who do not have even the primary education can carry out only simple physical job and to adapt such employee for more advanced tasks, is very complicated and costly (WEF, 2013).

According to the measurement of World Economic Forum, the fourth pillar consists of:

Health

- Business impact of malaria
- Malaria cases/100,000 population
- Business impact of tuberculosis
- Tuberculosis cases/100,000 population
- Business impact of HIV/AIDS
- HIV prevalence, % adult population
- Infant mortality, deaths/1,000 live births
- Life expectancy, years

Primary education

- Quality of primary education
- Primary education enrollment, net%

The global competitiveness leads to the need of each individual, to educate whole life. This is also enforced by the unstability of the labor market, due to the demographic changes around the world. The development of the potential of individuals is one of the key factors for sustainable development and therefore the education plays and will play the key role in the future economic success and social compactness (Jackson, 2013).

2.4.2.5 Higher education and training

The pillar of higher education and training represent the first pillar of the sub-index of efficiency driven economies. As was already mentioned, the globalization stress on the flexibility of labour force and not only on their level of education, but also the quality of it. This pillar measures the rates of population, which achieved secondary or even tertiary education. The factor of staff training is also measured due to the importance of continuous on-the job training (WEF, 2013)

According to WEF, the content of the fifth pillar is as follows:

Quality and Quantity of higher education

- secondary education enrollment, gross %
- tertiary education enrollment, gross %
- quality of the educational system
- quality of management schools
- internet access in schools

Training

- availability of research and training services
- extent of staff training

Country has to be able to react on the economic changes, which are occurring still more frequently. The educated and qualified population is the quo that's needs to be met. The education increases the level of educated inhabitants and by that to strengthen their flexibility with regard to frequent changes on the labour market.

2.4.2.6 Goods market efficiency

This pillar represents the efficiency of how the market is structured. This means if there exists the right mix of products and services, which are demanded by the market powers of supply-demand relation. It also includes the fact, whether these goods can be and are traded in the most effective way. The importance of competition is crucial. This one takes into an account the domestic competition as well as the foreign one. It insures, that only the most effective businesses will produce the demanded products and services and there through drive the efficiency of the economy. The ideal conditions for the most effective market is the minimum intervention from government, for example the limitations of distortionary or burdensome taxes, which give domestic producers an advantage over the foreign one, who could be much more efficient but due to an effort, to increase the domestic production, the foreign producers is disadvantaged. This protectionisms is counterproductive, because it reduces the overall economic activity.

The previous article mainly spoke about the supply side of the market mechanism but there is the efficiency of demand is also very significant. The efficiency of demand is measured based on the customer orientation as well as on the buyer sophistication. The background of the development of the demand is also essential. This represent the cultural and historical development, which leads to certain requirements in certain economies. In some economies customers are demanding more than in others. This generates the key competitive advantage due to forcing companies to focus on innovation and the customer-oriented attitude (WEF, 2013)

The WEF divides the efficiency of goods market into several subcategories and evaluates each of them separately. The list of all components, which are included in the evaluation is listed below.

Competition on the market

- Intensity of local competition
- Extent of market dominance
- Effectiveness of antimonopoly policy

Legal issues, policies and taxation

- Effect of taxation on incentives to invest
- total tax rate, % profits
- no. procedures to start a business
- no. days to start a business
- agricultural policy costs

Openness of the market

- prevalence of trade barriers
- trade tariffs, % duty
- prevalence of foreign ownership
- business impact of rules on FDI
- burden of customs procedures
- imports as a percentage of GDP

View of customers

- degree of customer orientation
- buyer sophistication

2.4.2.7 Labour market efficiency

Labour market efficiency represents the flexibility of the labour market. The flexibility of workers ensures, that they are allocated in the most effective way and that they have the proper conditions, which help them to give their best productivity. The flexibility also represents the transfers of employees from one job to another according to market demand. These transfers have to be made on the low cost basis in order to sustain the high efficiency of labour market. The critical issue is the unemployment rate of youth which represents critical factor, because mainly in European countries there are still barriers to entry the labour market. The conditions of the workplace are also taken into

consideration, due to the fact, that the more suitable working environment, the higher probability of achieving the higher efficiency. This symbolizes the equal conditions for all, especially focused on the equity between women and men (WEF, 2013).

The labour flexibility is also determined by the legal frame, which is in given economy implemented. The higher the restriction for employer/employee to determinate the job contract, the less flexible labour becomes and thus decrease the level of competitiveness (Ministry of Business and Industry, 2011).

This pillar contains as well as the previous pillars many sub-pillars, which are presented in the table below.

Relation between employee and employer

- cooperation in labor-employer relations
- flexibility of wage determination
- hiring and firing practices
- redundancy costs, weeks of salary
- pay and productivity
- reliance on professional management
- women in labor force, ratio to men

Country capacity

- country capacity to attract talent
- country capacity to retain talent

2.4.2.8 Financial market development

The recent economic crises showed the key role of financial stability. The financial crises, which is still in its turn, started in 2008 by the instability of Iceland, but its major boom was when the crises hit the US financial market. Due to the globalization and interconnection of countries all over the world, the financial crises hit everybody and

the most afflicted were the regular people and their personal savings. Of course, the business sector was hit as well and the economy fell in to the recession phase. On the other hand, if the state is able to ensure efficient financial sector, the helps to allocate the financial resources in the most efficient and prospective way. The financial tools represents the savings of citizens as well as the financial inflow from abroad.

The critical issue is the evaluation of risk and the proportion of expiated rates of returns. This was one of the major causes of the fall of the financial market of US in 2008. The unreasonable risk and speculations for low-liability investments with low-expectation of possible return in one hand with the possibility to ensure the investment at AIG insurance company. Moreover, it was even possible to ensure investment of a third person, something like a bet, if the investment will go well or not.

The investment in business is very essential for the level of productivity. This is the reason, why all efficient economies demand erudite financial market, which provides the capital for the private-sector. This represents the availability of loans, the security-exchanges, stable interest rates, percentage of reserves required by government and other financial tools. While taking to consideration all the functions of the financial market, it is necessary to create a trust worth and transparent environment and also insure proper level of regulation in order to protect all participants of the market (WEF, 2013).

The content of the pillar is displayed in the table below.

Financial services

- availability of financial services
- affordability of financial services

Access to financial means

- financing through local equity market
- ease of access to loans
- venture capital availability

Safety on the financial market

- soundness of banks
- regulation of securities exchanges
- legal rights index

2.4.2.9 Technological readiness

To be able to compete and to prosper in the competition, which is nowadays, firms have to be technologically developed. This pillar measures the ability of the adaptation of given economy on the existing technologies and also in respect to the leverage and functionality of information and communication technologies, which are key factors in overall technological readiness. The crucial fact is, whether the companies, which operates in the country have the access to the technologies and whether they are able to use them in the most efficient way. We have to also take into account the foreign technology, which source is usually the foreign direct investment. The amount of such investments is closely connected to the type of economy, in which we operate. The less developed countries, the more crucial the foreign direct investment is. We also have to take into account the difference between the availability and accessibility of technologies in given economy on one hand, compared to the ability of country for creation of new technologies on the other hand. But this ability of creation is included not in technological readiness but in the twelfth pillar, innovations. (WEF, 2013)

The content of ninth pillar is following:

Attitude of firms toward technologies

- availability of latest technologies
- firm-level technology absorption
- FDI and technology transfer

Attitude of individuals toward technologies

- Individuals using internet, %
- fixed broadband internet subscriptions/100 population
- international internet bandwidth, kb/s per user
- mobile broadband subscription/100 population

2.4.2.10 Market size

The reason, why the market size is included as one of the pillars of the overall competitiveness is the space for better productivity possibilities. The larger the market is, the better conditions for the taking the advantage of the economies of scale. The more is produced, the lower the cost for the one extra unit. In the past, the size of the market was limited by the borders, but with the era of globalization and internalization, the borders have lost its function. The domestic market was substituted by the international market. This advantage is especially beneficial for the original small domestic markets. As the empirical research proved, the openness of the market has positive influence on the economy itself in the meaning of economic growth. With the higher trade is closely connected the higher economic welfare. The exports are considered as a complement to potential low demand in domestic country but high demand in other. We also have to take into account the difference between geographic areas and traded areas, such as European

Union, which consists from many countries but it functions as a single common market.
(WEF, 2013)

The tenth pillar is composed by two parts. First one is the market size and the second one represents the macroeconomic indicators. The composition is following:

Market size

- domestic market size index
- foreing market size index

Macroeconomic indicator

- GDP (PPP\$ billions)
- Exports as a percentage of GDP

2.4.2.11 Business sophistication

The sophistication of business practices is without no doubt beneficial for the efficiency of production of goods and services. We can divide the sophistication into two categories. The quality of overall business network and secondly as the quality of individual companies' strategy plans and operations. At the advanced level of development, these factors are the key ones. In this pillar we measure the quality and quantity of local suppliers and also the way of their communication and interaction. The efficiency is encouraged when the suppliers are interconnected properly and can easier react on the development of demand, they can better prosper from innovations. The entry/exit barriers are also reduced, which leads to higher efficiency and better functioning of the market forces. To the individual companies' operations we include for example the branding, marketing, distribution processes. (WEF, 2013)

The eleventh pillar can be seen as two main categories, the measured level of local supplier and secondly as the development of business itself. Composition of this pillar is as following:

Local supplier

- local supplier quantity
- local supplier quality

Development of business

- state of cluster development
- nature of competitive advantage
- value chain breadth
- control of international distribution
- production process sophistication
- extent of marketing
- willingness to delgate authority

2.4.2.12 Innovation (WEF, 20013)

Last pillar focuses on the stage of innovation in given country. This innovation factor can be divided in to technological one and the non-technological. The non-technological innovations stand for mainly know-how, mental skills and also working conditions, which are present in given country. These non-technological innovations are mainly included in the business sophistication – the eleventh pillar. The last twelfth pillar of competitiveness is focused on the technological innovation. The efficiency of many of already mentioned pillars is closely connected to the innovation factor. The better innovation level, the more productive the other pillars can be. The different stages of innovation can be mentioned, such as the industrial revolution in the 18th century which

came up with the steam engine, later on it was the generation of electricity and nowadays the era of digitalization and mechanization of production. The desired level of innovation differs according to the type of economy. In the developing countries it is sufficient to be able to adapt on the technologies, which are already existing in developed countries. But in the developed countries the stress is put on the creation and innovation of already existing technics in order to find and maintain the competitive advantage. For achieving such process it is necessary that not only private sector works in particular way, but also the functionality of public sector and the supportive activities, such as investing in research and development. The presence and the quality of scientific research institutions is also important. (WEF, 2013)

The pillar of innovations consists of many subcategories, but the main of them are as following.

..

Innovations

- capacity for innovation
- quality of scientific research institutions
- company spending on R&D
- government procurement of advanced technological products
- availability of scientists and engineers
- PCT patents, applications/million population

2.4.3 INTRODUCTION OF THE ECONOMY AND POLITICAL BACKGROUND OF THE CZECH REPUBLIC

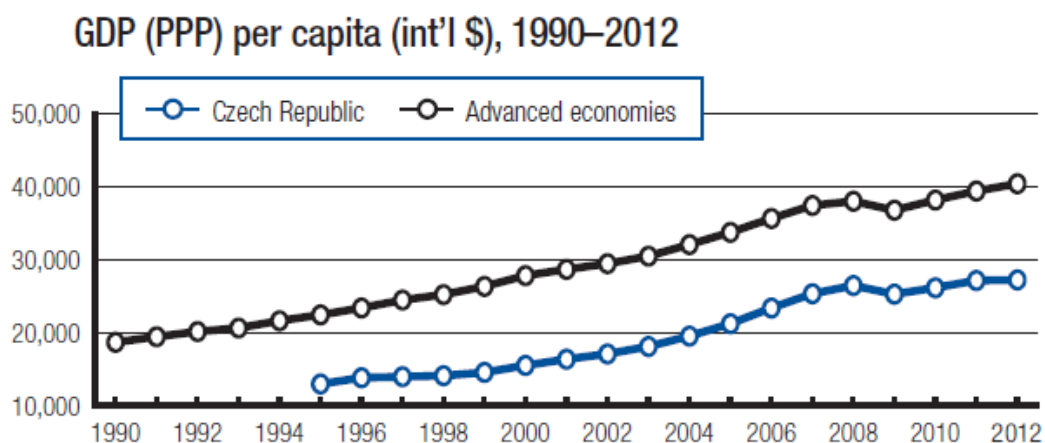
The economic development of the Czech Republic was strongly influenced by the historical facts, mainly after the division of Europe after the Second World War, the division of Western and Eastern Europe. The Czech Republic became a part of Soviet

Union, which did not bring much good. The already very well-functioning market economy was transformed on the central planned one in the late 40s of 20th century and after the long process and attempts the vice versa transformation was again taken place in the early 90s of the 20th century, when the communism was subverted, and the era of democratic state just began. (Myant, 2003)

Economic overview of Czech Republic – key indicators

- Population is slightly above 10.5 billion.
- GDP in \$US is over 196.1 billion
- GDP per capita in \$US is 26,698
- The GDP (PPP) per capita is illustrated in the graph attached bellow.

Source: World Data Bank, 2013



Source: WEF, 2013

As it is obvious from the graph above, the average GDP per capita in the international comparison remains still the same, lower around 11,000 international US dollar compared to the advanced economies.

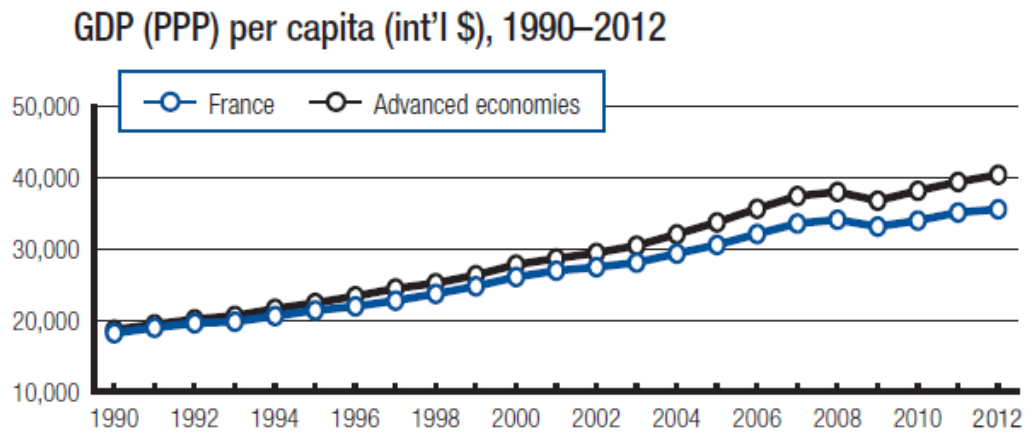
2.4.4 INTRODUCTION OF THE ECONOMY AND POLITICAL BACKGROUND OF FRANCE

France has gone through several through several tough problems, such as dealing with colonial wars in Algeria and Indochina, the political issues such as establishment of fourth and later on fifth France's republic but overall, France is considered as one of the strong pillars of the European continent along with Germany and United Kingdom. (Price, 2014)

Economic overview of France – key indicators

- Population is slightly above 65.4 billion.
- GDP in \$US is over 2,613 billion in 2012
- GNI per capita in \$US is 41,750
- The GDP (PPP) per capita is illustrated in the graph attached bellow.

Source: World Data Bank, 2013



Source: WEF, 2013

As we can see from the graph above, the situation of France is getting worse, since 90s of 20th century and there has launched quite significant difference between the amounts of GDP per capita in the past 20 years. In other words, in the beginning, France represented the advanced economies, but nowadays it has to fallen from its position and

do not catch with them anymore. The causes will be analysed in the practical part of this Diploma thesis in order to identify and explain the possible causes and consequences.

2.4.5 INTRODUCTION OF STATES WITH SIMILAR PATTERN TO PREVIOUS STATES

The development of the economy of each country can be measured on the base of Sector value-added as a share in percent of Gross Domestic Product. The summary of the value added to the GDP is showed in the table below.

Table 3: Sectoral value added as a percentage share of GDP, 2012

Country	Agriculture	Manufacturing industry	Non-manufacturing industry	Services
Czech Republic	2	31	8	60
Slovak Republic	4	21	14	61
Poland	4	18	13	65
France	2	11	8	79
United Kingdom	1	11	10	78
Germany	1	21	7	71

Source: WEF, 2013, own processed

The important factor is the percentage of GDP created via services. As we can easily see, the states from Eastern bloc including Czech Republic, Slovak Republic and Poland have services around 60 percent, where the states from western bloc including France,

United Kingdom and Germany have around 70 percent. This difference is made mainly in the sphere of manufacturing and non-manufacturing industry share on the overall GDP. The percentage share of agriculture is at least similar, as the developed economies focus mainly on higher levels such as already mentioned services.

3 EMPIRICAL OBSERVATION

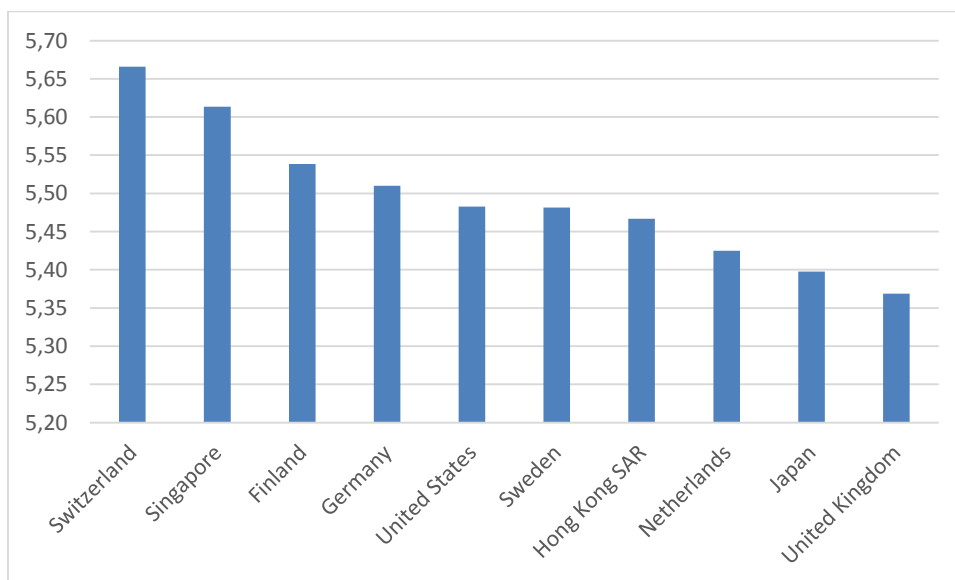
This chapter will start with the review of the most important data from the report of the global competitiveness, focused on the data from Europe and identifying the most competitive economies within Europe. This will be followed by the analysis of the global competitiveness of the Czech Republic, and also comparing to the rest of the European Union as well. As the analysis of the different development of the eastern and western Europe will be used contrast between Czech Republic as the post-communist country and France, as a representative of western development. Last analysis will be done on the basis of contrast between two blocks of states, first block will consist of Czech Republic, Poland and Slovak Republic. These states have similar economies, with comparable indexes. On the other hand, the second group will involve United Kingdom, France and Germany. The purpose of this comparison is to analyse the strength and weakness parts of the post-communist states in the view of the competitiveness on the European market.

As was already written in the literature review, the main source, which will be used, is the annual report of the World Economic Forum, which is called The Global Competitiveness Report 2013-2014. This report outcomes every year, so this thesis will content the most up-to-date data, which are available. The index of each country is counted on the base of the score of the twelve pillars, which are more deeply introduced in the previous part. These pillars are: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological

readiness, market size, business sophistication and innovation. These pillars are also split into three subcategories, according to the phase of the development of economy in each particular country. These are the factor-driven economies, which correspond to the sub-index Basic requirements, next sub-index is the Efficiency enhancers for the efficiency-driven economies and last one is the Innovation and sophistication sub-index, which is for the innovation-driven economies. For each of the economy, the sub-index determines, which factors are the key ones for the given economy. The chart of the countries divided according to the type of economy is enclosed as the attachment.

The report measures the competitiveness within 148 countries all over the world, to see the effect of globalization on their competitiveness. Among the top ten countries in the world belongs six countries from Europe and five of them are members of the European Union (excluding Swiss, which is the most competitive country in the world, measured by the indexes of twelve pillars). This can be seen from the graph below.

Chart 1: The Top Ten Countries (out of 148 measured)



Source: World Economic Forum, The Global Competitiveness. Own processed.

In the first attachment, table1 we can easily see, that the majority of the European Union is placed in the last column, which represents states driven by innovations in other words, the most developed. The countries, which are members of EU but are not in the innovation-driven economy but in the transformation phase from efficiency-driven to innovation driven are Croatia, Lithuania, Latvia, Estonia, Poland, Hungary, Ukraine and as a quite surprise, the Slovak Republic. Compared to the previous year's 2012 the situation remains the same, exclude the Slovak Republic, which went through recession in 2013 which probably caused the decrease in the evaluation of its economy from the innovation-driven to transformation phase.

3.1 THE COMPETITIVENESS OF THE CZECH REPUBLIC

To analyse and understand the development of the competitiveness of the Czech Republic we have to identify the development over past several years. In this case we have chosen the development over the last five years, which are representing the years 2009 to 2013.

As it is obvious from the table below, the development of the competitiveness of the Czech Republic is not very positive. The pillar of institutions has significant decrease.

Pillar	2009	2010	2011	2012	2013
Institutions	4.0	4.0	3.9	3.7	3.6
Infrastructure	4.6	4.6	4.8	4.8	4.7
Macroeconomic environment	4.8	5.0	4.9	5.2	5.0
Health and primary education	6.2	6.3	6.1	5.9	5.8

Higher education and training	5.2	5.1	5.1	4.9	4.9
Goods market efficiency	4.7	4.7	4.6	4.5	4.4
Labour market efficiency	5.1	5.0	4.7	4.3	4.2
Financial market development	4.8	4.6	4.5	4.3	4.2
Technological readiness	4.4	5.0	4.5	5.1	4.9
Market size	4.5	4.5	4.5	4.5	4.5
Business sophistication	4.5	4.4	4.5	4.5	4.4
Innovation	4.1	4.0	3.9	3.8	3.7
Total score	4.7	4.6	4.5	4.5	4.4
Position	31/133	36/140	38/142	39/144	46/146

Source: Data extracted from reports of WEF, own processed

As it is obvious from the table inserted above, each pillar has different development and by that it has different influence on the overall score. The final score is at the bottom line and as it is seen, it is been worsening during the last past years. If we have a look on the lost positions, we can come up with the fall from the 31st position in

the year 2009 to final position in last year, which is 46th. This means fall of 15 positions, which in the measure of competitiveness is 0.3.

To better understand the causes of the fall, we will use the multi linear regression function in order to analyse the key factors, which lower the position of Czech economy on the worldwide market. To identify the relations between each pillar we will use the statistical program Gretl.

The function of the multi linear regression equation will consist of one dependent variable, which in our cases will be the overall competitiveness index, and as the independent, or explanatory variable will be the values of different pillars. As these variables are not correlated between each other, we can call this statistical method as regression function of these independent variables.

The basic model of function which explains the relation between the dependent variable and independent variable is as follows:

$$y = \gamma_0 + \gamma x + \varepsilon$$

Where y represent the explained variable, Beta coefficient is the one, that determinates the relations between the dependent and independent variable and the ε is the representative of residuals, which is the composite effect of all other different types of variables, which are not included in the model (Neter, 1996).

As our model includes more than one explanatory variables, we have to use the model of the multi linear regression function. The model is written below.

$$y = \gamma_0 + \gamma_1 x_1 + \gamma_2 x_2 + \dots + \gamma_k x_k + \varepsilon$$

This model represents the same variables as the previous one except the factor, that it includes k number of variables as well as k number of Beta indexes.

To have the analysis complete, it is also necessary to include the hypothesis testing, which is done through the test of statistical significance. Basically we have two hypotheses, H_0 which states, that no explanatory variables has significant influence on the explained variable, and H_1 an alternative hypothesis, that states, that at least one variable significantly influences the dependent variable. The measurement is done through the use of p-value which is set in our case to 0.05. This means, that the rejecting of H_0 will be false, will happen in 5 cases out of 100, in other words, the chance of wrong judgement is 5percent.

As we are focusing on the obtaining of the multi linear regression model, we will use the Gretl software, to identify the relations between explanatory and explained variables. We have twelve explanatory variables $X_{(1-12)}$, one explained (y) and five years period of observations $(n=5)$.

Regrettably we have found out, that for the proper estimation of parameters in Gretl software, we need at least the same number of observations as the amount of explanatory variables so we are not capable to do the multi linear regression equation. The solution would be to reduce the number of independent variables. This can be made in the correlation matrix.

To measure the association between the variables will be used the coefficient of correlation (Neter, 1996). This coefficient is in the range between (-1, 1), where:

Absolute values of variables and their dependencies:

- $0 \leq R \leq 0.3$ – weak/no dependency
- $0.3 < R \leq 0.8$ – medium dependency
- $0.8 < R \leq 1$ – strong dependency

First of all we need to go through the process of developing the correlation matrix to see the relations between the explanatory variables and explained variable as well as between the

explanatory variables themselves. We need to consider, that the too strong relation between two or more explanatory variables is regrettable, so in that case, we would have to exclude one of the variables, which has weaker dependency with the explained variable.

The correlation matrix of the variables which are included in our model is as follows:

Correlation coefficients, using the observations 1 - 5

The p-value stated as 0.05, what represents 5percent critical value, testing method - two-tailed = 0.8783 for n = 5.

Y	X1	X2	X3	X4	
1.0000	0.8690	-0.6578	-0.5322	0.8248	Y
	1.0000	-0.5505	-0.6124	0.9822	X1
		1.0000	0.5056	-0.6028	X2
			1.0000	-0.5202	X3
				1.0000	X4
X6	X7	X8	X9	X10	
0.8498	0.9081	0.9124	0.9551	-0.4647	Y
0.9437	0.9922	0.9817	0.9453	-0.5126	X1
-0.5590	-0.5752	-0.6811	-0.6283	0.1605	X2
-0.8292	-0.5429	-0.6847	-0.7201	0.9092	X3
0.8806	0.9801	0.9615	0.8888	-0.3639	X4
1.0000	0.9147	0.9600	0.9678	-0.7539	X5
	1.0000	0.9783	0.9477	-0.4433	X6
		1.0000	0.9752	-0.5448	X7
			1.0000	-0.6455	X8
				1.0000	X9
			X11	X12	
			-0.0801	0.9707	Y
			0.2010	0.9574	X1
			0.4564	-0.6325	X2
			0.4924	-0.6396	X3
			0.2641	0.9150	X4
			-0.0680	0.9428	X5
			0.2100	0.9701	X7
			0.0226	0.9791	X8
			-0.0765	0.7791	X9
			0.3810	0.7934	X10
			1.0000	-0.8584	X11
				1.0000	X12

Now we have identified the unhealthy relations between explanatory variables. On the first line are also numbers higher than the p-value, but in that case it is desirable, because it identifies the relations of the explanatory variable to the explained variable y.

When we are getting rid of the unsuitable variables, we have to always look at their relation to the dependent variable, and exclude the one, which has weaker relation. We have marked the independent variables, which have strong dependency between each other, by the yellow colour. The ones, which are excluded from the whole model will be marked by red colour.

Y	X1	X2	X3	X4	Y
1.0000	0.8690	-0.6578	-0.5322	0.8248	X1
	1.0000	-0.5505	-0.6124	0.9822	X2
		1.0000	0.5056	-0.6028	X3
			1.0000	-0.5202	X4
				1.0000	
X6	X7	X8	X9	X10	Y
0.8498	0.9081	0.9124	0.9551	-0.4647	X1
0.9437	0.9922	0.9817	0.9453	-0.5126	X2
-0.5590	-0.5752	-0.6811	-0.6283	0.1605	X3
-0.8292	-0.5429	-0.6847	-0.7201	0.8092	X4
0.8806	0.9801	0.9615	0.8888	-0.3639	X6
1.0000	0.9147	0.9600	0.9678	-0.7539	X7
	1.0000	0.9783	0.9477	-0.4433	X8
		1.0000	0.7752	-0.5448	X9
			1.0000	-0.6455	
				1.0000	X9
			X11	X12	Y
			-0.0801	0.9707	X1
			0.2010	0.9574	X2
			0.4564	-0.6325	X3
			0.4924	-0.6396	X4
			0.2641	0.9150	

-0.0680	0.9428	X5
0.2100	0.9701	X7
0.0226	0.7791	X8
-0.0765	0.7934	X9
0.3810	-0.8584	X10
1.0000	0.9243	X11
	1.0000	X12

So after subtracting the unsuitable variables, we have come up with reduced model, where the overall competitiveness is the result of the scores of the second, third, ninth and twelfth pillar. These pillars represent infrastructure, macroeconomic environment, financial market development and innovation.

Now, when we have excluded the unsuitable explanatory variables, we can create the multi linear regression model by the usage of ordinary least square method. This procedure is made in Gretl program, which is a statistical software, which can process the data into the model of economic equation.

Results are shown in right below:

Model 1: OLS, using observations 1-5
Dependent variable: Competitiveness

	coefficient	std. error	t-ratio	p-value
const	1.60000	0.00000	NA	NA
Infrastructure	-0.333333	0.00000	NA	NA
Macroeconomic_e~	1.00000	0.00000	NA	NA
Financial_marke~	3.66667	0.00000	NA	NA
Innovation	-4.33333	0.00000	NA	NA
Mean dependent var	4.540000	S.D. dependent var	0.114018	
Sum squared resid	0.000000	S.E. of regression	0.000000	
R-squared	1.000000	Adjusted R-squared	NA	

From the data obtained, the regression function of our model would look like:

$$y = 1.6 - 0.33333x_2 + 1x_3 + 3.6667x_8 - 4.3333x_{12}$$

Unfortunately the reduction form of our model is not suitable for our equation, because we have probably exclude too many explanatory variables and the results is no longer valid.

As we are not able to numerize the relations between the development of each pillar and its influence on the final score of competitiveness, we will use the method of deduction, induction and comparison of single values in order to identify the key changes, which have the major influence on the decreasing position of the Czech republic.

3.2 THE GLOBAL COMPETITIVENESS OF THE CZECH REPUBLIC

The table below consists of three columns, first one indicates the pillar, which is measured, or the whole group of pillars and their score. The second one indicates the rank, which was given for the pillar. This rank is in the range 1 to 148. Number one represents that state has achieved the first position in that pillar, which means, that it is the most competitive. The number 148 indicates the worst position out of all. The last column is for the indication of score, respondents were supposed to evaluate the issue on the range 1-7, where the 7 stands for the best and vice versa.

	Rank (out of 148)	Score (1-7)
GCI 2013 - 2014	46	4.4
Basic requirements (20percent)	55	4.8
Institutions	86	3.6
Infrastructure	39	4.7
Macroeconomic environment	55	5.0

Health and primary education	60	5.8
Efficiency enhancers (50percent)	37	4.5
Higher education and training	39	4.9
Goods market efficiency	48	4.4
Labour market efficiency	81	4.2
Financial market development	58	4.2
Technological readiness	34	4.9
Market size	41	4.5
Innovation and sophistication factors (30percent)		
Business sophistication	38	4.4
Innovation	37	3.7

Global Competitiveness index of the Czech Republic in 2013/2014

Source: WEF, 2013, own processed

If we compared the position of the Czech Republic with the previous year 2012, we can pinpoint the fall by seven positions, from 39th position to 46th position this year. As we look closer to each pillar, we can identify the most problematic ones. The most challenging pillars are the institutions, so it is crucial to identify more deeply the factors, which influence the score of the first pillar. Other main challenges are in the education system and the flexibility of labour force. The negative development is also affected by

the worsening of macroeconomic environment. Especially we can see the negative impact of increasing state deficits and debts. The strong points of our economy is the level of sophistication and the attitude towards innovations. But as was already mentioned, there is enough room for improvements, such as the level of educational system and the level of flexibility of the labour market.

When we take closer look at the answers on the question, which factors negatively influenced the business in Czech Republic, the most often mentioning was the presence of corruption. This respond appeared in 17.2 percent of answers. The second most mentioned answer was the inefficient government bureaucracy, 12.6 percent. On the third position was tax rate level – 11.3 percent. The forth place belongs to restrictive labour policies – 10.5 percent and on the fifth, the tax regulations, which represented 10.1 percent.

It is obvious, that the most crucial pillar of competitiveness for Czech Republic represent institutions. It is necessary to look closer to the content of this pillar, in order to identify the most negative factors. The content of the pillar is given in the table below.

INDICATOR	VALUE	RANK/148
1st pillar: Institutions		
1.01 Property rights	3.9	88
1.02 Intellectual property protection	3.8	61
1.03 Diversion of public funds	2.4	117
1.04 Public trust in politicians.....	1.5	146
1.05 Irregular payments and bribes.....	3.7	81
1.06 Judicial independence.....	3.8	68
1.07 Favoritism in decisions of government officials	2.4	123
1.08 Wastefulness of government spending.....	3.4	53
1.09 Burden of government regulation	2.6	135
1.10 Efficiency of legal framework in settling disputes	3.1	115
1.11 Efficiency of legal framework in challenging regs. ...	2.7	126
1.12 Transparency of government policymaking.....	3.8	98
1.13 Business costs of terrorism	6.4	16
1.14 Business costs of crime and violence.....	5.0	53
1.15 Organized crime.....	5.0	71
1.16 Reliability of police services	3.9	90
1.17 Ethical behavior of firms	3.6	109
1.18 Strength of auditing and reporting standards	4.8	64
1.19 Efficacy of corporate boards	4.4	88
1.20 Protection of minority shareholders' interests	3.9	83
1.21 Strength of investor protection, 0–10 (best)*	5.0	84

Source: WEF, 2013

We can see, that this pillar is made out of 21 subpillars. The worst position is the public trust in politicians. The fact, that only two states, which are included in this survey, has this pillar worse. But there are more problems, such as diversion of public funds, favoritism in decisions of government officials, where Czech Republic has 123 position again out of 148. Speaking about burden of government regulation we are even on the place 135. The efficiency of legal framework in settling disputes along with efficiency of legal framework in challenging regulations is also very unsatisfying – 115 place to 126 place. So the main problem is the trust in politicians, the public afraid of frequent bribery and corruption in the public institutions and lack of insurance, that the problems of such crimes are solved efficiently.

As the one of the strongest pillar I would consider the twelfth pillar – Innovation. The table below contents the different sub-pillars and their scores. As we can see, the majority of the sub-pillars are pictured in blue colour, because they are above the overall average, which was achieved by the Czech economy. The only weak points are again, the government procurement of advanced technological products and also slightly below the average is also the availability of scientist and engineers.

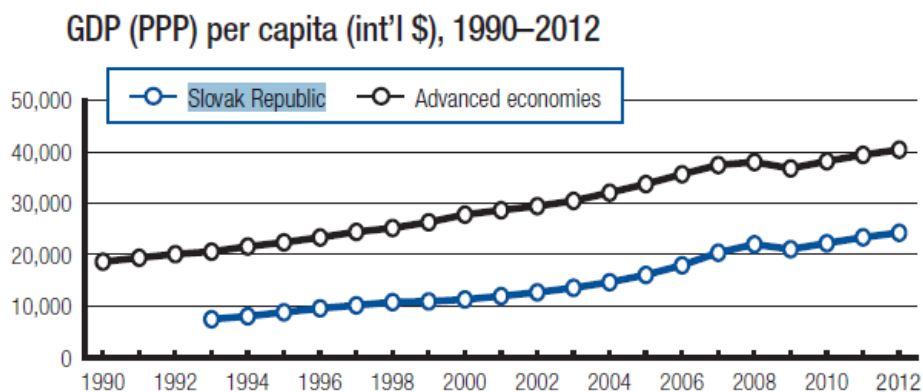
12th pillar: Innovation		
12.01	Capacity for innovation.....	4.3 26
12.02	Quality of scientific research institutions	4.9 26
12.03	Company spending on R&D.....	3.8 32
12.04	University-industry collaboration in R&D	4.4 35
12.05	Gov't procurement of advanced tech products	2.8 124
12.06	Availability of scientists and engineers	4.2 64
12.07	PCT patents, applications/million pop.*	15.3 29

Source: WEF, 2013

3.2.1 GLOBAL COMPETITIVENESS OF SIMILAR ECONOMIES TO CZECH REPUBLIC

a) Slovak Republic

Slovak Republic was chosen as a similar economy to the Czech Republic economy because of several reasons. Except the reasons, which are mentioned above, there is also common history, to both of these states, the era of Czechoslovak republic as well as the communist era after separating. Other reason is the economic similarity, which can be seen on the graph below.



Source: WEF, 2013

This graph express the same economic development as the Czech Republic has, even though that Slovak Republic has slightly lower GDP per capita, the trend is copying the line with the advanced economies as well as Czech Republic.

The competitiveness of Slovak Republic is measured by the same way as previous case. In general, the position of Slovak Republic has worsened by seven position from the previous year, which means the fall from 71st place to 78th place. The most negative factor influencing the global competitiveness is institutional pillar, which goes in one hand with the situation of Czech Republic. The problems, which limits the proper functioning of the Slovak market were pretty much similar to problems in Czech economy, on the first to places was the inefficient government bureaucracy (19.7 percent of answers) and corruption (18.7 percent of answers). These main problems were followed by the restrictive labour regulations (13.6 percent), policy instability (9.9 percent) and Tax rates (8.4 percent).

But on the other hand the most positive one is the pillar of health and primary education, which is the part of the basic requirements. If we compare the level of innovations, it is diametrical different, it has very low evaluation and it occupy the 95th place in overall comparison. The data summary are attached in the table below.

Global Competitiveness index of the Slovak Republic in 2013/2014

	Rank (out of 148)	Score (1-7)
GCI 2013 - 2014	78	4.10
Basic requirements (20percent)	67	4.60
Institutions	119	3.36
Infrastructure	67	4.13
Macroeconomic environment	62	4.87
Health and primary education	39	6.03
Efficiency enhancers (50percent)	56	4.03
Higher education and training	58	4.40
Goods market efficiency	76	4.2
Labour market efficiency	76	4.2
Financial market development	42	4.50
Technological readiness	52	4.20
Market size	58	4.00
Innovation and sophistication factors (30percent)	77	3.50

Business sophistication	73	4.00
Innovation	95	3.00

Source: WEF, 2013, own processed

The main problems of Slovak economy represents the first pillar institution, and that is the reason why it is needed to be more analysed, in the same way as previous case.

INDICATOR	VALUE	RANK/148
1st pillar: Institutions		
1.01 Property rights	3.9	83
1.02 Intellectual property protection	3.7	65
1.03 Diversion of public funds	2.2	138
1.04 Public trust in politicians.....	1.8	139
1.05 Irregular payments and bribes.....	3.4	99
1.06 Judicial independence.....	2.3	133
1.07 Favoritism in decisions of government officials	1.9	144
1.08 Wastefulness of government spending.....	2.1	137
1.09 Burden of government regulation	2.5	139
1.10 Efficiency of legal framework in settling disputes	2.4	143
1.11 Efficiency of legal framework in challenging regs. ...	2.2	142
1.12 Transparency of government policymaking.....	4.0	80
1.13 Business costs of terrorism	6.2	26
1.14 Business costs of crime and violence.....	4.7	69
1.15 Organized crime.....	4.5	102
1.16 Reliability of police services	3.6	108
1.17 Ethical behavior of firms	3.3	125
1.18 Strength of auditing and reporting standards	4.8	60
1.19 Efficacy of corporate boards	4.4	82
1.20 Protection of minority shareholders' interests	3.7	109
1.21 Strength of investor protection, 0–10 (best)*	4.7	100

Source: WEF, 2013

As we can see from the table above, Slovak republic has really problems in trust in governance, its independency and fair, ethical behaviour. The critical issues are

favouritism in decisions of government officials, where Slovak Republic is on the 144th position, the efficiency of legal framework in settling disputes and in challenging regulations are also purely negative, 143th place and 142nd place. This is similar pattern to the Czech Republic. In case of Slovak economy, there are even more challenging parts in this pillar, because overall, over thirteen sub-pillars are over 100, which means that majority of states in this survey deals better than Slovak republic, even some of the developing economies, or economies in the transformation process.

b) Poland

The reasons for choosing Poland as a third economy in the block of eastern states along with Czech Republic and Slovak Republic were again pretty similar. The position of Poland as a neighbour state to previous two, the communist history under the rule of Soviet Union and also the economic development is analogous.

The table below indicates the rank of positions, which has Poland achieved as well as the final score of each pillar.

Global Competitiveness index of Poland in 2013/2014

	Rank (out of 148)	Score (1-7)
GCI 2013 - 2014	42	44.6
Basic requirements (20percent)	59	4.72
Institutions	62	4.01
Infrastructure	74	3.96

Macroeconomic environment	65	4.88
Health and primary education	42	6.03
Efficiency enhancers (50percent)	32	4.06
Higher education and training	37	4.88
Goods market efficiency	57	4.34
Labour market efficiency	80	4.20
Financial market development	38	4.54
Technological readiness	43	4.47
Market size	20	5.14
Innovation and sophistication factors (30percent)	65	3.65
Business sophistication	65	4.06
Innovation	65	3.24

Controversially to previous states, the strongest pillar of competitiveness is the market size, where Poland placed on the 20th position. But also financial market development is very highly valued, which goes in one hand with Slovak Republic. If we look at the most problematic pillar for previous states, the first pillar institutions, we can see, that Poland deals much better, but it still does not reach the overall competitiveness,

which is 42nd place. The similar pattern with Czech Republic is seen on the development of labour market efficiency, which is also very low, it achieved the 80th place.

3.3 THE GLOBAL COMPETITIVENESS OF FRANCE

When we have a look on the position of France on the global level, we can see relatively big difference compared to previous studied states. France is on the 23th position out of 148 examined states. This is a fall by two positions from last year. France has several really dominant advantages, namely the second pillar, infrastructure, which is forth best in the world right after Switzerland, Hong Kong and Finland. Other strong points are health and primary education, technological readiness, which support the strong position in the global overview. The sophistication and innovation enhancers are also very well developed. The main weak points of competitiveness of France are according to the table below the flexibility of labour market, which is connected with strict rules on firing and hiring; and also the tax regime, which is considered as not very accommodating to companies as well as to individuals.

The position of France is much better compared to Czech Republic and the whole block of eastern states as well, but if we have look into previous years, we can register slightly decrease of the overall competitive position. In the year 2012 it was 21st position, which means fall by two places, the year before it was even 18th position, so again, fall by 3 places. The complete summary of scores of each pillar is given in the table below.

Global Competitiveness index of France in 2013/2014

	Rank (out of 148)	Score (1-7)

GCI 2013 - 2014	23	5.05
Basic requirements (20percent)	23	5.50
Institutions	31	4.79
Infrastructure	4	6.21
Macroeconomic environment	73	4.65
Health and primary education	24	6.33
Efficiency enhancers (50percent)	19	5.00
Higher education and training	24	5.21
Goods market efficiency	45	4.43
Labour market efficiency	71	4.31
Financial market development	33	4.61
Technical readiness	17	5.69
Market size	8	5.76
Innovation and sophistication factors (30percent)	18	4.84
Business sophistication	21	5.00
Innovation	19	4.68

As we can see, the most supportive and developed pillars for the competitiveness of France are infrastructure, where the economy occupies the fourth place and also, the market size, which represents the eighth place. The advantage of market size is not really possible to influence, because the borders are given and the population and therefore the market is closely connected. On the other hand, the most problematic pillars represent the macroeconomic environment - 73rd position and also the development of labour market efficiency. The most problematic factors for doing business represent the restrictive labour regulations, which automatically lead to lower competitiveness of this pillar, the high of tax rates, which are extreme on the European average and also the tax regulations and access to financing.

The particular problems of the macroeconomic environment pillar can be seen in the table below.

3rd pillar: Macroeconomic environment		
3.01	Government budget balance, % GDP*	-4.6 111
3.02	Gross national savings, % GDP*	17.6 81
3.03	Inflation, annual % change*	2.0 1
3.04	General government debt, % GDP*	90.3 135
3.05	Country credit rating, 0–100 (best)*	84.8 17

Source: WEF, 2013

As we can see, the main problem represents the government spending, government debt expressed in percentage of GDP, where France is on the 135th position, which is really surprising, compared to the overall score of 23rd position in final score. The second most problematic pillar represents the labour market efficiency. The scores are placed in the table below.

7th pillar: Labor market efficiency

7.01	Cooperation in labor-employer relations	3.4	.....	135
7.02	Flexibility of wage determination.....	5.1	.....	75
7.03	Hiring and firing practices.....	2.5	.....	144
7.04	Redundancy costs, weeks of salary*	11.8	.....	54
7.05	Effect of taxation on incentives to work.....	2.8	.....	127
7.06	Pay and productivity.....	3.8	.....	78
7.07	Reliance on professional management	4.8	.....	37
7.08	Country capacity to retain talent.....	3.6	.....	57
7.09	Country capacity to attract talent	3.9	.....	44
7.10	Women in labor force, ratio to men*	0.88	.....	35

Source: WEF, 2013

The figures clearly show, which parts of the labour market are the most inefficient, namely the cooperation in labour-employer relations, the hiring and firing practices and effect of taxation on incentives to work.

3.3.1 GLOBAL COMPETITIVENESS OF SIMILAR ECONOMIES TO FRANCE

a) United Kingdom

As was said in the previous part, purpose is to find similar competitive patterns in different economies, namely patterns of the development of states under the communist influence of Soviet Union and so called western states, in the head with France. The United Kingdom economy was chosen because it fulfil the political point mentioned couple rows above but also the United Kingdom represents one of the most developed country in the whole Europe.

When we have a look on the development of the competitiveness of the United Kingdom we can identify small fall, precisely by two position, compared to previous year, from the 8th position to 10th position in 2013. The overall balance is analysed in the table below.

Global Competitiveness index of United Kingdom in 2013/2014

	Rank (out of 148)	Score (1-7)
GCI 2013 - 2014	10	5.37
Basic requirements (20percent)	24	5.48
Institutions	12	5.43
Infrastructure	8	6.12
Macroeconomic environment	115	3.98
Health and primary education	16	6.39
Efficiency enhancers (50percent)	4	5.45
Higher education and training	17	5.45
Goods market efficiency	14	5.05
Labour market efficiency	5	5.35
Financial market development	15	5.00
Technical readiness	4	6.06
Market size	6	5.80
Innovation and sophistication factors (30percent)	10	5.15
Business sophistication	9	5.40
Innovation	12	4.90

The country's weakest pillar is far long the pillar of macroeconomic environment. In the respect of other pillars, which are all around 10th position, the macro environment is on the 115th position. This is reason for deeply insight in the causes, which influences such a bad score.

3rd pillar: Macroeconomic environment

3.01	Government budget balance, % GDP*	-8.3	140
3.02	Gross national savings, % GDP*	10.8	123
3.03	Inflation, annual % change*	2.8	1
3.04	General government debt, % GDP*	90.3	136
3.05	Country credit rating, 0–100 (best)*	86.7	15

Source: WEF, 2013

From the table above is clear, that even though the economy of the United Kingdom has the best inflation change within all measured countries, the rest of the macroeconomic environment is pretty bad. The government budget balance is even negative, which places the United Kingdom on the 140th place. This goes in one hand with the general government debt, expressed in percentage of GDP, which is 90.3 percent.

On the other hand, the economy has also some very strong pillars, such as the efficiency of labour market, where it occupies fifth position. The market size is also very well evaluated – 6th position. The other strong pillars are the business sophistication and also the level of innovation.

b) Germany

The economy of Germany belongs to one of the strongest economies in the world. It was chosen in the purpose to show the similarities of the development as well as pointing the similar difficulties in achieving the most competitive state as possible. The other

reason of choosing Germany was also the geographical position, as it is neighbouring economy of France and also very close to United Kingdom. The competitiveness of Germany is shown in the table placed below.

	Rank (out of 148)	Score (1-7)
GCI 2013 – 2014	4	5.51
Basic requirements (20percent)	9	5.90
Institutions	15	5.30
Infrastructure	3	6.24
Macroeconomic environment	27	5.68
Health and primary education	21	6.36
Efficiency enhancers (50percent)	8	5.31
Higher education and training	3	5.90
Goods market efficiency	21	49.2
Labour market efficiency	41	4.57
Financial market development	29	4.69
Technical readiness	14	5.72
Market size	5	6.02

Innovation and sophistication factors (30percent)	4	5.59
Business sophistication	3	5.68
Innovation	4	5.50

Global Competitiveness index of Germany in 2013/2014

The table above shows, that Germany does pretty well in the ability to compete. The Global Competitive index for the last year was 5.5 which sorts Germany on the 4th position within the measured states. There are no big differences between the scores, but the pillars which negatively influenced the German economy are labour market efficiency, macroeconomic environment, and financial market development. Again, we can see analogous pattern with France and United Kingdom.

4 DISCUSSION

4.1 THE GLOBAL COMPETITIVENESS OF THE CZECH REPUBLIC COMPARED TO THE GLOBAL COMPETITIVENESS OF POLAND AND THE SLOVAK REPUBLIC

In the previous part we have analysed the competitiveness of the economies of the eastern bloc quite in detail, so now it is possible, to look whether there is some pattern, which is applicable for those economies. Talking about overall competitiveness, Czech Republic is closer to Poland, 46th place to 42nd place respectively compared to the position of Slovak Republic, which occupies the 78th position. The common sign is that the weakest pillar represents the institutions, which are part of the sub-category of basic requirements. The second most problematic pillar of these economies is the labour market efficiency. All of them are around 80th place, which is not very optimistic. The enhancers of efficiency are generally strong for all three economies. There is need to highlight the pillar of market size – 20th place, which increases the overall position of Poland, compared to position of Czech Republic which is more than double worse – 41st, and Slovak Republic has even worse conditions – 58th. This factor cannot be unfortunately influenced. On the other hand, Czech Republic is very strong in the business sophistication and innovation, where it occupies 36th position, compared to relatively weak Poland – 65th position and even worse Slovak Republic – 77th position.

4.2 THE GLOBAL COMPETITIVENESS OF THE FRANCE COMPARED TO THE GLOBAL COMPETITIVENESS OF UNITED KINGDOM AND GERMANY

Analytic part of this thesis was also focused on the identification of competitiveness of France as well as other representatives of developed western economies, these economies were chosen on the basis of economic development as well as on the basis of geographical aspects and also political development after World War Second. These economies are namely Germany and United Kingdom. France was found

as the least competitive out of these economies, overall occupying the 23rd position, compared to United Kingdom, which stands on 10th position and Germany has placed even on the 4th position. Such positive results of Germany are not really surprising as Germany belongs to one of the world's strongest economies. The common pattern of all these economies is the very good position of the eleventh and twelfth pillar, which stand for innovation and business sophistication. The developed economies has to be particularly strong in these two in order to be able to compete similar economies. To other common sign belongs the similarity within the weakest pillar, which is the macroeconomic environment – namely the government debt and budget balance. One pillar, where France differs pretty lot is the pillar of labour market efficiency.

4.3 THE GLOBAL COMPETITIVENESS OF THE CZECH REPUBLIC VERSUS FRANCE

As we have already made the comparison of the states within the blocks, the eastern bloc, which purpose was to find parallels between Czech Republic and Slovak Republic and Poland, and secondly the western bloc, which examines the matches between France and United Kingdom and Germany, it is now time to liken the differences between Czech Republic and France. The overall competitiveness is definitely on the French site, as France is twice more competitive than Czech Republic, 23rd place compared to 46th place respectively. But as we could see, the development over last years is similar, over the last two years their competitiveness decreases by two places. If we are talking about solid pillars of Czech economy, we should highlight the technological readiness, business sophistication and the innovation pillar. The last two pillars are also solid pillars of French economy, but next to them we cannot forget the perfectly competitive pillar of infrastructure – 4th place in total and also the market size, which is incomparable to the Czech one. Speaking about the weak points of both economies, the labour market efficiency pillar is one of the worst for both economies, but Czech Republic has also problems with institutional pillar contra to the French weak point, the macroeconomic environment.

4.4 PROPOSALS

In order to improve position of Czech Republic not only in respect to economies mentioned in this thesis but in general, there has to be made an improvement mainly in the level of institutions, infrastructure and financial market development. The most crucial factors, which negatively influence the competitiveness of Czech economy is the corruption, inefficient government bureaucracy and taxes, in general the basic functions of the state is not very well fulfilled. In order to catch up with the most developed economies in the world and in order to be able to compete on the global market, Czech Republic has to focus on the development of proper functioning of government. As to other pillar, which is very crucial for Czech economy, it is the pillar of infrastructure. Czech Republic cannot really influence market size, but should take advantage of its strategic position in the heart of Europe, which propose to benefit as the transit country. But without proper infrastructure, the transits cannot be made in the most efficient way and the attractiveness of Czech Republic decreases.

On the other hand, speaking about competitiveness of France, we should more focus on the improvement of macroeconomic environment as well as on an increase of the efficiency of labour market. France should take more advantages from its market size, which outlines it as strong market. The main difficulties are in the bureaucracy, labour policies, and access to financial resources, which makes France not competitive as it could be.

5 CONCLUSION

As the 21st century is the century of globalization, which automatically leads to strengthening the interdependency between economies all over the world, the demands increase in one hand with the level of competition. The success on the global market can be only insured by the high flexibility of different markets in order to be able to react on the global market development, as it changing continually. There are many way, how to measure and interpret the competitiveness of each state, it differs according to institution. This thesis works with the interpretation of World Economic Forum, which is generally perceived as one of the best and most objective. According to results, which are deeply described in the analytical part of this thesis, the competitiveness of Czech Republic has similar features as other post-communist economies, namely the Slovak Republic and Poland. As it was said in discussion, the most problematic pillars are institutions, were a big role plays corruption, bribery and also perception of government functionality. The other most problematic factor was the labour market efficiency, but this was similar to the western economies, explicitly France. The competitiveness of western economies, we can also point out a similar arrangement of weak and strong pillars. These economies are very strong in the pillars of innovation and sophistication. The weakest pillar is also the same – the macroeconomic environment, specifically the government debt and the budget balance.

The analytical part of this thesis was meant to be statistically measured, by the regression analysis, in order to analyse the relation of the twelve pillars, as well as to even predict the potential future competitiveness. Unfortunately, as we wanted to do the multi linear regression function with twelve variables, we did not have proper amount of observed periods, so it was not possible use this statistical method. We have also tried the correlation matrix in order to exclude the correlated variables, but unfortunately, it was not possible either. So at the end, we have analysed the data, which were available and we made the comparison of these economies based on empirical data. It would be suitable to make this analysis after six years, when there will be twelve observed period and the data will be suitable for the statistical analysis.

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7 ATTACHMENTS

Table 1: Countries/economies at each stage of the development, 2013/2014

Stage 1: Factor-driven (38 economies)	Transition from stage 1 to stage 2 (20 economies)	Stage 2: Efficiency-driven (31 economies)	Transition from stage 2 to stage 3 (22 economies)	Stage 3: Innovation-driven (37 economies)
Bangladesh	Algeria	Albania	Argentina	Australia
Benin	Angola	Bosnia and Herzegovina	Barbados	Austria
Burkina Faso	Armenia	Bulgaria	Brazil	Bahrain
Burundi	Azerbaijan	Cape Verde	Chile	Belgium
Cambodia	Bhutan	China	Costa Rica	Canada
Cameroon	Bolivia	Colombia	Croatia	Cyprus
Chad	Botswana	Dominican Republic	Estonia	Czech Republic
Côte d'Ivoire	Brunei Darussalam	Ecuador	Hungary	Denmark
Ethiopia	Gabon	Egypt	Kazakhstan	Finland
Gambia, The	Honduras	El Salvador	Latvia	France
Ghana	Iran, Islamic Rep.	Georgia	Lebanon	Germany
Guinea	Kuwait	Guatemala	Lithuania	Greece
Haiti	Libya	Guyana	Malaysia	Hong Kong SAR
India	Moldova	Indonesia	Mexico	Iceland
Kenya	Mongolia	Jamaica	Oman	Ireland
Kyrgyz Republic	Morocco	Jordan	Panama	Israel
Lao PDR	Philippines	Macedonia, FYR	Poland	Italy
Lesotho	Saudi Arabia	Mauritius	Russian Federation	Japan
Liberia	Sri Lanka	Montenegro	Seychelles	Korea, Rep.
Madagascar	Venezuela	Namibia	Slovak Republic	Luxembourg
Malawi		Paraguay	Turkey	Malta
Mali		Peru	Uruguay	Netherlands
Mauritania		Romania		New Zealand
Mozambique		Serbia		Norway
Myanmar		South Africa		Portugal
Nepal		Suriname		Puerto Rico
Nicaragua		Swaziland		Qatar
Nigeria		Thailand		Singapore
Pakistan		Timor-Leste		Slovenia
Rwanda		Tunisia		Spain
Senegal		Ukraine		Sweden
Sierra Leone				Switzerland
Tanzania				Taiwan, China
Uganda				Trinidad and Tobago
Vietnam				United Arab Emirates
Yemen				United Kingdom
Zambia				United States
Zimbabwe				

Table 2: Countries/economies at each stage of the development, 2012/2013

Stage 1: Factor-driven (38 economies)	Transition from stage 1 to stage 2 (17 economies)	Stage 2: Efficiency-driven (33 economies)	Transition from stage 2 to stage 3 (21 economies)	Stage 3: Innovation-driven (35 economies)
Bangladesh	Algeria	Albania	Argentina	Australia
Benin	Azerbaijan	Armenia	Bahrain	Austria
Burkina Faso	Bolivia	Bosnia and Herzegovina	Barbados	Belgium
Burundi	Botswana	Bulgaria	Brazil	Canada
Cambodia	Brunei Darussalam	Cape Verde	Chile	Cyprus
Cameroon	Egypt	China	Croatia	Czech Republic
Chad	Gabon	Colombia	Estonia	Denmark
Côte d'Ivoire	Honduras	Costa Rica	Hungary	Finland
Ethiopia	Iran, Islamic rep.	Dominican Republic	Kazakhstan	France
Gambia, The	Kuwait	Ecuador	Latvia	Germany
Ghana	Libya	El Salvador	Lebanon	Greece
Guinea	Mongolia	Georgia	Lithuania	Hong Kong SAR
Haiti	Philippines	Guatemala	Malaysia	Iceland
India	Qatar	Guyana	Mexico	Ireland
Kenya	Saudi Arabia	Indonesia	Oman	Israel
Kyrgyz Republic	Sri Lanka	Jamaica	Poland	Italy
Lesotho	Venezuela	Jordan	Russian Federation	Japan
Liberia		Macedonia, FYR	Seychelles	Korea, Rep.
Madagascar		Mauritius	Trinidad and Tobago	Luxembourg
Malawi		Montenegro	Turkey	Malta
Mali		Morocco	Uruguay	Netherlands
Mauritania		Namibia		New Zealand
Moldova		Panama		Norway
Mozambique		Paraguay		Portugal
Nepal		Peru		Puerto Rico
Nicaragua		Romania		Singapore
Nigeria		Serbia		Slovak Republic
Pakistan		South Africa		Slovenia
Rwanda		Suriname		Spain
Senegal		Swaziland		Sweden
Sierra Leone		Thailand		Switzerland
Tajikistan		Timor-Leste		Taiwan, China
Tanzania		Ukraine		United Arab Emirates
Uganda				United Kingdom
Vietnam				United States
Yemen				
Zambia				
Zimbabwe				

Table 1: Rankings of the EU27 in the Global Competitiveness Index 2010–2011

Economy	Rank	Score
Sweden	2	5.56
Germany	5	5.39
Finland	7	5.37
Netherlands	8	5.33
Denmark	9	5.32
United Kingdom	12	5.25
France	15	5.13
Austria	18	5.09
Belgium	19	5.07
Luxembourg	20	5.05
Ireland	29	4.74
Estonia	33	4.61
Czech Republic	36	4.57
Poland	39	4.51
Cyprus	40	4.50
Spain	42	4.49
Slovenia	45	4.42
Portugal	46	4.38
Lithuania	47	4.38
Italy	48	4.37
Malta	50	4.34
Hungary	52	4.33
Slovak Republic	60	4.25
Romania	67	4.16
Latvia	70	4.14
Bulgaria	71	4.13
Greece	83	3.99